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ABSTRACT

Part of the Master Curriculum Guide Project, this guide presents concept-based activities in economics for use with students in grades nine through 12. The activities are related to global aspects of economic development. The objective is to provide detailed classroom lessons illustrating ways of applying economic analysis to world history and to the contemporary world scene. The 11 concept-based lessons can be modified for use in existing curriculum. They are designed to help students understand basic economic problems with which every economic system must contend. Sample lessons are entitled "A Primitive Economy," "The Game of Scarcity and Allocation," "Patterns of Economic Development," "Limits to Growth," and "Using Economic Data to Compare Types of Economic Systems." Activities involve students in map and globe work, filling in worksheets, class discussion, reading assignments, analyzing case studies, and writing brief essays. For each lesson, information is presented on time required, major and related concepts, objectives, rationale, material, procedure, and evaluation. An annotated listing of other resources concludes the document. (DB)

Part II

Strategies for Teaching Economics:

World Studies (Secondary)

James B. O'Neill, *Chairperson*

Master Curriculum Guide in Economics for the Nation's Schools

1980

Joint Council on Economic Education

JCEE Checklist No. 261

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Foreword

The *Master Curriculum Guide* was published to be used as a tool for curriculum development—it is not a curriculum per se. It is designed as a resource document for school systems engaged in K–12 economic education curriculum development. Part I provides a framework for teaching economic ideas and Part II provides detailed classroom lessons illustrating useful ways in which these ideas can be taught at different levels of difficulty. Thus, the *Master Curriculum Guide* indicates what economic ideas can be taught, where they can be taught, and how they can be taught.

It was decided to slice the school years into three segments: primary, intermediate, and secondary—with the secondary packets oriented toward subject fields. Curriculum committees were established for these segments. Teachers must decide the appropriate grade for each lesson based upon the capacity of their students. Those teaching in "middle schools" will want to examine both the intermediate-level package and the various secondary packages.

By judiciously selecting lessons from the volumes of teaching strategies, teachers can systematically upgrade the quantity and quality of economics instruction in their existing courses. Each lesson is self-contained and ready for teaching, but good teachers who have had economic education training can readily modify the activity to fit their special classroom needs. The lessons are concept-based rather than unit or theme-oriented. Once teachers have mastered the instructional activity, placement within existing courses or inclusion as supplements to text units will rapidly follow. Sample materials for classroom use (e.g., pictures, cards, games, etc.) may be reproduced at the teacher's discretion.

Most of the curriculum strategies published in this volume have not been classroom-tested. For this reason, we see the present edition as a working document that will be improved on the basis of responses from users throughout the country. The Instructional Activity Evaluation Form (shown on pages 9-10) or modified versions of it, may be used by supervisors to obtain feedback from teachers. We urge teachers to send copies of such evaluations to the Joint Council. This will enable us to obtain insights for future revisions. Furthermore, since we view these collections of concept-oriented curriculum activities as starting points, teachers are urged to submit their own activities dealing with concepts selected from Part I, the *Framework*. Those teachers wishing to submit activities should use a format that includes the essential elements of the format outlined on page 11. This guide was developed to encourage writers to provide immediately teachable lessons. If the Joint Council receives a sufficient number of activities that have been classroom-tested, it will be well on its way toward supplying multiple volumes of conceptually oriented lessons at various grade levels. In fact, it would have a growing "curriculum activities bank" which, when published, would provide teachers with a rich source of classroom-tested lessons designed to teach various components of the economics framework.

The Master Curriculum Guide Project, like all complex undertakings, is the product of many people whose contributions must remain unacknowledged, because it is nearly impossible to assign authorship to ideas that have been shaped and reshaped as they were molded into a published document. Perhaps by briefly tracing the evolutionary character of the product, we can not only clarify its purpose but also give credit to some of the principals involved.

The Master Curriculum Guide Project is an outgrowth of the Developmental Economic Education Project (DEEP). Working documents produced for the DEEP experiment in curriculum change conducted between 1964 and 1969 included the "two little red books," as they were called in the field: one a statement of economic concepts to be taught as outlined in the *Task Force Report on Economic Education in the Schools*, and the second, some suggestions for grade placement. These materials were later fashioned into a single volume entitled *Economics in the Curriculum*. During the 1960s and the early 1970s, these publications were extensively used, especially by those schools associated with the DEEP

Cooperating Schools Program. Literally hundreds of curriculum guides and lesson plans were generated from these documents and through them thousands of teachers and students were introduced to economic education.

During the 1973 meetings of the National Association of Affiliated Economic Education Directors, many Council and Center directors, led by the California and Oklahoma contingents, urged the Joint Council to undertake what has become known as the Master Curriculum Guide Project. It took three years for W. Lee Hansen's committee to develop *A Framework for Teaching Economics*. At the same time that the *Framework* was being prepared, curriculum task force groups were established, chaired by the individuals whose names appear on these published volumes. Behind the scenes, the project relied heavily on a steering committee of professional economic educators: Peter V. Harrington, director, Indiana Council for Economic Education, Purdue University; Hugh G. Lovell, professor of economics, Portland State University; Clayton Millington, executive vice president, Oklahoma Council on Economic Education, Oklahoma State University; Leon M. Schur, director, Center for Economic Education, University of Wisconsin-Milwawkee; Roman F. Warmke, chairman, Department of Economic Education, Ohio University.

These individuals served in an advisory capacity for various project committees and significantly helped to shape the product. June V. Gilliard, director of curriculum for the Joint Council, contributed importantly to the design of the teaching strategies and prepared the Instructional Activity Evaluation Form. Each committee was given the responsibility to make a first selection of those economic concepts that could be most usefully taught within the grade level and subject area established. We know that more ideas than are included in these volumes *can* be taught. Our objective for these first editions was to produce a few quality activities that could be immediately used by teachers.

We are indebted to all individuals who have participated in the preparation of *Strategies for Teaching Economics: World Studies,* but special thanks are due to the chairperson, James B. O'Neill. Through his leadership, we have good teaching models that will serve to accelerate concept learning in economics.

S. Stowell Symmes
Director of School Services
Coordinator, Master Curriculum Project

Preface

Strategies for Teaching Economics is one component of a two-part publication entitled *Master Curriculum Guide in Economics for the Nation's Schools*. Part I of the guide, *A Framework for Teaching Economics: Basic Concepts*, presents a conceptual structure of economics and shows how that structure can be used to assist in more effective personal economic decision-making. Part II, *Strategies for Teaching Economics*, demonstrates to educators how the conceptual *Framework* can be taught at various grade levels: primary, intermediate, and secondary. It is published as several volumes to allow more flexible use by classroom teachers and curriculum development specialists.

The Joint Council greatly appreciates the fine cooperation given to us by the many universities and school systems associated with the development of these curriculum strategies. We are especially indebted to the individuals who drafted the materials. While no claim is made that these lessons have been evaluated under all classroom conditions, it is expected that the lessons will work with the pupil populations designated. We consider the present volume as a working document and expect that revised editions will be forthcoming in the years ahead.

The entire Master Curriculum Project was made possible by generous contributions from all our many dedicated sponsors. In addition, supplementary grants were received from General Motors, Ford Motor Car Fund, and American Telephone and Telegraph. We appreciate the confidence these sponsors have expressed in the economic education movement. Special commendation should be given to S. Stowell Symmes, director of school services, who has coordinated the project for the Joint Council from its inception and to John de Vita, June Gilliard, and Lawrence A. Mayer, who skillfully clarified difficult segments of the guide during the editing process.

We are confident that *Strategies for Teaching Economics* will serve teachers well as practical guidelines for building economics lessons into existing curricula. Properly used, the *Master Curriculum Guide* can become a powerful device for accelerating economics instruction at all grade levels.

M. L. Frankel
Former President

Michael A. MacDowell
President

Acknowledgments

The development of this publication required the contributions of many individuals and would not have been possible without the cooperation of the College of Business and Economics of the University of Delaware and individuals on the staff of the Joint Council on Economic Education.

The project was developed and refined by Phillip Mow, a social studies supervisor, and Frank Hagan, a social studies teacher, of the Newark (Delaware) School District. After several revisions, Robert Highsmith, director of the Economic Literacy Project, California State University and Colleges Foundation, Long Beach, California, provided salient advice for the final version.

The wealth of experience of Edward C. Prehn was especially helpful in formulating the Overview and Rationale, preparing the lessons on world trade, and suggesting items for the resource catalog.

James B. O'Neill
University of Delaware

Overview and Rationale

A diffusion of the desire for higher living standards—the so-called revolution of rising expectations in the less economically advanced nations—has had far-reaching economic and political effects. The "revolution" has sped up in recent decades partly because of advances in communications. As a result a planet, earth, has been transformed into a global village. As in any village, its inhabitants inevitably face certain economic problems in common, and consequently such concerns as the burgeoning of population, the consumption of resources, the uncertainties of energy supply, and the possible limits to growth increasingly force us to look at the world as a global economy.

Some of the chief economic worries of the present day turn on shortages of one kind or another. At present, the underdeveloped nations can be said to face the greatest shortages because they are so heavily dependent on the industrialized countries for financing, technological assistance, capital and consumer goods, and specialized services. The world is thus confronting with new urgency the problem that has always been central to economics—scarcity. The factors of production—land, labor, and capital—have never been unlimited, and today some nations are severely short of one or more of them.

There are other significant economic problems that confront the world in the early 1980s. Trends in the foreign exchange system, e.g., in the relations of national currencies to one another, are far too volatile for comfort. The debt of some underdeveloped countries to private banks in the industrialized countries may be too burdensome. The problem of how to combat the combination of virtually worldwide inflation and unemployment remains unsolved. And how much energy will be available at what set of prices may be the most urgent and far-reaching problem of all.

All these stresses and strains make teachers feel that there is more place than ever for economics in world history or world studies courses. And since many economic problems of today are by no means new, linking them with the experience of earlier times can suggest dangers to be avoided as well as routes to solutions.

In order to analyze economic events of the past intelligently, students need to understand the basic concepts of economics—an understanding that will be useful throughout life, not in the classroom alone. The teaching of the basic concepts should ideally begin early in a student's career so that teachers in succeeding grades can build on an ever-sturdier foundation. In this way, early economic experience rooted in the child's familiar environment can be fashioned into general principles that encompass the national and eventually the world scenes. The Master Curriculum Guide for the primary level introduces children to basic concepts such as scarcity, choice-making, opportunity costs, specialization, division of labor, and exchange. The guide for the intermediate level deepens, expands, and refines these concepts by developing them into clusters dealing with economic systems, demand and supply, equilibrium, competition, monopoly, and the like.

The specific purpose of this publication, *Strategies for Teaching Economics: World Studies (Secondary)*, is to apply economic analysis to world history and to the contemporary world scene. In doing so, we present opportunities to reinforce earlier lessons in economics, take up more complex issues, and show how basic economic concepts and analytical tools can be applied to a wide variety of situations. Because other publications in the MCG series largely deal with economics in the context of market economies, this volume contains no specific lessons on them. Here, descriptions and data about market economies are chiefly used to make comparisons with other types of economies.

The Basic Economic Problem

Every economic system must contend with the basic economic problem: the lack of enough productive resources to supply all the goods and services its members want. This relative scarcity of supply in relation to demand gives rise to the need for economizing—the need to make the best possible allocation of productive resources among all their alternative uses. When analyzing scarcity and its implications, one must consider the availability of factors of production (productive resources), particular scarcities and choices, opportunity costs, and trade-offs.

Lesson 1 uses a series of questions to help students understand the concepts of scarcity, choice, and productive resources. Questions about a site map of a Bushman camp in the Kalahari Desert illustrate how proper inquiry can serve as a tool to study a culture and its economy. Lesson 2 presents a game of the Robinson Crusoe type, Scarcity and Allocation. It dramatizes the need to make skillful choices in order to deal most effectively with scarcity.

The Development of Economic Systems

The learning activities in Lesson 3 take five class periods during which students collect and record data characteristic of traditional, market, and command economies—the three main types of economic systems. In a traditional economy—in this case an Eskimo

community—the major forces affecting economic decisions are shaped by tradition: religion, custom, and habit. Traditional economies are prone to use outmoded techniques of production and trade because "things have always been done this way." The economic and social practices of small villages in India are a contemporary example of how restrictive the effects of tradition can be.

The basic economic questions of what to produce, how much, by what means, and for whom, are overtly and specifically addressed in a market economy, as is illustrated in a model called "By Bread and Cheese Alone." The United States, of course, is basically a market economy—most decisions are made by companies or individuals, and changes in prices signal whether more or less of particular goods and services should be produced.

In a command economy, by contrast, production and other decisions are centrally formulated by a national authority. In the Soviet Union, this authority is the GOSPLAN. The basic questions of what, how much, how, and for whom are thus decided by an arm of the government.

Students should come away from Lesson 3 with the realization that all present-day economic systems are more or less mixed economies—a point that is also stressed in Lesson 6. There are no purely traditional, market, or command economies, though one form is generally predominant in any nation.*

The Emergence of the Market Economy

The market economy, in which the forces of demand and supply determine prices and these market-determined prices guide production, developed only recently in human history. Earlier societies were dominated by custom or command. The economic system of the feudal societies in Europe during the medieval era—often defined as the period from the ninth to the thirteenth century—was an example of a command economy, though it had many elements of a traditional one. The medieval economic system, analyzed in Lesson 4, contained features that helped transform it into a market economy, and decentralized decision-making began to become increasingly important. Lesson 5 shows that this evolution occurred through the expansion of trade, the growth of towns, the increasing use of money, the permissive attitude toward trade that accompanied the Protestant Reformation, and the transformation and combination of feudal domains into the beginnings of the modern nation-state.

Lesson 6 attempts to round out the preceding lessons by suggesting objective methods of reaching conclusions about how economic systems may be classified and compared.

*All the basic concepts in Lesson 3 can be reinforced if the course also includes the industrial revolution.

Economic Systems Today

Practically all present-day nations, regardless of which economic system they exemplify, are faced with serious economic problems.

1. The traditional economies find it hard to increase their economic output—that is, achieve economic growth—precisely because their orientation to tradition shackles growth. Such absolute growth as they do achieve usually does not result in a significantly improved standard of living today or sufficient investment to raise the standard of living in the future. In many cases an important reason is that their population tends to grow so rapidly that even though total output increases, output *per person* fails to increase or increases very little. (By the beginning of the 1980s there was evidence that the rate of growth of population in traditional economies, though continuing to rise at fairly rapid rates, was beginning to slow down.)
2. The fundamental problems of command economies are:
   a. The tendency of central planning to be inherently inefficient because it lacks or ignores signals from the market;
   b. The planners' insulation from the market, leading them to emphasize physical quantities in their production goals, which diminishes the incentive for industries or individuals to improve the design or quality of existing products or to introduce new products;
   c. The propensity of authorities such as those of the Soviet Union to favor the production of investment and military goods over consumption goods—a disregard of consumers' needs which may lead to political as well as economic problems, a point the lesson on command economies stresses.
3. The problem of market economies in modern democracies is to strike a balance between the goal of maintaining a relatively free and efficient market and the desire to provide financial assistance or subsidies to people in need because of age, illness, lack of skills, discrimination, etc., factors that make them unable to earn sufficient income in the market. There is a similar problem between the compatibility of government regulation and the principles and workings of the market. More short-term, but seemingly recurrent, are the problems of keeping the economy growing at a suitable rate, keeping unemployment low, and avoiding inflation or deflation—problems that are at present exacerbated by the rise of energy prices and the uncertainty of energy supplies.

Obviously, the problems of the prevailing economic systems are more complex than can be adequately described in the summary statements just made. Those statements do, however, provide a focus for working through lessons 7, 8, and 9, which form a sequence in themselves.

The Pattern of Development

There seems to be a common evolution as economies proceed on the path from underdeveloped to developed status or, to put it another way, from a traditional to a modernized form. This common pattern is explored in Lesson 7, which illustrates how the structure of production, the composition of the labor force, and the distribution of population between rural and urban components change as economies evolve. The lesson is based on data for present-day economies, but also includes text and charts describing the contours of the typical historical pattern in easy-to-visualize forms.

Less Developed Economies

The so-called revolution of rising expectations has perhaps had its greatest effects in the new nations formed out of territories released from colonial rule since the end of World War II. The inhabitants of these countries have been trying—with varying degrees of success—to escape from poverty through a combination of their own efforts and the help of foreign loans and foreign aid. Underdeveloped countries (see Handout 8-2) that have made the least progress are typically traditional economies that produce little but food and raw materials—usually in insufficient quantities.

Lesson 8, "Less Developed Economies," uses statistical and visual techniques to give students insights into the factors that determine an economy's output and to arrive at a definition of "underdevelopment." By identifying the problems of less developed economies and by evaluating possible solutions in terms of their consequences for such economies, the students in effect have a model approach for analyzing similar economic situations or problems. The lesson should also serve to enhance the ability of students to work with and interpret statistical information.

Command Economies

The nature of an authoritarian economic system is taken up in Lesson 9 on the problem of Soviet-style command economies. Learning about the conflicts in the Soviet Union concerning the allocation of resources and the various approaches taken by the authorities to reduce this conflict should improve student understanding of current Soviet economic policies. Teachers ought to remind students that Communist countries do not all follow the Soviet Union's lead exactly. For example, the Yugoslavian economy incorporates more market elements. Poland has begun to do so, and China—at this writing—shows some signs of diverging from the Soviet model.

Economic Growth

The rate of economic growth per capita is one of the most important criteria by which economies are judged to be developed or to be in the process of developing. Sustained growth, in other words, is a hallmark of a modernized economy or one that is moving toward modernization. Developed market economies—mainly the United States, Canada, Japan, and most of the countries in Western Europe—constitute the bulk of the modernized or advanced countries. Command economies may also fit the designations "advanced" or "modernized." Much of the data in, for example, Lesson 6, clearly show the Soviet Union, Czechoslovakia, East Germany, and Poland to be growing more rapidly or enjoying a higher standard of living than many economies that fall—more or less—under the category of developing or "traditional."

Whereas it was once tacitly assumed that continuing, unbounded growth was an economic blessing no matter how advanced a country might be, that assumption is now being subjected to considerable criticism. The wisdom of considering economic growth to be an unambiguously worthwhile goal under all circumstances began to be sharply attacked in the early 1970s. Though the "growthsmen" were no doubt far more numerous than the "no-or-slow growthsmen," the whole issue was still very much alive at the beginning of the 1980s.

Lesson 9 takes up the limits-to-growth issue by examining the possible future characteristics of the basic economic problem—scarcity. Some who have pondered the matter predict that world economic growth must be curbed or even halted if we are to avoid a "doomsday"; others predict that the benefits of further growth will outweigh its disadvantages. World studies and world history classes can provide an opportunity for students to think about these possibilities and the destiny of Spaceship Earth.

International Economics

History teachers who want to expand the economic content of their world studies courses can readily do so by including topics in international economics. International trade is logically the first. The essence of the impetus to trade between nations is that all participants gain thereby; each nation buys from the other what the trading partner can produce with comparatively greater efficiency. This is the economic doctrine of comparative advantage.

The determinants of foreign trade in the real world, of course, differ from the doctrinal ideals. For example, if sales of some domestically produced products are hurt by foreign competition, tariff barriers may be erected. Many governments subsidize the sale of exports in order to enable their producers to compete with or to undercut the prices of domestic producers in another country. Subsidies can also be used to undercut the prices of competing exporters in a third country. Instead of subsidizing the selling of exports through special funding or tax relief, some countries finance exports at subsidized interest rates. And so on.

There are two basic positions on foreign trade policy. The protectionist position, in effect, is that a coun-

try's employment of economic resources and economic welfare are maximized if tariffs and other impediments to imports are used to shelter domestic producers from their competitors abroad. Free traders and most economists argue, in effect, that employment of resources and the economic welfare of individual nations and of the world as a whole are maximized when the possible impediments to international trade are least.

Foreign trade policy is also, of course, a part of total foreign policy: trade between countries can be used to strengthen international ties; embargoes or other barriers to trade can be used to threaten or punish other nations. Lesson 11, "Protectionism in Foreign Trade," introduces students to the basic concepts, practices, and terminology of trade among nations—including absolute advantage, comparative advantage, opportunity costs, tariffs, quotas, embargoes, the infant industry and other protectionist arguments, and free trade. This material can also be used in teaching about the eighteenth century struggle for overseas empires, the commercial revolution, mercantilism, and some of the economic causes of World Wars I and II.

MASTER CURRICULUM GUIDE

Instructional Activity Evaluation Form

Please complete an evaluation form for each activity used and return to: _____ (Name of Supervisor)

NAME: _____ (Person Completing Form) SCHOOL ADDRESS: _____

DATE: _____ _____

_____

TITLE AND/OR LEVEL OF ACTIVITY PACKAGE: _____

NUMBER AND/OR TITLE OF ACTIVITY: _____

DESCRIPTION OF CLASS WITH WHICH ACTIVITY WAS USED:

Course Title: _____

Age Range or Grade Level: _____

Title of Textbook (if any): _____

Student Ability Level(s)—(Check one):

_____ Above Average

_____ Average

_____ Below Average

_____ Heterogeneous Group Including All the Above

ACTIVITY EFFECTIVENESS (circle the number you think indicates the appropriate rating):

1. Are objectives clearly stated?

   Very Clear 5 4 3 2 1 Vague

2. Are objectives realistic in terms of student maturity at the specified age or grade level?

   Very Realistic 5 4 3 2 1 Unrealistic

3. Are teaching procedures stated in a manner so as to be easily understood?

   Easy to Understand 5 4 3 2 1 Very Difficult to Understand

4. Are teaching procedures appropriate for accomplishing objectives?

   Very Appropriate 5 4 3 2 1 Not Appropriate

5. Are teaching procedures appropriate for students of this age or grade level?

   Very Appropriate 5 4 3 2 1 Not Appropriate

6. Are recommended student materials appropriate for the age or grade level specified?

Very Appropriate	5	4	3	2	1	Not Appropriate

7. To what extent does this activity contribute to pupils' understanding of the particular economic concept it is designed to teach?

Very Much	5	4	3	2	1	Not At All

8. Did you use any of the items suggested for evaluation? _____
If yes, please provide the information requested below.

Number of Evaluation Item	*Average Level of Class Performance (Circle one)*			
_____	Excellent	Good	Acceptable	Poor
_____	Excellent	Good	Acceptable	Poor
_____	Excellent	Good	Acceptable	Poor
_____	Excellent	Good	Acceptable	Poor
_____	Excellent	Good	Acceptable	Poor

9. What would be your overall rating of evaluation techniques suggested for this activity?

Excellent	5	4	3	2	1	Poor

10. What would be your overall rating of the activity in terms of its effectiveness for achieving stated objectives?

Very Effective	5	4	3	2	1	Not At All Effective

COMMENTS AND RECOMMENDATIONS: What changes and/or additions would you recommend for making this a more effective instructional activity? Please describe or, if available, include some samples of any additional teacher or student materials you used (for example: evaluation techniques). We welcome specific elaboration concerning any of the above questions.

(Attach extra sheets with comments and materials or use back of form)

Form prepared by June V. Gilliard,
Director of Curriculum, JCEE

MASTER CURRICULUM GUIDE

Instructional Activity Format

TITLE:	Name of lesson.
TIME REQUIRED:	Time or number of class periods needed to complete the activity.
RECOMMENDED GRADE LEVEL:	Grade and/or ability level of students for whom the activity is intended.
MAJOR CONCEPTS:	Concepts around which the activity is mainly organized.
RELATED CONCEPTS:	Other economic concepts dealt with in the activity.
INSTRUCTIONAL OBJECTIVES:	For each objective we specify (1) the particular knowledge, skill, or attitude the student is expected to demonstrate; (2) the action the student will perform in demonstrating this knowledge, skill, or attitude (e.g., write, compare, state, list, etc.); (3) the conditions under which the action is to occur (e.g., given certain data or information, after viewing a particular film, participating in a particular field trip, etc.).
RATIONALE:	A brief statement explaining the significance of the activity. The statement may focus on what students should know, be aware of, or be able to do. Or, it may focus on the importance of the instructional approach being taken (e.g., use of gaming/simulation for motivational purposes or to have students apply certain skills, knowledge, etc.).
MATERIALS:	A list of all materials needed for the activity (e.g., books, games, films, etc.).
PROCEDURE:	A description of the teaching-learning process to be used for pupil attainment of objectives. Includes both teacher strategies and pupil activities.
EVALUATION:	A description of strategies, testing instruments, or other materials to be used for assessing student learning.

Lesson 1: A Primitive Economy

TIME REQUIRED: Two or three class periods

RECOMMENDED GRADE LEVEL: 9–12

CONCEPTS: The basic economic problem: scarcity and choice
Productive resources

Instructional Objectives: Using a site map, students will

- Classify the productive resources shown as natural resources or capital resources;
- Deduce what skills the members of the society occupying the site possess;
- Infer how the society answers the questions of what to produce, how to produce, how much to produce, and how production is to be distributed, and defend these inferences.

Rationale: The study of world history or world cultures in part involves examining the nature of various economies. This lesson focuses on the economics of early societies. In them, one can see—in simplified form—some of the choices all societies must make in order to cope with the economic problem of scarcity.

Materials: One copy of Handout 1-1 for each group. One copy each of Handouts 1-2 and 1-3 for every student.

Procedure:

1. Divide class into groups of five students each. If large tables for group work are not available, have each group place several desks together so as to form a flat surface on which to spread out the site map and other materials.
2. Distribute Handout 1-1 (one per group) and have students tape or paste together the two halves of the map.
3. Distribute Handout 1-2 (one per student) and instruct groups as follows: Examine the map carefully before beginning exercise 1. Then, using only the information on the map, determine what productive resources are available to the society and classify them as human, natural, or capital resources. Then write them down in the appropriate columns of the work sheet. (To make sure students understand key terms ask for volunteers to define and give examples of human resources, natural resources, and capital resources. If students need more extensive review, distribute Handout 1-3 and have class read and discuss it before beginning exercise 1.)
4. Allow approximately 15 minutes for groups to complete the exercise.
   NOTE: Human resources available to the society are not explicitly dealt with on the map, so students may find it difficult to state what they are. Use questions similar to those below to assist groups having trouble with this category.
   —What are some of the natural resources available on the site? How are these used? What kinds of skills or labor are needed to employ the resources in this manner?
   —What are some of the capital resources available? What kinds of skills are required to produce them? How are the resources used?
5. Have one group write its lists on the chalkboard. Ask the remaining groups to compare these lists with their own and to indicate any additions or differences of opinion. If differences appear, the groups should cite the evidence on which they base their classifications. They should then try to resolve the disputes.
   NOTE: Some resources do not clearly fall into a single category and therefore are difficult to classify. For example, eggshells may be classified as a natural resource (i.e., a gift of nature). If, however, students conclude that the shells are stockpiled and later used as storage vessels or broken into pieces and used for making other items such as jewelry, the shells could be classified as capital resources. If students cannot resolve differences as to how resources that do not clearly fall into a single category should be classified, you may allow them to include disputed items in more than one category or to create a new category of "hard-to-classify" resources. Students should omit any item for which they cannot name a productive use. Examples of items students may include in the various resource categories are:

   NATURAL RESOURCES: Nuts, trees, stones, animals, vegetables. (Such items as eggshells, animal sinews, and vegetable fibers may be included in this category or under capital resources, depending on students' conceptions of how these are used.)

   CAPITAL RESOURCES: Anything that is by evidence or inference used to produce other goods (or services) for the society.

   HUMAN RESOURCES: Hunters, food gatherers, leather makers, rope or twine makers, etc.
6. As an assignment or at the beginning of the next class period, have groups use the map to answer the questions below. Tell students to be prepared to justify their answers.
   a. What are some of the goods and services this society can provide with its available resources? (Answers depend on how imaginatively students use information available on site map. They should, of course, limit themselves to the technologies and goods suggested on the map.)
   b. How do you think the work of this society is organized to provide goods and services? (An-

swer depends on how much division of labor the students can reasonably assume from the evidence.)

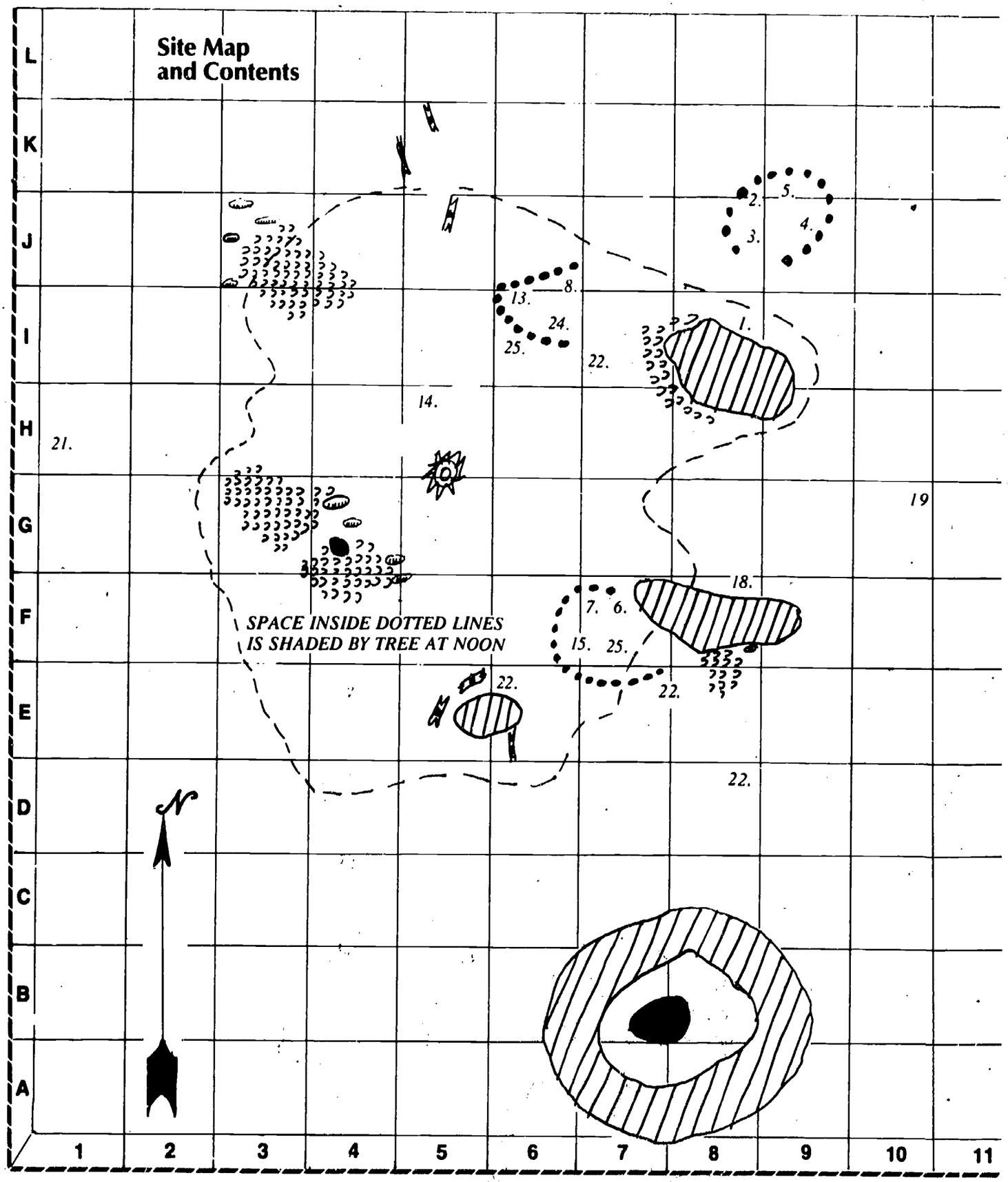
c. How do you think the goods and services are distributed among members of society? (Potential answers include barter, money, a combination of both. *Question:* Would a single unit of production of one commodity always be exchangeable for a single unit of another commodity?)

7. Have groups report and discuss responses to the questions in exercise 2 of the handout. Answers will differ because they must in large part be inferred. The suggested procedure for group reports and class discussion is to ask each group to report its answers to question a and explain how they were derived. (For ease of comparison you may wish to have the answers written on the chalkboard.) Encourage students to challenge conclusions that are contrary to evidence or based on faulty logic. Use the same procedure for reports and discussion on questions b and c.

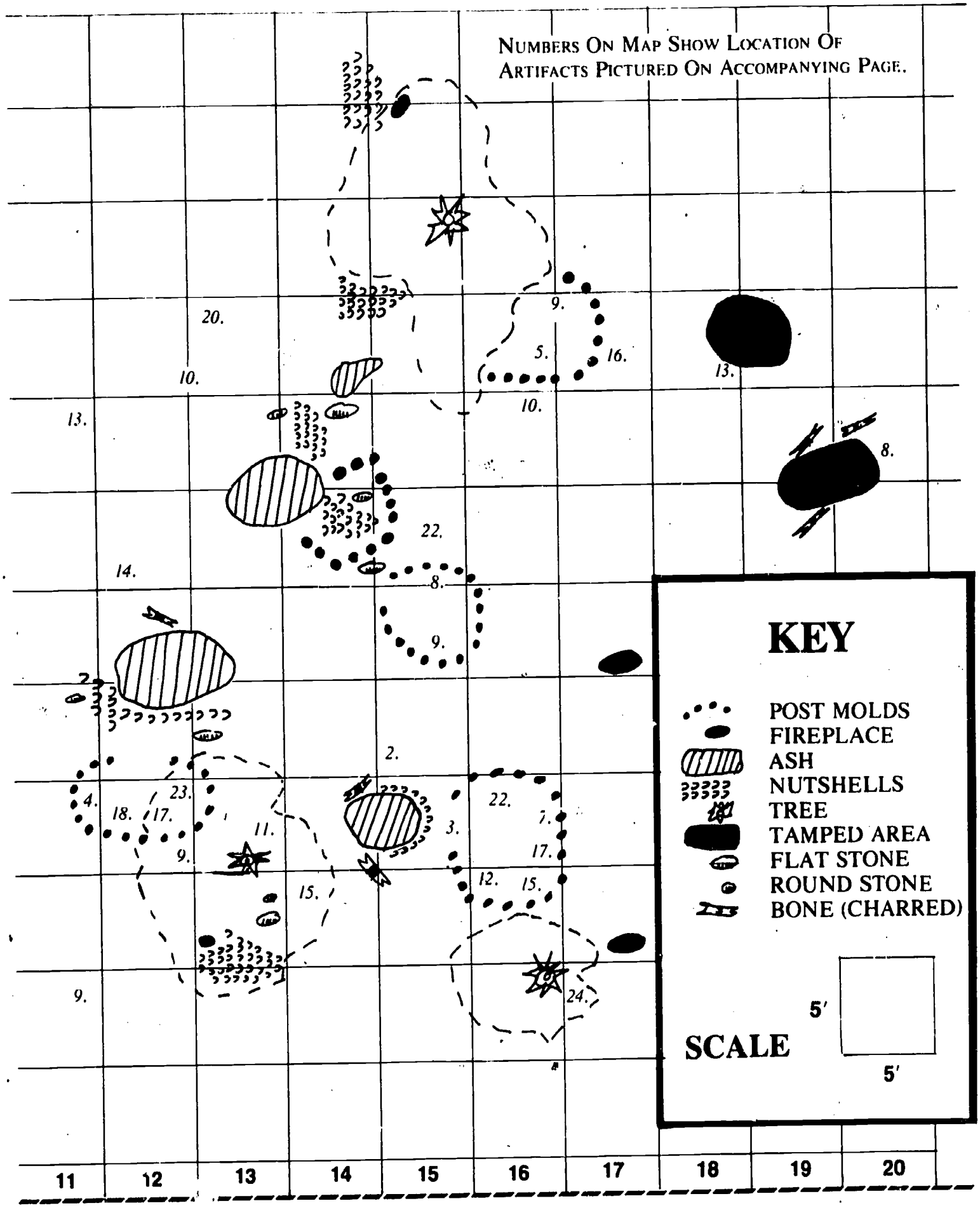
Evaluation:

1. Ask the students to describe in writing an imaginary day in the life of someone who lives on the site.
2. Have the students name all the possible capital resources found on the site and give the evidence that leads them to place artifacts in that classification. (NOTE: Filmstrips of various Bushman societies are available. They would allow students to see how their inferences compare to reality.)

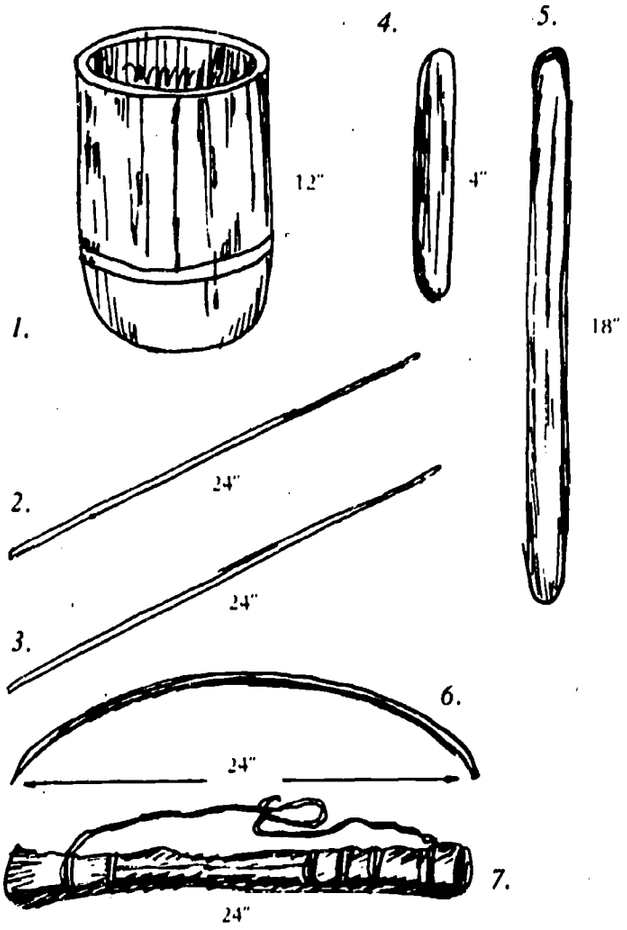
Handout 1-1



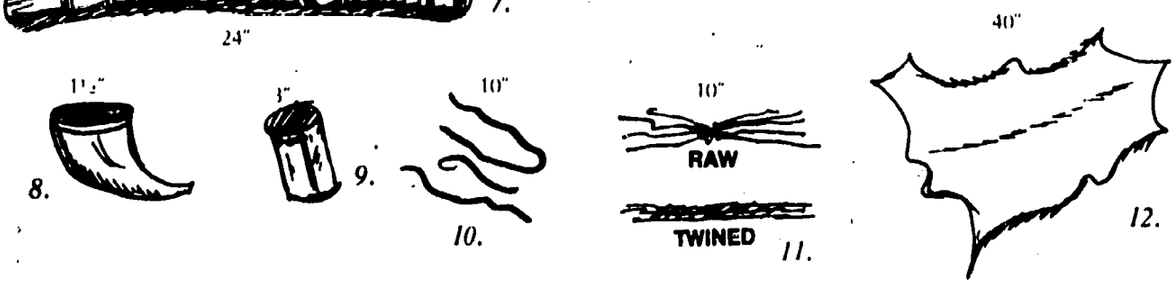
From the Anthropology Curriculum Study Project, The MacMillan Company, 1968.

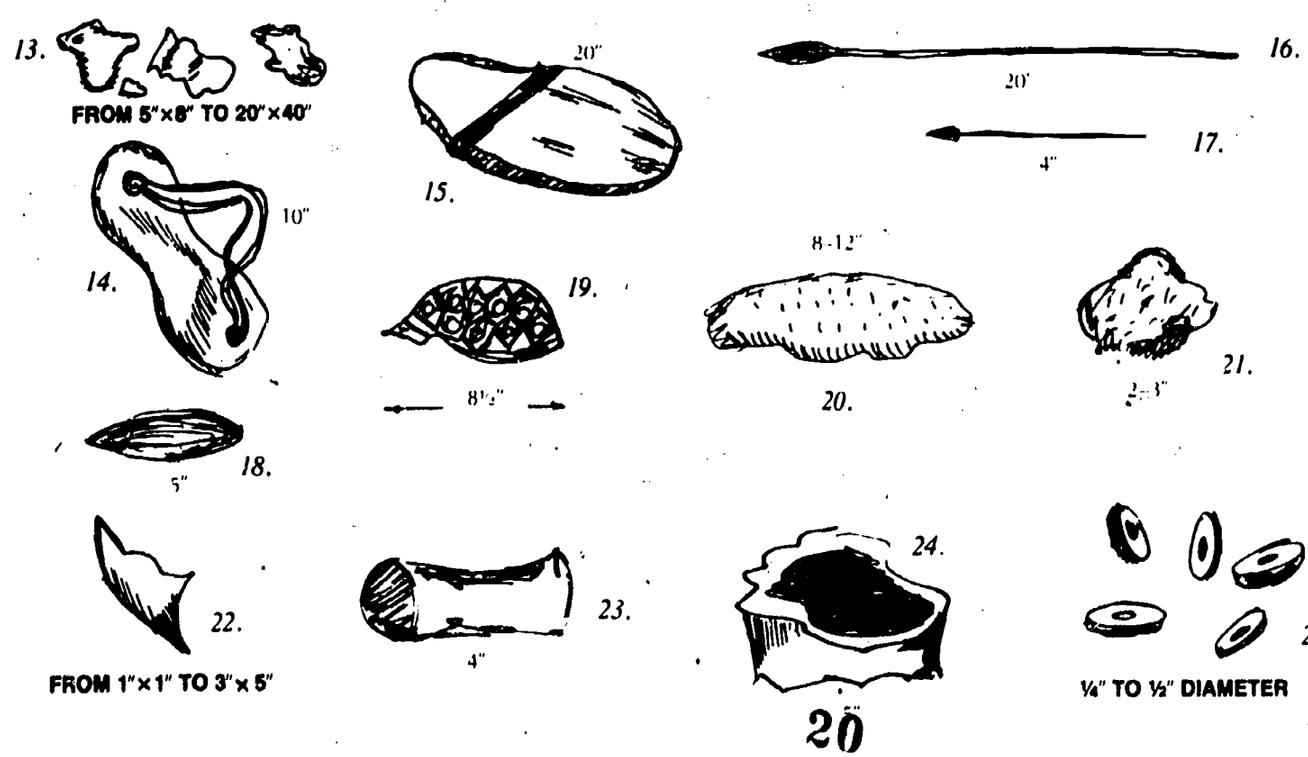

NUMBERS ON MAP SHOW LOCATION OF ARTIFACTS PICTURED ON ACCOMPANYING PAGE.
KEY
POST MOLDS
FIREPLACE
ASH
NUTSHELLS
TREE
TAMPED AREA
FLAT STONE
ROUND STONE
BONE (CHARRED)
SCALE
5'
5'
11
12
13
14
15
16
17
18
19
20

KEY TO NUMBERED CONTENTS OF SITE MAP



1. Wooden Bowl, thick bottom
2. Th'n Wooden Wand, polished on one end
3. Thin Wooden Wand, holes in side at one end
4. Blunt Thick Stick
5. Rolled Copper Sheet, charred inside
6. Curved Stick, pointed ends
7. Cylinder of Bark, crossed at one end by leather
8. Piece of Bent Wood, hollowed and charred inside
9. Metal Cylinder, metal bottom
10. Animal Sinews
11. Vegetable Fibers
12. Treated Animal Hide, hair removed
13. Small Scraps of Hide
14. Piece of Thick Leather, thongs attached
15. Bag Made of Leather, laced with sinews
16. Hammered Metal Implement
17. Shaped Metal
18. Shaped Metal
19. Tortoise Shell
20. Flat Stone, peck or tool marks
21. Round Stone, peck or tool marks
22. Egg Shell, large, hard, thick (ostrich)
23. Animal Bone, hollowed and charred inside
24. End of Large Animal Bone, cup-shaped
25. Egg Shell Scraps, drilled in center





Handout 1-2

SITE MAP WORKSHEET

1. Examine the site map carefully. Based on the evidence provided, list the productive resources available to this society and, in the space below, classify these resources under the headings indicated.

Natural Resources	Capital Resources	Human Resources

2. Using the site map and the resource lists, discuss the following questions in your group and write the group conclusions in the spaces provided.

   a. What are some of the goods and services this society can provide with its available resources?

   b. How do you think the work of this society is organized to provide goods and services?

   c. How do you think the goods and services are distributed among members of the society?

Name _____ **Class** _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 1-3

PRODUCTIVE RESOURCES

Before goods and services can be consumed, they must be produced. For this to occur, *productive resources* (also called factors of production) are necessary. Productive resources constitute the input to production, while the goods and services produced constitute the output. There are several kinds of productive resources.

Natural resources are the gifts of nature used to produce goods and services. They include land, water, oil and mineral deposits, the fertility of the soil, climates suitable for growing crops, timber, and so on. Some of these resources are used up in the process of production, others renew themselves, while still others can be renewed through the conscious efforts of people.

Human resources are people and their physical and mental capacities. The number of people available for work and the hours they work constitute one dimension of labor input. Another is the quality of the labor skills provided and the motivation of those who provide them. The quality of the labor force reflects past efforts to improve skills and knowledge by means of education and training.

Capital goods are those things created by man's past efforts that are available to produce goods and services in the future. They include machines, tools, and factories. The kinds of capital goods used and how they are used reflect the state of technology which, in turn, is a reflection of scientific knowledge and the resources devoted to acquiring this knowledge.

Two dimensions of productive resources are often important. One is *time* which is required in the production as well as the consumption of goods; time cannot be recaptured, stored, or renewed. All people face the prospect of finite days and of finite lives, thereby forcing them to make decisions about how to allocate their time among various activities. *Space* is also important. The amount of living space available, the density of an area's population, and the distances that must be traveled to carry out economic activities influence economic behavior and are influenced by it.

From *Master Curriculum Guide in Economics for the Nation's Schools*, Part I, *A Framework for Teaching Economics: Basic Concepts* (New York: Joint Council on Economic Education, 1977), p. 10.

Lesson 2: The Game of Scarcity and Allocation*

TIME REQUIRED: Approximately four class periods

RECOMMENDED GRADE LEVEL: 10–12

CONCEPTS: Scarcity and choice
Opportunity costs
Trade-offs

Instructional Objectives: Students will

- Understand the basic economic problem of scarcity and choice;
- List the alternative uses for the resources available in the game;
- Choose the use of resources they believe will yield the greatest benefit and indicate which goods should be produced immediately, which should be postponed until later, and which should be forgone entirely;
- Relate their experiences in the game to problems of economic scarcity and choice that confronted prehistoric societies and that confront contemporary societies.

Rationale: Because scarcity is the basic economic problem, it is necessary to choose how to make the best use of available economic resources. In the game of Scarcity and Allocation, students are required to make such choices. Dealing with scarcity is a task that all societies from prehistoric times to the present have had to face.

Materials: One copy each of handouts 2-1, 2-2, and the Factsheet for every student. (The Factsheets are available at $5.00 per 100 from Didactic Systems, Inc., 6 North Union Avenue, Cranford, NJ 07016.)

NOTE: Planning is essential to the success of the game. Rules and procedures for conducting the game cannot be understood without the Factsheet. Consequently, you should order the Factsheets well before the time when they will be needed. In advance of the first lesson, you should read all the materials provided for students, including the Factsheet, as well as the instructional procedures given below. You should also consider the following in deciding how to organize the class for playing the game.

Scarcity and Allocation can be played by individuals but team play is more effective for groups of students. Team members can discuss procedures and choices as well as help one another become familiar with the game. Moreover, slower students will not stop when they run into difficulty but will tend to follow the lead of others until they understand the game. Teams of any size can play, but those of three or four members work better than larger ones.

You may wish to place a scoresheet like the one below on the chalkboard or on a large sheet of paper. It can be used to record the three or four best results of individual students or of teams. Showing it to the students early in the game helps to direct their thinking and encourages competition.

SCORESHEET
Scarcity and Allocation

Student (or Team)	Final Daily Working Hours	Net Hours Saved
A		
B		
C		
D		
E		
F		
etc.		

Procedure:

1. Distribute Handout 2-1 and worksheets. Assign the handout as overnight reading or have students read it in class.
2. Discuss the introductory section of Handout 2-1 with students, emphasizing the points below:
   a. The game roughly parallels the earliest experiences of human societies. Prehistoric people were forced to spend all their time hunting and collecting food to avoid starvation and protecting themselves to avoid sudden death. Gradually humans improved their lot. They domesticated animals and thus gained a steady supply of meat as well as additional working power to apply to chores that individuals could not perform alone.
   b. Units of time can be used as a measure of value or price. On the island the value of a good is measured by the number of hours of work it represents.
   c. Each period in the game equals ten days. Time spent on farming will not produce food until two periods later. Before a tool (e.g., a plow) can be used to make work easier, it must be built. Building tools requires time and effort. Moreover, the possession of a plow does not in itself assure a harvest. Seed must be col-

*The Joint Council on Economic Education gratefully acknowledges the cooperation of Erwin Rausch, president of Didactic Systems, Inc., who developed the Scarcity and Allocation game.

lected and land cleared, plowed, and planted. All this takes time, and the island's inhabitants must stop fishing to do it. Yet, they must secure enough food to sustain life while they build up the farm.

d. The class must accept the following assumptions inherent in Scarcity and Allocation or the game will lose its effectiveness:
—The situation—an island inhabited by survivors of a shipwreck—actually exists.
—All survivors have equal ability in skills needed on the island.
—Any given hour spent fishing will bring in the same amount of fish (food) as any other hour. The same assumption applies to food obtained by hunting, collecting, or farming.
—Every person needs the same amount of food.
Without these assumptions, the development of the island community would be far too complex to be covered in a few classroom sessions.

3. Distribute Handout 2-2 (Worksheet) and the Factsheet. Explain how the Worksheet and Factsheet are used in the game. During the explanation you may need to point out the following:
   a. One object of the game is to build efficient tools.
   b. Tool combinations not listed on the Factsheet are assumed to be less efficient than the combinations shown.
   c. A tool must be built before it can be used to benefit the islander.
   d. Sometimes it will be necessary to build a tool that will give less benefit by itself than a tool already available. In this case the older tool should continue to be used until the new tool, in combination with another, can render better results. For example, if a net is available it takes 8 hours to obtain one Daily Food Supply for one person. If a wagon is built next, it will still take 8 hours to obtain food—not the 9 hours shown for the wagon—because the wagon will not be used as long as it doesn't improve the situation. When a trap has also been built, however, the wagon can be used to bring home the catch, reducing the time for obtaining food to 4 hours a day.
   e. Students should not build tools they will not need. Doing so will only prevent them from saving time, and success is in part measured by the number of hours saved.
4. Have students play the sample game *step-by-step* as described in Handout 2-1. Experience has shown that where ample time is taken with the sample game, students understand the game more quickly and enjoy it more. During the sample game, defer questions concerning theory to the review session, if possible. Questions pertaining to rules and procedures, however, should be answered in detail.
5. Before beginning the first round, tell students whether they will play as individuals or in teams. If you use a scoresheet, explain the scorekeeping procedure to the students and tell them where the sheet will be posted. Finally, remind them that
   a. Entries on the Worksheet should be in pencil because there is likely to be frequent erasing.
   b. Each game period (round) consists of 120 hours (10 days of 12 hours each). A Daily Food Supply must be provided for each of the ten days of the period before any time can be spent building tools or farming.
   c. The Worksheets will be collected at the end of each class period.
6. Have students play the first three rounds. At the end of the third round, review the rules for farming, and remind students that
   a. Time spent on farming should be entered on lines 9 and 10 of the Worksheet;
   b. Any Daily Food Supplies from farming should be entered on line 6 two periods later.
7. Have students resume play through Round 12.
   NOTE: The game has no provision for trading because experience has shown that many students cannot grasp all the complexities when the game is thus expanded. If the class catches onto the game quickly, you might wish to experiment by allowing informal trades. The best way to do so is to decrease the length of time needed to build a copy of a tool to less than that shown on the Factsheet. Students can specialize in making certain tools and then trade them.
8. For the review period, have students discuss the following:
   a. What were the principal problems you had to solve as you played the game?
   b. What alternatives did you have for using resources at the end of the third round?
   c. Which alternative did you choose?
   d. What factors entered into your decision?
   e. What effect did this decision have on your ability to produce food?
   f. What were some of the choices you made in other rounds? What alternatives were available at that time? What influenced the decision you made?
   g. In what ways do you think the problems you faced in the game were similar to the economic problems faced by prehistoric societies? In what ways were they different?
   h. Do you think economic scarcity is a problem in present-day societies? Why or why not?

Evaluation: Provide each student with a new game Worksheet (Handout 2-2). Ask students to take home the Worksheet and Factsheet and replay the game, completing the Worksheet for all twelve periods. In a subsequent class discussion, have students compare their Worksheets with those they completed when they played the game in class.

Handout 2-1

SCARCITY AND ALLOCATION GAME*

You might call Scarcity and Allocation a "Robinson Crusoe game." It deals with conditions on a desert island, and its objective is to increase the standard of living of people stranded there.

Primarily, of course, the game is concerned with problems that stem from the basic economic concept of unlimited wants and limited resources. There is no end to human wants, but there is to resources. Hence a person or a society must make choices about what to produce, how much to produce, and when to produce it.

Scarcity and Allocation is a model of a real situation. It contains certain assumptions and rules that provide a simple framework within which to work. To play the game you must accept the rules and assumptions. Do not expect the model to duplicate reality. From the game, however, you can derive principles that can be applied to reality.

Tools Mean a Better Life

You will imagine that you are one of a group of people stranded on an uninhabited insland. Although you are shipwrecked survivors from a contemporary ship, you have salvaged no modern conveniences to ease your existence. You are far away from regular shipping routes and chances are slim that you will be rescued soon. Fortunately, the island is rich in vegetation and wildlife. Fish, game, and fruit should afford you an adequate and healthy diet. You are as good a hunter and fisherman as any of your companions, and as adept at making tools as they are. If your group is industrious, you might reach modest affluence: good tools to help you with your work; comfortable shelter and clothing; enough emergency stocks to see you through hard seasons; and ample time for recreation and leisure.

At first you have only your bare hands and a few well-shaped rocks with which to obtain food. Your greatest desire, besides finding a cave to sleep in, will be to reduce the long hours you have to spend searching for food.

Very soon some or all of your team begin to make crude tools. One of you might make a spear from a straight branch, a sharp rock, and some vines. Somebody else might make a fishing rod and hook, or a primitive plow with which he can take the first steps toward farming. More elaborate tools can be fashioned with difficulty: fishnets, traps, and wagons. Perhaps you will learn to domesticate animals so that they can pull a plow or supply milk and meat.

As you acquire tools, you need less and less time to find your food. Your life becomes less difficult. In Scarcity and Allocation, as you accumulate time, you accumulate savings.

The point is (that) in this simple environment hours are quite sufficient to measure value. For example, equating fish with meat or meat with vegetables, hour for hour, would be quite fair. One day's catch of fish would equal the harvest of one day's work on a farm or the amount of meat a person can bag in one day of hunting.

Savings, then, are measured in hours. Of course, time cannot be stored. But remember that all the saved hours may be used for projects that lift you—the castaway—above the survival level. Perhaps you make some animal-skin clothes, or some luxury like a fan or a hammock, or you collect food to be used as emergency stocks. Perhaps you spend your free hours in sheer relaxation, which also is valuable, although not an economic product.

In other words, a greater number of hours saved means a higher standard of living. For the purposes of the game, we assume that this saved time, like savings in a bank, can be carried over to the next period. The object of the game is to utilize your time in the best way so that you can accumulate more and more hours. The person or the team with the most hours saved and the shortest workday (the least amount of hours spent in getting the daily food supply) wins the game.

Two forms are required for playing the game. The Worksheet provides a record of your decisions and their results. The Factsheet contains the information necessary for making key decisions. Be sure to look both over carefully before you begin.

The Sample Game

In the sample game sheet that appears below, periods 1, 7, 8, and 9 of an imaginary game have been filled out. To illustrate the procedure for playing, periods 7, 8, and 9 are explained step by step. Period 1 is fairly simple. Follow it yourself, line by line, to be sure you understand it. The middle pe-

riods provide better examples of how to play, because more activities take place at that time than at the beginning of the game.

STEP ONE. Find the hours available. In the game, each period consists of 10 days. It is assumed that there are 12 hours of daylight in each day, which gives you 120 working hours for each period. Therefore line 1 has been filled out for all the periods. If you have any hours saved from the preceding period, you enter them on line 2. (In sample period 7 there is nothing to enter on this line because building a wagon in period 6 used up all the hours left over from previous periods.) You will always enter the total of lines 1 and 2 on line 3 to find the total hours available for use during the current period. (In sample period 7, this number is still 120.)

STEP TWO. Obtain daily food supply for the period. Ten daily food supplies are needed during each period. This number does not change throughout the game, so line 4 has been filled out across the Worksheet. What might change is the number of daily food supplies you obtain from hunting, fishing, collecting, or farming.

You cannot begin farming until period 4. The reason for this is simple: it takes time to clear land, build a plow, gather seeds, and otherwise prepare to farm. Moreover, when and if you do start to farm, you cannot get more than half your needed food supplies in that way. The reason is that you should have some food obtained from fishing or hunting to give you a balanced diet.

In sample period 7, all ten daily food supplies are obtained by hunting, fishing, or collecting, and none by farming (lines 5 and 6). But a trap and a wagon are now available for use. Information on the Factsheet shows that with this tool combination only 4 hours are needed to obtain each day's food supply (line 7), or 40 hours in this period (line 8). Lines 9 and 10 are left blank, since no time is spent in farming. So the total hours used to obtain food in the period (line 11) are the 40 from hunting, fishing, or collecting. Subtracting that from the 120 hours available in the period gives 80 hours left, or "saved" (line 12).

STEP THREE. Build tools. If enough hours are available after current food needs are satisfied, you can build tools to shorten your future workdays. In sample period 7 a plow is built (line 13). The Factsheet shows that a plow takes 30 hours to build. This fact was entered on line 14. Subtracting 30 from the 80 hours that are left after obtaining food

SAMPLE GAME

	Period	1	7	8	9	10	11
Hours	1. Per Period	120	120	120	120	120	120
	2. Saved from Preceding Period	0	0	50	60	130	
	3. Total Available	120	120	170	180		
Daily Food Supplies	4. Total Per Period	10	10	10	10	10	10
	5. By Hunting, Fishing, or Collecting	10	10	10	10		5
	6. By Farming (no more than 5)	X	0	0	0		5
Hours Spent Hunting, Fishing, or Collecting	7. Per Day	11	4	4	4		
	8. Per Period	110	40	40	40		
Hours Spent Farming	9. Per Day	X	0	0	2		
	10. Per Period	X	0	0	10		
Getting or Growing Food	11. Total Hours Used	110	40	40	50		
	12. Hours Left	10	80	130	130		
Tool Building	13. Description	0	PLOW	ANIMAL	0		
	14. Hours Spent	0	30	70	0		
	15. Net Hours Saved	10	50	60	130		

Handout 2-1 (concluded)

gives a net saving of 50 hours (line 15). Enter this also on line 2 for the next period.

For sample period 8, 170 hours are available (50 saved from the last period plus the 120 of the present period). All ten daily food supplies are still obtained through hunting, fishing, or collecting (with a trap and a wagon). So we still need 40 hours to get food (lines 8 and 11). Subtracting 40 from the 170 hours available leaves 130 hours (line 12); a total of 70 hours are expended domesticating an animal to pull the plow (lines 13 and 14), and 60 hours are left over (line 15).

At the start of sample period 9, 180 hours are available. All food supplies for the period are obtained by hunting, fishing, or collecting, which still takes 4 hours a day.

Now that a plow and animal are available, some hours are spent in farming. The farming procedure is a little different. Remember that most of the work in farming precedes the harvest by weeks or months. Crops must have time to grow and ripen. In the game, the time spent on farming does not produce food until two periods later.

The Factsheet shows that with a plow and animal it takes 2 hours a day to get food by farming (line 9). Since it is a game rule that only half a period's food can be from farming, 10 hours (5 food supplies at 2 hours each) were so used in period 9 (line 10).

In period 9, then, 50 hours were spent to gather and grow food (40 plus the 10 on farming). Subtracting this sum from 180 leaves 130 hours. No tools were built, which means that all 130 hours were saved and can be "carried" to the next period.

Although the next period is not filled out in the sample, you should be able to understand that the farming effort must be continued. The result will be that the crop matures in period 11 (two periods after planting). It will satisfy five daily food requirements in that period and each period following as long as time is expended to keep up fields. Your hunting, fishing, or collecting time is thus reduced from 40 to 20.

Ready To Play

You are now ready to start your own game. In period 1 you have only 120 hours available, and it will take you 11 hours to get one daily food supply, because you have no tools so far (see Factsheet). As soon as you begin accumulating hours, you will have to decide on the best way, that is, which tools to build, to increase your saved time.

Be sure to use a pencil to record your data so that you can erase easily if you make a mistake or change your mind.

The best way to play the first few periods is to reread the sample game and follow it step by step as you play.

One more word of introduction. If you do not immediately understand all that is expected of you in Scarcity and Allocation, don't worry about it. Remember, the best way to learn a game is to play it. As you play, the rules and procedures will soon become clear.

Handout 2-2

WORKSHEET

	Period	1	2	3	4	5	6	7	8	9	10	11	12
Hours	1. Per Period	120	120	120	120	120	120	120	120	120	120	120	120
	2. Saved from Preceding Period	0											
	3. Total Available	120											
Daily Food Supplies	4. Total Per Period	10	10	10	10	10	10	10	10	10	10	10	10
	5. By Hunting, Fishing, or Collecting	10											
	6. By Farming (no more than 5)	X	X	X	X	X							
Hours Spent Hunting, Fishing, or Collecting	7. Per Day	11											
	8. Per Period	110											
Hours Spent Farming	9. Per Day	X	X	X									
	10. Per Period	X	X	X									
Getting or Growing Food	11. Total Hours Used	110											
	12. Hours Left	10											
Tool Building	13. Description	0											
	14. Hours Spent	0											
	15. Net Hours Saved	10											

Name _____

Class _____

Lesson 3: Traditional, Market, and Command Economic Systems

TIME REQUIRED: Approximately five class periods

RECOMMENDED GRADE LEVEL: 10–12

CONCEPTS: Types of economic systems: allocation mechanisms

Instructional Objectives: Students will

- Collect and record data about the three types of economic systems;
- Analyze the data and make inferences about the economic goals of particular cultures;
- Distinguish between economies in terms of the relative importance of different allocation mechanisms.

Rationale: An economic system is a complex of institutional relationships that determine what goods and services will be produced, how they will be produced, how much will be produced, and who will consume them. Investigating these relationships provides students with useful knowledge of different economic systems as well as the social and political development of different cultures.

Materials: One copy each of handouts 3-1, 3-2, 3-3, 3-4, 3-5, and 3-6 for every student.

Procedure:

1. Distribute handouts 3-1 and 3-2. Ask students to read the selections in Handout 3-2 and then to fill out the three boxes in Handout 3-1 that appear under the heading "What is the main economic problem?"
2. Distribute Handout 3-3. Ask students to read it and then fill out the top box in column 2 of Handout 3-1.
3. Distribute Handout 3-4. Ask students to read it and then fill out the middle box in column 2 of Handout 3-1.

NOTE: After students read Handout 3-4, but before they complete Handout 3-1, you may want to point up the role that prices play in a market economy. If the price of a good or service tends to rise during a noninflationary period (or faster than the average of all prices in a period of inflation) the usual result will be to reduce the demand for that good or service and to increase the amount that is produced or offered for sale. If a price tends to fall in either absolute or relative terms, the opposite should happen: more of the commodity or service will be bought and less produced or offered for sale. In short, the market uses prices as key signals—or information—with which to help make economic decisions and to bring demand and supply into balance. That is why the market system is frequently called a price system.

The point may be driven home by referring to that part of the reading titled "A Model: By Bread and Cheese Alone," and requesting the students to assume that people in this imaginary economy want more cheese and less bread. Then ask:

a. What will happen to the price of good dairy land? To the wages of bakers?
b. Why would the changes the students describe take place?

4. Distribute Handout 3-5 and have students fill out the bottom box in Column 2 of Handout 3-1.
5. Have students review all the previous readings and then fill out the three boxes in Column 3 of Handout 3-1.

Evaluation:

1. Distribute Handout 3-6. Have students complete the exercises given there.
2. Have students write an essay on the following statement: "No economy is fully a traditional, command, or market economy. Each has traces of all three systems."

Handout 3-1

TYPES OF ECONOMIC SYSTEMS

Type of economic system	What is the main economic problem? (1)	How does this type of economy decide What? How? and for Whom? (2)	What goals/values are implied as being important in this type of economic system? (3)
TRADITIONAL			
MARKET			
COMMAND			

Name and Class _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 3-2

THE ECONOMIC PROBLEM

. . . [Much] economics grows out of one simple but powerful fact: There is never enough of everything to go around. For this reason, the study of economics focuses upon the concepts of scarcity and choice. Every society must find a way to divide what it has among what it needs. This generalization applies to such varied goods and services as food, shelter, transportation, and medical care.

The world's poorest societies face scarcity in its most severe form. Anyone living in an underdeveloped country where a typical person's income may average less than $100 a year knows that he cannot have everything he wants. The same point applies, however, to the governments and people of rich societies, such as . . . the United States. The United States may have to choose between trips to the moon and a clean environment. A rich family in the United States may have to choose between an expensive automobile and a vacation in Europe. . . .

Economies Along Spectrums

Throughout history, people have developed many ways of organizing a society to decide what, how, and for whom to produce goods and services. Different values, backgrounds, and geography have produced a wide variety of economies. Out of this variety, however, three general types or categories of economic systems can be identified—traditional, command, and market.

The oldest of these systems is the traditional economy. . . . Such systems answer the what, how, and for whom questions largely according to what was done in the past. They stress the old ways, not new ways or progress. People in these societies would be puzzled by the emphasis which [many modern] economies . . . place on constant change and improvement.

A second group, nearly as ancient as the first, includes the command economies. Rulers run these economies from above. The commands of these rulers determine the answers to the key economic questions. In the past, and in a few modern societies, the command economies have often preferred old, set ways of doing things. In that respect, they resemble traditional economies. But today many nations with command economies, such as the Soviet Union and China, stress progress.

A third group, only a few centuries old, contains the market economies. . . . [T]hey include some of the wealthiest economies the world has yet seen, such as the United States and Canada. Like the newer command economies, they emphasize progress and change. For the most part, the buying and selling activities of private citizens answer the what, how, and for whom questions in market economies. Citizens sell their labor to one another for whatever price they can get. Then they use the proceeds to buy whatever they want and can afford. Therefore, unlike a command economy, the general public—not the rulers—decides what should be produced or how to produce it.

Each of the three types of economic systems has been described very simply here. Moreover, when you try to put the world's economies into one of these three groups, you will find that no economy fits exactly into place. Although the United States serves as an example of a market economy, it has elements of . . . traditional economic systems. For example, . . . some individuals, almost without giving it another thought, go into the same line of work as their fathers or mothers. [In many instances, women do not yet receive as much pay as men for equal work.]

[T]he Soviet command economy has some elements of a market system. Some farmers on collective or state farms sell parts of what they raise for whatever they can get in the market. Likewise, the Soviet system has elements of a traditional economy. The long history of the Soviet people still influences the country today. Yet, for the most part, the Soviet economy operates on commands from the central government. . . .

No economy is fully a traditional, command, or market economy. Each has traces of all three systems.

Handout 3-3

WHAT, HOW, AND FOR WHOM IN A TRADITIONAL ECONOMY

. . . Until recent years, the Eskimos produced and distributed food, clothing, and shelter exactly as their ancestors had done for generations before them. When they killed a seal or a caribou, they divided the meat and hides according to the customs of the past. Each husband and wife educated their own children as they had been educated. They also provided other services, such as medical care or law enforcement, as their ancestors had done.

[The following] reading[s] concentrate . . . on the ways in which the Eskimos answered the three basic economic questions associated with the concept of scarcity: what to produce, how to produce it, and for whom to produce it. . . .

What To Produce: The Seal or the Caribou

The Noahanirgmiut (no-a-ha-NEERG-me-ut) were still living on seal meat and were making no attempt to kill any of the numerous caribou that were continually migrating past . . . (they) had never hunted caribou on the ice and had not considered it possible. It would in fact be a fairly hopeless thing for them to try it; and while no doubt some of them might occasionally secure an animal, they would waste so much time that the number of pounds of meat they obtained in a week's hunt that way would be but a small fraction of the amount of seal meat they might have secured in the same time. Besides that, this is the season which the Eskimo give up to the accumulation of blubber for the coming year . . . By getting seals in the spring . . . they secure an agreeable article of diet for the coming autumn and provide themselves as well with a sort of insurance against hard luck in the fall hunt. Each family will in the spring be able to lay away from three to seven bags of oil. Such a bag consists of the whole skin of the common seal. The animal has been skinned through the mouth in such a way that the few necessary openings in the skin can be easily sewed up or tied up with a thong. This makes a bag which will hold about three hundred pounds of blubber, so that a single family's store of oil for the fall will run from nine hundred to two thousand pounds.

How To Produce It: Catching a Seal

The whole principle of successfully stalking a seal is just in realizing from the first that he is bound to see you and that your only hope is in pretending that you are also a seal. If you act and look so as to convince him from the first that you are a brother seal, he will regard you with unconcern. [Imitating] a seal well enough to deceive a seal is not difficult, for, to begin with, we know from experience that his eyesight is poor. You can walk up without taking any special precautions until . . . you are within two hundred and fifty or three hundred yards. Then you have to begin to be more careful. . . . You must not only crawl ahead, seal-fashion, but you must be careful to always present a side view of your body to the seal, for a man coming head-on does not look particularly like a seal. . . . In this way you can crawl within five or ten yards of him if you like, and as a matter of fact I have known of expert seal hunters who under emergencies would go after a seal without any ordinary weapon and crawl so near him that they could seize him by a flipper, pull him away from his hole, and club or stab him.

For Whom to Produce It: Dividing the Seal

. . . [B]oiled pieces of seal meat had already been taken out of the pot and lay steaming on a sideboard. . . . My hostess picked out for me the lower joint of a seal's foreleg, and handed it to me, along with her own copper-bladed knife; the next most desirable piece was handed to her husband, and others in turn to the rest of the family. . . . [O]ne extra piece was set aside in case I should want a second helping, and the rest of the boiled meat was divided into four portions, with the explanation to me that there were four families in the village who had no fresh seal meat.

The . . . adopted daughter of the house, a [child] of seven or eight, had not begun to eat with the rest of us, for it was her task to take a small wooden platter and carry the four [small] pieces of boiled meat to the four families who had none of their own to cook. . . . Every house in the village in which any

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From Vihjalmur Stefansson's famous 1913 account, *My Life with the Eskimo*, first published in 1913; as quoted in *Comparative Economic Systems: An Inquiry Approach*, by John R. Coleman, Ted C. Soens, and Edwin Feriton, pp. 38–42. © 1974 Holt, Rinehart and Winston, Publishers.

Handout 3-3 (concluded)

cooking was done had likewise sent four portions. . . .

During our meal presents of food were also brought us from other houses; each housewife apparently knew exactly what the others had put in their pots, and whoever had anything to offer that was a little bit different would send some of that to the others, so that every minute or two a small girl messenger appeared in our door with a platter of something to contribute to our meal. . . .

The Influence of the Past on Decision-Making

. . . We had several excellent fish nets in our boat, and I had said to [the] Eskimo in the beginning that I thought we ought to put them out to see if we could catch any fish; but they said very definitely that there were no fish here. At that time I had had no experience with Eskimo in a country new to them. I had dealt only with Eskimo near [their] home, and my experience with them was that they knew exactly where to put nets, and knew also what places were hopeless as fishing localities. I know now that the Eskimo . . . never expect to find anything in any place where no one has found it before, so far as they know, and never having heard of any one catching fish in Smith Bay they had felt sure there would not be any. . . .

The Influence of Beliefs on Decision-Making

. . . [T]he wonders of our science and the wildest tales of our own mythologies pale beside the marvels which the Eskimo suppose to be happening all around them every day at the behest of their magicians. . . .

When I showed them my binoculars that made far-away things seem near and clear, they were of course interested; when I looked to the south or east and saw bands of caribou that were to them invisible, they applauded, and then [made] the suggestion, "Now that you have looked for the caribou that are here today and found them, will you not also look for the caribou that are coming tomorrow, so that we can tell where to lie in ambush for them." When they heard that my glasses could not see into the future, they were disappointed and naturally the reverse of well impressed with our powers, for they knew that their own medicine-men had charms and magic paraphernalia that enabled them to see things the morrow was to bring forth. . . .

Handout 3-4

THE MARKET ECONOMY AS AN ORGANIZING TOOL*

Every day thousands of people take part in making or buying such different items as groceries, ten-speed bicycles, toasters, steel rods, houses, basketballs, magazines, factories, cars, cement mixers, and clothes. Who decides which of these items should be produced? Who will get them? What will these goods cost? How many of each item should be made?

It would be simple if an individual or group could be singled out as the decision-maker. It would also be simple if some overall plan existed which set prices or production goals. However, such decision-makers and plans do not exist in a market economy. . . .

The Market

Because we live in a market-run society, we are apt to take for granted the puzzling—indeed, almost paradoxical—nature of the market solution to the economic problem. But assume for a moment that we could act as economic advisers to a society that had not yet decided on its mode of economic organization. . . .

We could imagine the leaders of such a nation saying, "We have always experienced a highly tradition-bound way of life. Our men hunt and cultivate the fields and perform their tasks as they are brought up to do by the force of example and the instruction of their elders. We know, too, something of what can be done by economic command. We are prepared, if necessary, to sign an edict making it compulsory for many of our men to work on community projects for our national development. Tell us, is there any other way we can organize our society so that it will function successfully—or better yet, *more* successfully?"

Suppose we answered, "Yes, there is another way. Organize your society along the lines of a market economy."

"Very well," say the leaders. "What do we then tell people to do? How do we assign them to their various tasks?"

"That's the very point," we would answer. "In a market economy, no one is assigned to any task. In fact, the main idea of a market society is that each person is allowed to decide for himself what to do."

There is consternation among the leaders. "You mean there is no assignment of some men to mining and others to cattle raising? No manner of designating some for transportation and others for weaving? You leave this to people to decide for themselves? But what happens if they do not decide correctly? What happens if no one volunteers to go into the mines, or if no one offers himself as a railway engineer?"

"You may rest assured," we tell the leaders, "none of that will happen. In a market society, all the jobs will be filled because it will be to people's advantage to fill them."

Our respondents accept this with uncertain expressions. "Now look," one of them finally says, "let us suppose that we take your advice and allow our people to do as they please. Let's talk about something specific, like cloth production. Just how do we fix the right level of cloth output in this 'market society' of yours?"

"But you don't," we reply.

"We don't! Then how do we know there will be enough cloth produced?"

"There will be," we tell him. "The market will see to that."

"Then how do we know there won't be *too much* cloth produced?" he asks triumphantly.

"Ah, but the market will see to that too!"

"But what is this market that will do these wonderful things? Who runs it?"

"Oh, nobody runs the market," we answer. "It runs itself. In fact there really isn't any such *thing* as 'the market.' It's just a word we use to describe the way people behave."

"But I thought people behaved the way they wanted to!"

"And so they do," we say. "But never fear. They will want to behave the way you want them to behave."

*The first two paragraphs and "A Model: By Bread and Cheese Alone" are from *Comparative Economic Systems: An Inquiry Approach*, by John R. Coleman, Ted. C. Soens, and Edwin Fenton, pp. 88 and 90–91. © 1974 Holt, Rinehart and Winston, Publishers. "The Market" is from Robert L. Heilbroner, *The Making of Economic Society*, 5th edition, © 1975, pp. 18–19. Reprinted by permission of Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Handout 3-4 (concluded)

"I am afraid," says the chief of the delegation, "that we are wasting our time. We thought you had in mind a serious proposal. What you suggest is inconceivable. Good day, sir."

A Model: By Bread and Cheese Alone

. . . Imagine a market economy somewhere in the world which produces and consumes only two products. The people in this economy live entirely on bread and cheese. Study the model carefully, and consider how this economy decides what to produce, how to produce it, and for whom to produce it.

First, much of the *what* question is answered by the fact that these people just happen to like bread and cheese, and only bread and cheese. But how much of each? Since these people live in a free market economy, they are not told which to buy. They will divide their spending between bread and cheese in whatever way appeals to their tastes. Assume that they have been spending half of their income on bread and half on cheese. Now suppose these people decide, of their own free will, that they want more cheese and less bread. What happens?

First, the bakers and the cheesemakers learn of the change in taste not from a king or commissar, but from simple observation. The bakers find themselves with bread unsold at the end of the day. That is a signal to them to cut back production. The cheesemakers, on the other hand, find that they have sold all their cheese before the end of the day. That is their signal to try to expand production.

But the chain of events has just begun. The cheesemakers cannot simply make more cheese immediately. First, they will have to get more milk, more labor, and more equipment. If any of these ingredients is in short supply, the cheesemakers may change the way in which they make cheese as well as the amount. If skilled labor is hard to come by, the cheesemakers may train more people, work their present staff overtime, cut corners in the cheesemaking process, or try to devise new machinery to do part of the work that has been done by labor. From any of these changes, a new *how* answer would result.

At the same time, bakers will find that they must lay off some of their skilled workers as production is cut back. These workers may be lucky enough to find jobs in the expanding cheese industry. However, their new jobs will probably neither pay as well nor be at as high a skill level as their old jobs in the bread industry. Farmers with land that is fine for raising wheat but not so good for raising dairy cattle will also feel the squeeze [at least until they can shift to another crop that is just as profitable]. Their friends with good dairy lands will prosper. Thus, there will be a redistribution of income as a result of the shift in tastes from bread to cheese. The *for whom* question is answered not by law but by impersonal market forces. Those who gain from the shift in taste get more income with which they can buy more of the economy's bread and cheese than before. Those who lost from the shift in taste end up with less money to buy bread and cheese.

The real world, however, is more complicated than this imaginary economy of bread eaters and cheese eaters. In the real world, thousands of products exist. But the same basic process is still at work. In a market economy, free market forces, responding to the demand of consumers alone, make the major decisions about what goods are to be produced, how they are to be produced, and for whom they are to be produced.

Handout 3-5

THE CORE OF THE COMMAND ECONOMY*

. . . In a market economy, productive resources such as steel, timber, skilled labor, and computers, would go to whoever bids highest for them. In the Soviet Union, government planners decide where such resources are to go. They say, "Here are our most important goals, and here is the way we will use our available resources to achieve these goals."

When considering the distribution of key resources, the planners face an important question: How should they divide production between capital goods and consumer goods? If they chose to, the planners could raise today's standards of living quickly. They could allocate resources to the production of consumer goods which the people desire. But they know that steel used for automobiles, washing machines, and refrigerators cannot also be used for railroad cars, bridges, and more steel mills. And if the stock of capital goods does not increase, the nation will not be able to make more consumer goods in the future. The problem, then, is: Find a workable balance between giving the people what they want in the short run, while providing for the long-term expansion of the nation's productive facilities. . . .

All of the separate pieces in the Soviet Union's economic jigsaw puzzle somehow have to be fitted together. This is the task of the Gosplan, the state economic planning agency of the Soviet Union. This committee of economic planners receives its general directions from the central committee of the Communist Party. The party frames the five-year plans for the society.

In translating the general commands of the party into many closely related, specific targets, the Gosplan has help from subordinate commissions that govern different industries and regions. The planning agency also uses statistics and computers to help fit the pieces of the economic jigsaw puzzle together. . . .

Even with the various types of assistance the Gosplan receives, the task of the economic planners remains complex. The planners must make most of the economic decisions that the free market makes in the United States. Outsiders know many of the mistakes that Soviet planners have made. Too many shortages and too many failures in achieving goals make these mistakes difficult to conceal. . . .

The Gosplan takes its orders from the Communist Party. The party is an elite group and is deliberately kept small. In fact, only about six percent of the adults in the Soviet Union today belong to the party. But once they become members, each plays a part, however minor, in setting the goals for the nation. The members of the Gosplan are the key technicians whose skills help determine whether or not the nation's goals are achieved. But the goals themselves—and the final control of the economy—still remain firmly in the hands of the Communist Party. . . .

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*Excerpted from *Comparative Economic Systems: An Inquiry Approach*, by John R. Coleman, Ted C. Soens, and Edwin Fenton, pp. 156-59. © 1974 Holt, Rinehart and Winston, Publishers.

Handout 3-6

EVALUATION EXERCISE

Below are statements describing various economic actions. In the space provided label or classify each statement according to whether you think it is typical of a traditional economy (T), a command economy (C), or a market economy (M).

_____ 1. "On the farms, the working day lasts from before sunrise until dusk or dark. As they have done for centuries, women follow the reapers and binders on foot to gather the gleanings from the fields. . . ."

_____ 2. "The problem of finding skilled workers was immense. There were simply not enough trained men available. His competitors were fighting for their share of the labor supply. [He] decided to introduce a five-dollar-a-day minimum wage. The new minimum more than doubled the existing wage. . . ."

_____ 3. "The practice of giving certain industries [first call on scarce materials] has brought more rapid over-all economic growth than otherwise might have been possible."

_____ 4. "The proclamation of the [head of state] declared that no banking operations should be carried on throughout the country until further notice."

_____ 5. "The [people being studied] were still living on seal meat and were making no attempt to kill any of the numerous caribou that were continually migrating past. I thought at first that there might be some taboo preventing them from hunting caribou on ice, but this they told me was not so. It was simply that they had never hunted caribou on the ice and had not considered it possible. . . ."

_____ 6. "Holding prices in check was difficult. A great burden fell on the Office of Price Administration, created to keep the lid on prices by setting price ceilings on a large list of commodities which were much in demand."

Name _____ **Class** _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Lesson 4: Europe's Economy in an Age of Transition: I. The Medieval Economy

TIME REQUIRED: Two to three class periods

RECOMMENDED GRADE LEVEL: 10-12

CONCEPTS: Types of economic systems

Instructional Objectives: Students will

- Describe the characteristics of medieval society that restricted change;
- List the features of the medieval economy that fit the traditional and/or command economic system.

Rationale: It is important to understand the economic system of the Middle Ages because it contains elements out of which market systems developed.

Materials: One copy each of handouts 4-1, 4-2, 4-3, and 4-4 for every student.

Procedure:

1. Distribute Handout 4-1. Allow time for students to read the material. Then have them write answers to the questions provided in the handout.
   a. What were some of the obligations John of Cayworth had toward his lord? (Cultivate; carry manure; carry wood.)
   b. What were some of the obligations the lord had toward John of Cayworth? (Provide him with a house; provide him with 30 acres of land; provide meals in return for John of Cayworth's work of harrowing, carrying manure, and carrying wood.)
   c. What provisions were made in this contract for passing on land from father to son? (Payment of a year's rent plus continuing payment of rent.)
   d. What economic effects would any/or all of the things mentioned in the preceding questions and answers have? Why? (Because people were locked into traditional economic and social roles, upward mobility was severely restricted. Lack of social mobility, in turn, limited the possibilities for aggregate economic growth.)
2. Distribute Handout 4-2. Allow time for students to read the material. Then have them write answers to the questions provided in the handout.
   a. What were the rules governing membership in the Merchant Guild on Lynn Regis? (A stranger entering the guild had to pay 100 shillings; a member's son entering the guild had to pay 4 shillings.)
   b. What effect do you think membership rules described above had on the guild? Why? (Guild membership would tend to stay in the original families since membership fees were much lower for sons than for strangers.)
   c. Why do you think the guild fined members who conveyed its decisions to outsiders? (To keep outsiders from competing with guild members.)
   d. What were some of the rules governing the Hatters' Guild? (The most experienced ruled the guild as wardens. No one could make or sell hats unless he was a member of the guild. Apprentices had to serve for seven years before becoming journeymen.)
   e. What effect would the rule allowing only members of the guild to sell hats in London have on the economy? (Maintain prices and limit competition.)
   f. How would you explain the concern of the Hatters' Guild for "quality control"? (It made suppression of competition more effective.)
   g. What effect did rules like these have on the economy of the period? (Restricted competition. Acted to limit innovation and price cutting. Total effect was to hold back economic growth and limit the efficiency of the market.)
3. Distribute Handout 4-3. Allow time for students to read the materials. Then have them write answers to the questions provided in the handout.
   a. What did St. Thomas Aquinas list as proper reasons for a person to obtain a profit? (Improvement of the product or payment of expenses of transporting the product to where it was needed or could be most useful.)
   b. What was his view of interest? (He thought interest was "unjust.")
   c. What effect would banning the payment of interest on borrowed funds have upon economic life? (It would reduce the quantity of money people would be willing to lend and would also tend to reduce economic activity.) Why? (There would be no incentive to lend. Economic activity would slow because those who needed to borrow in order to meet personal expenses or to carry on a business would remain without the required funds.)

Evaluation:

1. Distribute Handout 4-4. Have students read it and write an essay on the following: What political, economic, and social factors within medieval society acted to restrict changes? (*Political factors:* the breakup of the Roman Empire; the existence of small feudal states; the constant warfare. *Economic factors:* the large amounts of resources used for wars; the limited economic activity in towns; the guilds' control of their respective markets. *Social factors:* great restrictions on rising into richer or more prestigious social and economic classes; restrictions on migrating to other places, i.e., limited social and economic mobility.)
2. Ask students to write an essay on the following statement: Classify the medieval economy as a traditional, market, or command system and explain your reasons. (Students will indicate that elements of tradition and command dominated the medieval economy. Assess the quality of responses based upon the cogency of the reasons given.)

Handout 4-1

A Contract Between a Villein and His Lord, 1307*

During the Middle Ages, economic life centered on the manor. Lords received manors from kings and other lords in return for military service. A manor consisted of the lord's house, cottages for his tenants, a church, mill, and workshops; and woodlands, fields, and pastures. Most of the tenants were serfs bound to the manor for life. Other tenants, called villeins, were legally free but subject to the authority of the lord.

Each villein had a contract with his lord spelling out [their] rights and duties. Eventually lords wrote these contracts down in account books so that everyone would know what the villein's duties were. An example of such an account book follows.

John of Cayworth (villein) holds from his lord one house and thirty acres of land. For his right to this land, he must pay the lord two shillings a year at Easter and Michaelmas. At Christmas he must give the lord one cock and two hens worth four shillings.

He must harrow (cultivate) the lord's land for two days during Lent at sowing time with his own horse and harrow. He receives from the lord each day that he harrows three meals.

He must carry the manure of the lord's animals for two days using his own two oxen. He receives from the lord three meals each day that he carries the manure.

He must carry wood from the lord's forest to the manor house for two days in summer. He receives from the lord three meals each day that he carries wood.

John of Cayworth may not allow his daughters to marry without the consent of the lord or the lord's bailiff [general overseer]. Neither may he permit his sons to enter the clergy without the lord's consent. He may not cut the timber growing on his land without the consent of his lord or the bailiff, and then only for the purpose of building.

After his death, his survivors will pay to the lord the best animal that he had, unless he has no living beast, and then the lord will receive no payment.

And if his sons or daughters wish to continue holding his house and thirty acres after his death, they must make a payment to the lord equal to the entire rent for one year, and continue paying the rent as set down in this contract.

Questions:

a. What were some of the obligations John of Cayworth had toward his lord?

b. What were some of the obligations the lord had toward John of Cayworth?

c. What provisions were made in this contract for passing on land from father to son?

d. What economic effects would any/or all of the things mentioned in the preceding questions and answers have? Why?

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*Reprinted from *The Shaping of Western Society: An Inquiry Approach*, by Edwin Fenton and John M. Good, p. 44. © 1974 Holt, Rinehart and Winston, Publishers.

Handout 4-2

GUILD RULES*

During the eleventh century, trade and the use of money increased, and town life revived. As town craftsmen began to manufacture more goods, they organized into guilds, or craft associations. Each town established separate guilds for merchants and for members of each craft such as weavers, hat makers, or glove makers. Gradually the rules of the guilds began to regulate economic affairs in the towns. The following regulations come from two medieval guilds.

The Merchant Guild of Lynn Regis

If any stranger wishes to enter the Merchant Guild of Lynn Regis, he must pay the alderman one hundred shillings. [Note: The alderman was the leader of the guild.]

If any member of the guild has a son or sons who wish to enter the guild, each one ought to pay the guild four shillings for his entrance.

If any of the members of the guild tell any stranger the plans or the decisions of the guild, without the permission of the alderman, they shall pay a fine of thirty-two pence.

If any of the members should fall into poverty or misery, all the members of the guild are to assist him out of the treasury of the guild or out of their own pockets.

If any member should fall asleep because of too much drink at a general meeting or at the feasts of the guild, he must pay a fine of four pence.

The Hatters' Guild of London

The most experienced and best hat makers shall rule the guild as wardens. They shall watch all members of the guild to see that the regulations are kept.

No one shall make or sell hats in London unless he is a citizen and a member of the guild.

Only men who take an apprenticeship under one of the masters of the guild may enter the hatters' trade. An apprentice must serve a term of at least seven years before he may become a journeyman.

Because some of the members of the guild have made hats that do not meet the standards of the guild, no workman in the trade shall work at night. All workmen in the trade shall make hats in the daytime so that the wardens may inspect their work.

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*Reprinted from *The Shaping of Western Society: An Inquiry Approach*, by Edwin Fenton and John M. Good, pp. 47–48. © 1974 Holt, Rinehart and Winston, Publishers.

Handout 4-2 (concluded)

Questions:

a. What were the rules governing membership in the Merchant Guild of Lynn Regis?

b. What effect do you think the membership rules described above had on the guild? Why?

c. Why do you think the guild fined members who conveyed its decisions to outsiders?

d. What were some of the rules governing the Hatters' Guild?

e. What effect would the rule allowing only members of the guild to sell hats in London have on the economy?

f. How would you explain the concern of the Hatters' Guild for "quality control"?

g. What effect did rules like these have on the economy of the period?

Name _____ **Class** _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 4-3

ST. THOMAS AQUINAS ON VALUES*

A society's values affect its economic decisions as much as they affect all other aspects of its conduct. Medieval values came primarily from the teachings of Christianity. In the thirteenth century, one of the Church's great religious thinkers, St. Thomas Aquinas, explained how the good Christian should conduct himself in economic affairs. His ideas were based on both Aristotle's works and the moral teachings of the Church.

If a man buys something, he may lawfully sell it at a profit if he has made the thing better or if he has had to meet the expenses of transporting it from one place to another.

But to take interest for lending money is unjust. Money was invented chiefly to make exchange easy. In itself, it does not fill a need of life. Money only represents the goods that can be acquired with it. Hence, to take interest for money lent means to take a payment for something that does not satisfy a natural need. Rather, the payment is taken to satisfy greed.

Questions:

a. What did St. Thomas Aquinas list as proper reasons for a person to obtain a profit?

b. What was his view of interest?

c. What effect would banning the payment of interest on borrowed funds have on economic life? Why?

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*Reprinted from *The Shaping of Western Society: An Inquiry Approach*, by Edwin Fenton and John M. Good, p. 48. © 1974 Holt, Rinehart and Winston, Publishers.

Handout 4-4

Medieval Society: A Historical Essay*

The end of Roman authority changed the political, economic, and social forces that had shaped western European society. Feudalism, a system of small semi-independent local governments based on personal contracts between lords and vassals, replaced Roman law and government. The broad commercial economy of the Roman Empire was replaced by manorialism, an economic system based on farm communities called manors. Manors supplied most of the goods and services the people living on them needed. The vibrant urban life that Roman commerce had supported nearly disappeared, cutting off the exchange of ideas and institutions between Europe and the Middle East. . . .

Medieval Europe inherited many Roman traditions and institutions. German tribal chieftains imitated Roman emperors and wealthy landowners. They settled on estates farmed by serfs, who were not allowed to leave the land. In 800, on Christmas Day, Charlemagne, king of the Franks, was given the Roman title of emperor by Pope Leo III. He united under his rule most of the western Roman Empire and some lands that had not been in the empire.

The kings of western Europe needed the allegiance of the nobles if they were to stay on their thrones. The nobles enforced the laws and manned the armies that protected the kindgoms against invaders. Even Charlemagne depended on the noble landowners to see that churches were maintained, roads kept up, and the laws enforced. Through the institution of feudalism, the Frankish nobility supported Charlemagne. For their continued oaths of loyalty and obedience, Charlemagne gave his vassals grants of land. In return, they came equipped to do battle whenever he called. . . .

From the ninth century until the thirteenth, most of Europe was thus divided into hundreds of small feudal holdings. No monarch emerged, such as Charlemagne, powerful enough to rule over a large territory. For hundreds of years, the feudal governments provided Europe with adequate local administration and defense against invaders.

The Church, also inherited from Rome, played a major role in the feudal system. Christianity had become the dominant religion of the Roman Empire by the fourth century. . . .

The popes called upon the kings and nobles to go to war on behalf of the Church. Beginning in 1095 and continuing for two hundred years, the popes called for Crusades to recapture Palestine, the Holy Land of Jesus' birth, from the Muslims. Armies of Europeans went to Palestine. Although the Crusaders failed to take Jerusalem, those who returned to Europe brought with them a desire for the products of the East and curiosity about the rest of the world. . . .

At the same time that feudalism developed and the Church's influence increased, Europe's political unity was destroyed. Commerce was disrupted as thieves and the wars between nobles made trade dangerous. Tolls collected by each noble at the border of his territory made transporting goods expensive. Pirates on the Mediterranean Sea ended almost all trade between western Europe and the Middle East for hundreds of years. Europeans had to produce their own goods and services.

Most medieval Europeans were peasants who farmed the manor lands. Their contracts with the manor lords gave them protection and the right to cultivate a part of the land in return for dues and services. Most of these peasants were serfs who were not free to leave the manor. Those who were freemen could leave. But without much hope of finding a better life in the towns, they usually remained on the manors.

A small number of people continued to live in the towns during the Middle Ages. The medieval towns were the administrative centers of the Church. In addition, they housed a few small craft industries. Beginning late in the eleventh century, trade and the use of money revived. The population of the towns began to increase. As the merchants and craftsmen found a greater demand for their products, they organized into guilds.

Manors and guilds were responsible for most of the economic decisions during the Middle Ages. They decided what goods and services would be produced with the available resources. The manor lords selected the crops that would be grown and

*Excerpted from *The Shaping of Western Society: An Inquiry Approach*, by Edwin Fenton and John M. Good, pp. 56-62. © 1974 Holt, Rinehart and Winston, Publishers.

Handout 4-4 (concluded)

the items that would be made in the manor workshops according to long-standing traditions. In the towns, each guild regulated the production of a particular item. Manors and guilds also decided how resources would be used. Contracts with the lord of a manor stated when the peasants would work for the lord and when they w ld work for themselves. Guild regulations specified what capital and natural resources would be used to make each article. Finally, manors and guilds decided how goods and services would be distributed. Contracts also stated what portion of the peasants' crops and labor went to the lord. Guild rules listed prices craftsmen could charge for their articles and how much of the profits went to the guild masters.

The manors and guilds also regulated the roles and status of medieval men and women, and . . . established the norms of behavior. In addition to stating the peasant's economic duties, a manorial contract specified whom his daughters could marry, what his sons would do when they were grown, and what would become of his wife after he died. The contract of a serf gave him less status on the manor than the contract of a freeman. On the whole, role and status were inherited. The son of a serf grew up to be a serf: the son of a fr eman grew up to be a freeman. Likewise, the oldest son of the manor lord inherited his father's role and status.

[In the towns,] inheritance played a smaller part in controlling role and status, . . . but they were still largely inherited. Guild rules often barred from the trade anyone who was not the son of a member. And fathers expected their sons to practice their crafts. Guilds also concerned themselves with norms of behavior. Guild regulations had provisions about drunkenness, thievery, and piety. Moreover, the guild determined the status of its members according to their rank as craftsmen—apprentice, journeyman, or master.

Status in the medieval Church also often depended on [that of] one's father. Bishops and other high Church officials were generally selected from the nobility. Parish priests were usually the sons of peasants. On the other hand, the talented son of a peasant might become a bishop or even a pope, as did Gregory VII, son of an Italian peasant. A serf's son could become an administrative officer of a diocese. Within the monastic communities, men of humble origins sometimes worked their way up.

The political, economic, and social systems of the Middle Ages restricted change. Besieged by invaders and divided into small political units, medieval Europeans followed the ways of custom and tradition. Political power, wealth, role, and status were generally inherited. The same families often owned and ruled their land for many years.

Questions:

1. What political, economic, and social factors within medieval society acted to restrict changes?

2. Classify the medieval economy as a traditional, market, or command system and explain your reasons.

Lesson 5: Europe's Economy in an Age of Transition
II. The Emerging Market Economy

TIME REQUIRED: Two to three class periods

RECOMMENDED GRADE LEVEL: 10-12

CONCEPTS: Types of economic systems

Instructional Objectives: Students will
- Describe the transition from the medieval economy to the emerging market economy;
- Specify the main changes facilitating the emergence of a market economy.

Rationale: A student who understands the historical emergence of the market economy will be better able to analyze today's changing economic systems.

Materials: One copy each of handouts 5-1, 5-2, 5-3, 5-4, and 5-5 for every student.
(NOTE: This lesson requires students to refer back to readings in Lesson 4 in order to make comparisons.)

Procedure:
1. Distribute Handout 5-1. Allow time for students to read the material. Then have them write answers to the questions provided in the handout.
   a. What main points does the reading "Economic Growth in a Market Economy" make? (Contrasts the market with the traditional system of deciding what to produce. Great Britain's economy began to grow more rapidly. Modern industrialization was born.)
   b. What differences are there between the contract described in "A Serf Makes a New Contract" and the contract of John of Cayworth described in Handout 4-1? (The new contract did not require services to be performed by the serf. He was only obliged to pay rent for the house and land.)
   c. What difference is implied by the change in obligation from performing services plus paying some rent to paying an annual rent only? (The serf had acquired more freedom to earn money outside the feudal relationship.)
   d. Why do you think the difference stated in the previous question would result? (Some sort of "market" was appearing.)
2. Distribute Handout 5-2. Allow time for students to read the material. Then have them write answers to the questions provided in the handout.
   a. What are some of the specific details of the revised regulations? (All weavers could work day or night. Weavers could sell cloth at any price. Experienced journeymen were given the opportunity to open their own shops.)
   b. What differences are there between the Toulouse regulations and the guild rules from Lynn Regis and London stated in Handout 4-2? (Allows individuals much more freedom; creates more competition.)
   c. What differences would the new rules make in the economic activity of an area like Toulouse? Why do you think so? (Prices would fall because of greater competition; economic activity would increase.)
3. Distribute Handout 5-3. Allow time for students to read the material. Then have them write answers to the questions provided in the handout.
   a. What are some of the promises the Royal Treasury makes in this letter? (It will subsidize navigation. It will remove trade barriers—specifically tolls. It will encourage and/or subsidize established businesses and the formation of new ones. It will encourage trade by sea.)
   b. What conclusion can be reached if Colbert's files contained many letters such as this one? (There was a national policy of promoting economic enterprise by helping to increase production and by making transportation by land and sea cheaper or easier.)
   c. What effect would the attitude expressed by Colbert in this letter have on economic activity? Why? (An increase in economic enterprise would increase national economic growth. The potential profits of doing business would rise and the costs of entering a business would be lowered.)
4. Distribute Handout 5-4. Allow time for students to read the material. Then have them write answers to the questions provided in the handout.
   a. What does Defoe describe in this commentary? (To be a tradesman or merchant can help a man rise in social status. Merchants can be "gentlemen.")
   b. What positions does Richard Baxter state in the excerpt from *A Christian Directory*? (People have a God-given duty to work and not live off the sweat of others. It is all right to become wealthy and to make as much profit as possible.)
   c. How do these positions compare with those of St. Thomas Aquinas that were stated in Handout 4-3? (To Aquinas, profits had to be "earned" by improving the quality or availability of a product, whereas Baxter encouraged people to maximize profits so long as the motive was not solely to enjoy the pleasures of the flesh.)

d. What effect do you think this change in theology had on economic life? Why? (It encouraged economic growth by permitting individuals much more latitude in the way they made profits.)

Evaluation: Give students Handout 5-5. After they finish the reading, have them complete the following assignment: "With the help of the above reading and all the other material in lessons 4 and 5, prepare an essay describing what you consider to be the major changes in medieval society that eventually gave rise to the market economy of the eighteenth century. Explain why you selected them." (Some of the main points the students should include are the changing values of the church [St. Thomas Aquinas vs. Richard Baxter]; the breakdown of tradition, the establishment and growth of centers of trade the improving social status of merchants.)

NOTE: You may wish to substitute a classroom discussion/review.

Handout 5-1

THE EMERGING MARKET ECONOMY

A Serf Makes a New Contract

Inflation created a need for money in the late Middle Ages, and many lords worked out new contracts with their serfs. In return for cash, the lords released the serfs from their obligations. Following is an example of such a contract from 1278.

Let everyone know that we have freed from the yoke of serfdom, William, the son of Richard of Wythington. Previously William has been our serf, along with all of his children and all of his possessions. Now, neither we nor those who follow us as lord of this manor shall be able to require services upon our land from William and his children.

William will receive the house and land he now occupies by paying to us and our successors forty shillings each year, rather than . . . the old manorial rents.

Economic Growth in a Market Economy

The values, folkways, and institutions that dominated Europe during the Middle Ages gave way to many pressures for change. In one of the most dramatic of all these changes, Europeans created new ways to answer the basic economic questions. Medieval Europeans relied on tradition to guide their economic decisions, but later Europeans turned to the marketplace.

In a market economy, the consumer decides what goods will be produced, how they will be produced, and who will receive them. If consumers flock to buy one style of shoes, manufacturers will produce more of that style and stop producing less popular ones. In order to compete successfully, they will combine human, natural, and capital resources as efficiently as they can. Manufacturers will divide the income among themselves, their workers, and the suppliers of natural and capital resources according to the contribution each one makes.

The change from a traditional to a market economy took place over many centuries. It involved both agriculture and industry. Both the social system and the political system contributed to the pace of economic change. Whole societies had to accept new ways before the market could dominate economic life.

The economy began to grow at a more rapid rate during the latter half of the eighteenth century, particularly in Great Britain. There a unique combination of economic, political, and social changes led to rapidly accelerating economic growth. Later, new cities were built around factories, mills, and mines. Modern industrialized, urbanized society had been born.

Questions:

a. What main points does the reading "Economic Growth in a Market Economy" make?

b. What differences are there between the contract described in "A Serf Makes a New Contract" and the contract of John of Cayworth, described in Handout 4-1?

c. What difference is implied by the change in obligation from performing services plus paying some rent to paying an annual rent only?

d. Why do you think the difference stated in the previous question would result?

Handout 5-2

TOULOUSE REVISES ITS GUILD REGULATIONS*

Medieval guild regulations turned men away from the trades, blocked new production techniques, banned the sale of goods from other towns, and even ruled on the morality of the guildsmen. In time, however, town governments lifted many of these restrictions. The following selection from the early fourteenth century gives an example of revised guild regulations.

A number of worthy men of Toulouse (France) have come to the councilmen of the city complaining of many conflicts between the drapers, weavers, carders, and finishers of woolen cloth.

Therefore, the councilmen of Toulouse, having conferred with many experts and members of these trades, issue the following ordinance.

All weavers may work at their profession, day and night, wherever it pleases them in the city or the suburb.

Moreover, these weavers may sell their cloth at any price that pleases them.

All apprentices who complete their residence with master weavers may work in their own workshops or wherever it pleases them, so long as they do their work honestly and well.

All men and women who make cloth in their homes may hire weavers to work for them.

Questions:

a. What are some of the specific details of the revised regulations?

b. What differences are there between the Toulouse regulations and the guild rules from Lynn Regis and London stated in Handout 4-2?

c. What differences would the new rules make in the economic activity of an area like Toulouse? Why do you think so?

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Handout 5-3

COLBERT AND THE MERCHANTS OF MARSEILLES*

The files in the office of [Jean Baptiste] Colbert were filled with letters like this one to the merchants of Marseilles in 1664. [Colbert was finance minister to Louis XIV of France.]

Considering how helpful it would be to this land to reestablish foreign and domestic commerce, we have decided to establish a council devoted to questions of trade.

We also inform you that we are budgeting a million livres each year out of the royal treasury to encourage manufacturers and increase navigation.

We are working constantly to abolish all tolls which are collected on the rivers.

We have already spent more than a million livres on the repair of roads, and we shall spend more.

We will take money from the royal treasury to help those who wish to reestablish old industries or begin new ones.

All merchants who trade on the sea will receive gifts of money for each ton of merchandise they export or import if they buy ships or build new ones.

Questions:

a. What are some of the promises the Royal Treasury makes in this letter?

b. What conclusion can be reached if Colbert's files contained many letters such as this one?

c. What effect would the attitude expressed by Colbert in this letter have on economic activity? Why?

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Handout 5-4

A Comment on English Society

Daniel Defoe (1660?-1731) is best known for his novel, Robinson Crusoe. *But Defoe was also a keen observer of English society and a fine example of the well-to-do middle-class man who had achieved social prominence. The following selection is taken from* The Complete English Tradesman, *written between 1725 and 1727.*

Since we engage in so much trade, it is no wonder that the tradesmen in England become noblemen and country gentlemen. Nor should we wonder that the gentlemen of the best families marry tradesmen's daughters, and apprentice their younger sons to tradesmen. How often these younger sons make enough money in trade to buy the estates of their elder brothers, who had inherited the lands of their fathers and then wasted their inheritance by high living.

Unlike other countries, gentlemen can be merchants in England. In fact, trade in England makes gentlemen. After a generation or two, the tradesmen's children or grandchildren become as good as gentlemen, members of Parliament, statesmen, judges, bishops and noblemen.

Richard Baxter on Labor and Riches

Richard Baxter (1615-1691) was the most famous Presbyterian clergyman of his time. Presbyterianism was founded by a Scottish clergyman, John Knox, in the mid-sixteenth century. It is essentially an outgrowth of Calvinism. Baxter developed Calvin's economic ideas in a book called A Christian Directory. *The importance of these ideas is apparent when they are compared with those of St. Thomas Aquinas.*

God has commanded you to work for your daily bread, and not to live on the sweat of others. He that will not work must be forbidden to eat. Indeed, it is necessary for the health of our bodies, which will grow diseased if we are idle. And if our body becomes diseased, so does our soul.

Finally, it is lawful and right to save money and become wealthy. To seek riches solely for pleasures of the flesh is wrong. But you may do those things which will most likely give you success and lawful gain. You are supposed to improve all of the talents your Master has given you. You do not fulfill your calling if you choose the least profitable method of gaining riches.

Questions:

a. What does Defoe describe in this commentary?

b. What positions does Richard Baxter state in the excerpt from *A Christian Directory*?

c. How do these positions compare with those of St. Thomas Aquinas that were stated in Handout 4-3?

d. What effect do you think this change in theology had on economic life? Why?

Handout 5-5

THE EMERGENCE OF THE MARKET*

Europeans did not consciously invent the market economy as Thomas Edison invented the electric light bulb. Rather, many political, economic, and social changes gradually pushed western man toward making economic decisions in a different way. Many of the values and institutions of European life had to change before the market economy could develop.

During the Middle Ages traditional ways dominated economic life and prevented the development of a market economy. A market economy must have free laborers who can move from place to place seeking the best jobs. Most medieval Europeans, however, were bound to the land as serfs. The development of a market economy depends upon centers of commerce where goods can be traded. During the Middle Ages, few Europeans lived in cities where trade could take place. If a market is to develop, the society must be able to move goods from place to place easily. In medieval times, pirates, wars, tolls, and taxes on commerce made transporting goods difficult. Finally, if it is to develop a market economy, the society must value material wealth and give high social status to those who produce wealth. Medieval Christians valued heavenly reward above earthly gain and put merchants in a low place on the social scale.

By the eleventh and twelfth centuries, Europe had already begun to remove those controls on the economy that had prevented the rise of a market system. As the centuries passed, changes in European culture picked up speed. By the eighteenth century, the European economy resembled the model of a market economy more than it resembled the traditional model.

Essay: With the help of the above reading and all the other material in lessons 4 and 5, prepare an essay describing what you consider to be the major changes in medieval society that eventually gave rise to the market economy of the eighteenth century. Explain why you selected them.

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Lesson 6: Using Economic Data to Compare Types of Economic Systems

TIME REQUIRED: Two to four class periods

RECOMMENDED GRADE LEVEL: 10–12

CONCEPTS: Economic statistics
Economic systems
Classifying economic systems

Instructional Objectives: Students will

- Interpret the meaning of statistics about economies;
- Draw conclusions about economic systems according to their interpretations;
- Understand the terms "market," "command," and "traditional" as applied to particular economies;
- Realize that individual economies are mixtures of the three types, that is, actual economies have some characteristics of each type of system, although one type tends to dominate.

Rationale: Using economic statistics to form generalizations is one of the most important skills required in order to make any kind of economic comparisons. Students in world studies courses often must make comparisons between nations as well as between economic systems and how they change or grow. This lesson provides an analytical framework for such purposes. It also illustrates the value and limitations of classifying events into essentially arbitrary categories in order to manageably analyze very complex relationships. Affixing such labels as "command," "market," and "traditional" to economic systems helps us to understand fundamental characteristics of the economic structure of countries. However, other classifications could be used instead. Furthermore, neither this particular set of labels nor any other can be expected to fully convey the complexity of the systems being analyzed.

Materials: Two or three copies of Handout 6-1 for every student. One copy each of handouts 6-2, 6-3, 6-4, 6-5, and 6-6 for every student.

Procedure:

1. Students may work alone or in pairs. Provide copies of Handout 6-1. Explain that it will be used to record generalizations students will be making about countries representing three types of economic systems. *Do not reveal what the types are at this time.*
2. Distribute selections form handouts 6-2 through 6-6. (The number of tables you give out will depend upon the time available and the talents of the students.) Review terms such as "per capita," "exports," "metric tons" as much as is necessary to enable students to comprehend the contents of the tables. *Do not* identify the countries yet, but you may state that the identifying letters represent real countries.
3. Ask students to examine the table in each handout and answer the questions beneath. The last question on each handout asks students to form at least one generalization about the data for each type of economy. The generalizations must be based on the data. For example, in Handout 6-2, a good answer for Type I economies is, "All but one country increased exports"; and in Handout 6-3, a good answer for Type III economies is, "These countries do not produce as much meat as do Type I and II countries."
4. Ask students to write their generalizations on Handout 6-1. Have them draw a line across the page to separate the statements derived from each table.
5. After students have recorded generalizations from several statistical tables, hold a brief class discussion based upon the information they have obtained. Begin the discussion by asking: "Can you explain the classifications using the concepts of market, command, and traditional economies? Can you determine on what basis the economic systems represented by each type work?" Let the students speculate about the classifications and the identity of the countries before giving them the following information: Type I—mostly market; Type II—mostly command; Type III—mostly traditional.

COUNTRY

A. Brazil	I. Poland
B. Italy	J. U.S.S.R.
C. Japan	K. Afghanistan
D. South Africa	L. India
E. United States	M. Kenya
F. Cuba	N. Saudi Arabia
G. Czechoslovakia	O. Zaire
H. East Germany	

6. It will be readily evident that the classification system of economies as mostly traditional, mostly market, or mostly command is difficult to deduce from the statistical data alone. However, there is some justification for using these descriptions. It becomes clearer when the countries are known. Refer back to Lesson 3 and use the following information as a guide to your review of the lesson.

NOTES FOR REVIEW OF LESSON 3:

It is very difficult to speak of any one country as a market, command, or traditional economy. Some

countries fit the characterization rather well, but most tend to combine aspects of all three to varying degrees. For example, a significant portion of agricultural production in the Soviet Union—a command economy—involves a free market: Members of collective farms are permitted to grow food on separate plots on their own time and market the produce in towns or cities for whatever price they can get. The terms market, command, and traditional often more accurately apply to specific economic sectors within a country or region. For instance, for the most part the economies of oil-producing Middle Eastern countries are traditional, but their oil sectors are modern and are typically organized in a command fashion. Moreoever, the three-way labeling of economic systems is complicated because many countries—and many economic sectors within countries—may be in transition from one type of economy to another.

Specific information regarding the statistical tables which should enter the discussion:

1. Brazil might be placed with the Type III economies because much of its economy is still backward and traditional. It is here placed in Type I because the most important sectors of its economy are *mostly* market oriented and it is continuing to move in this direction.
2. Saudi Arabia's oil sector is modern and basically organized in a command (state-run) manner. This makes it a special case within the Type III grouping.
3. Stress that although current data is used in this activity, statistical information on classifying economies is frequently not available for many societies examined in world studies courses, particularly for economies of the more distant past. However, historians and economists nevertheless classify economic systems of the past as traditional or command—and discern market elements after the thirteenth century. Lessons 7 and 8 in this guide explain other methods and further nuances of classifying economies.

Evaluation: Ask students to read the following quotation:

> Some economists feel that the terms market, command, or traditional should not be applied to entire economic systems. They say the terms should only be applied to a part of an economy. For example one might say that the oil industry in Middle Eastern countries is mostly run by command (the state), while much of the rest of the economy is traditional.

After students have read the quotation ask them whether they think the terms market, command, and traditional should be or should not be used to classify economic systems. Ask them to explain the reasons for their conclusion.

Handout 6-1

Characteristics of Economic Systems

Table	Type I	Type II	Type III

Name and Class _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 6-2

Imports and Exports
(millions of U.S. dollars)

Countries	Imports				Exports			
	1975	1976	1977	1978	1975	1976	1977	1978
Type I								
A	12,210	13,532	13,069	14,538	8,670	10,128	12,054	12,527
B	38,366	43,428	47,580	56,446	34,830	36,969	45,063	56,047
C	57,881	64,799	70,660	78,731	55,844	67,225	80,470	97,501
D	7,566	6,751	5,893	7,193	4,524	4,776	6,158	7,182
E	102,984	128,872	156,758	182,787	106,157	113,323	119,005	141,154
Type II								
F	9,081	9,706	11,187	12,565	8,356	9,035	10,303	11,747
G	3,883	4,066	4,188	4,687	3,677	3,573	3,537	4,456
H	11,290	13,196	14,334	14,572	10,088	11,361	12,024	13,267
I	12,536	13,867	14,616	15,098	10,283	11,017	12,265	13,333
J	36,969	38,108	40,817	50,550	33,316	37,169	45,161	52,216
Type III								
K	350	335	498	681	223	299	314	322
L	6,391	5,710	6,648	7,954	4,393	5,526	6,378	6,614
M	980	973	1,284	1,709	643	825	1,213	1,022
N	4,214	8,694	14,651	20,366	29,671	38,287	43,465	39,211
O	927	827	610	589	865	930	981	925

SOURCE: United Nations, *1978 Statistical Yearbook*, pp. 424–431.

Questions:

1. Which countries had more exports than imports in 1978? Which had more imports than exports in that year?

2. Which countries had more exports each year between 1975 and 1978? Which countries had more imports each year between 1975 and 1978?

3. From the data given, what *general statements* can you make about the imports and exports and foreign trade of the Type I countries? Type II? Type III? Complete at least one statement for each type of economy. (HINT: These statements can be comparisons between types as well as statements about a type. Look for patterns or general characteristics.)

Name _____ **Class** _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 6-3

Production
(thousands of metric tons)

Countries	1978 Beef	1978 Pork	1978 Lamb	Nitrogenous Fertilizers, 1977–78	1977 Cement	1977 Crude Steel
Type I						
A	2,250	850	48	232.2	20,528	11,165
B	1,102	920	53	1,028.7	38,204	23,334
C	364	1,226	n.d.	1,446.0	73,138	102,405
D	500	90	154	414.0	6,573	7,178
E	11,325	6,125	155	9,939.0	72,627	113,701
Type II						
F	143	63	n.d.	47.0	2,656	341
G	393	815	6	605.0	9,779	15,064
H	427	1,174	15	838.5	12,102	6,850
I	750	1,833	18	1,528.9	21,301	17,262
J	7,100	5,100	885	9,025.0	127,056	146,678
Type III						
K	66	n.d.	122	37.7	136	n.d.
L	188	65	393	1,999.7	19,173	9,836
M	145	5	31	n.d.	1,144	n.d.
N	12	n.d.	35	92.8	n.d.	n.d.
O	22	29	9	n.d.	489	n.d.

n.d. = no data reported.
SOURCE: United Nations, *1978 Statistical Yearbook*.

Questions:

1. Which countries are the largest meat producers? Which are the smallest producers?

2. Which countries seem to have the most diversified economies in terms of production? Which seem to be the most specialized?

3. From the data given, what *general statements* can you make about production in the Type I countries? Type II? Type III? Complete at least one statement for each type of economy. (HINT: These statements can be comparisons between types as well as statements about a type. Look for patterns or general characteristics.)

Name _____ **Class** _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strateg* *for Teaching Economics: World Studies (Secondary)*, 1980.
Joint Council on Economic Education, 1212 Avenue of the Americas, N ork, NY 10036.

Handout 6-4

Consumption
(totals in thousands of metric tons; per capita figures in kilograms)

Countries	Nitrogenous Fertilizers, 1977-78	Steel, 1977		Newsprint, 1977	
		Total	Per Capita	Total	Per Capita
Type I					
A	689.2	11,976	107	179.9	1.5
B	801.0	20,798	368	214.4	3.8
C	689.0	58,243	512	2,314.3	20.3
D	343.3	4,871	161	16.9	7.5
E	9,037.2	133,923	618	9,021.0	41.6
Type II					
F	223.0	506	53	24.1	2.4
G	601.0	10,513	700	71.0	4.8
H	770.8	9,914	591	145.6	8.7
I	1,230.0	18,737	540	127.0	3.7
J	7,523.0	145,617[a]	567[a]	1,135.3	4.4
Type III					
K	37.0	24	1	1.2	0.06
L	2,914.6	10,185	16	156.3	0.2
M	25.3	210	13	4.2	0.3
N	4.7	1,969	207	8.0	1.0
O	4.5	81	3	1.1	0.04

SOURCE: United Nations, *1978 Statistical Yearbook.*
[a]1976.

Questions:

1. Which countries consume the largest quantity of nitrogenous fertilizers in absolute terms? Of steel? Of newsprint? Which consume the largest quantity per capita?

2. Which countries consume the smallest quantity of nitrogenous fertilizers in absolute terms? Of steel? Of newsprint? Which consume the smallest quantity per capita?

3. From the data given, what *general statements* can you make about consumption in the Type I countries? Type II? Type III? Complete at least one statement for each type of economy. (HINT: These statements can be comparisons between types as well as statements about a type. Look for patterns or general characteristics.)

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Handout 6-5

Energy Production and Consumption, 1976
(totals in millions of coal-equivalent metric tons)

Countries	Production	Consumption	
		Total	Kilograms per Capita
Type I			
A	26.47	79.84	731
B	28.43	184.46	3,284
C	38.21	414.87	3,679
D	76.32	87.40	2,985
E	2,049.70	2,485.45	11,554
Type II			
F	0.25	11.60	1,225
G	83.84	110.34	7,397
H	79.25	113.96	6,789
I	200.35	180.51	5,253
J	1,674.10	1,349.86	5,259
Type III			
K	3.62	0.81	41
L	121.09	132.92	218
M	0.09	2.10	152
N	643.99	17.56	1,901
O	2.37	1.58	62

SOURCE: United Nations, *1978 Statistical Yearbook.*

Questions:

1. Which countries have the highest total production of energy? Which have the lowest? Which countries have the highest per capita consumption of energy? Which have the lowest?

2. Which countries are in a position to export energy? Which country has the greatest excess of energy produced over energy consumed?

3. From the data given, what *general statements* can you make about energy production and consumption in the Type I countries? Type II? Type III? Complete at least one statement for each type of economy. (HINT: These statements can be comparisons between types as well as statements about a type. Look for patterns or general characteristics).

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Handout 6-6

Transportation and Communication, 1977

Countries	Railroad Freight Carried (ton-kilometers)	Motor Vehicles in Use (thous. units)		Telephones (no. in use per 100 persons)
		Passenger Cars	Commercial Vehicles	
Type I				
A	60,721	5,916.3[a]	1,397.2[a]	4.1
B	17,100	14,295.0[b]	1,549.0[b]	28.5
C	41,317	17,236.0	10,315.0	42.4
D	69,330	2,163.5	821.2	8.3
E	1,206,366	112,300.0	30,100.0	74.4
Type II				
F	1,848[a]	80.0[a]	40.0[a]	3.3
G	71,550	1,827.7	289.8	19.0
H	58,228	2,236.7	570.0	17.1
I	135,406	1,547.3	569.0	8.4
J	3,330,902	n.d.	n.d.	7.5
Type III				
K	n.d.	38.4[c]	26.1[c]	0.2
L	144,030[a]	805.4	690.4	0.3
M	n.d.	114.1	83.9	1.0
N	66[b]	59.4[b]	52.6[b]	1.0[d]
O	2,203[a]	84.8[b]	76.4[b]	0.2[a]

n.d. = no data reported.
SOURCE: United Nations, *1978 Statistical Yearbook*, except for Country E.
[a]1976. [b]1974. [c]1971. [d]1973.

Questions:

1. Which countries appear to have the most developed transportation systems? Which have the least?

2. Which countries appear to have the most developed communications systems? Which have the least?

3. From the data given, what *general statements* can you make about transportation and communications in the Type I countries? Type II? Type III? Complete at least one statement for each type of economy. (HINT: These statements can be comparisons between types as well as statements about a type. Look for patterns or general characteristics.)

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Lesson 7: Patterns of Economic Development

TIME REQUIRED: Two class periods

RECOMMENDED GRADE LEVEL: 10-12

CONCEPTS: Economic growth
Measurement: Use of tables and graphs

Objectives: Students will

- Construct graphs showing typical changes in the structure of production, the composition—by broad industry categories—of the labor force, and the rural-urban distribution of population as a country's economic development proceeds;
- Develop generalizations about the sequence of changes that tend to occur in a growing and modernizing economy.

Rationale: The economic growth of nations is associated with far-reaching alterations in their social and economic structures. Although the pace and specific characteristics of change vary considerably from one country to another, on the whole the changes conform to certain broad patterns. These patterns provide a useful framework for looking at economic performance and national problems, particularly in countries that are in the process of 'developing."

Materials: One copy each of handouts 7-1, 7-2, 7-3, and 7-4 for every student. (NOTE: Handout 7-2 may be instead projected.)

Procedure:

1. Provide every student with a copy of Handout 7-1.
2. Either project Handout 7-2 or give one copy to each student.
3. Have students define and discuss the terms in the table. You may want to precede or supplement the discussion by giving students information such as the following:
   a. Low-Income Countries are those that had a per capita income, measured in U.S. dollars, of $300 or less in 1977; Middle-Income Countries had per capita incomes measured in U.S. dollars of $300 to about $3,000. Industrialized Countries had per capita incomes measuring more than U.S.$3,000.
   b. The columns labeled Structure of Production reveal the percent of total output arising from the three sectors into which output can be divided: (i) agriculture—crops (human food, animal food, and industrial crops such as tobacco and cotton), meat and dairy products, fish, tree or forest products; (ii) industry—mining, manufacturing, construction, electricity, water, gas; (iii) services—health care, education, auto repairs, laundry, entertainment, communications, finance, transportation, etc., and government.
   c. The columns labeled Composition of the Labor Force show the percent of people employed in the three sectors of production.
   NOTE: Of all three industrial sectors, production in the service industries in both the low-income and middle-income groups is comparatively the largest relative to that of the industrialized countries. The reason, particularly in the low-income countries, is that many services there are provided by small, specialized food stores, other retailers with a meager selection of goods and few sales, wandering purveyors of goods (peddlers, virtually), many small service establishments to repair footwear, pots and pans, etc., inefficient means of transportation, a large number of individuals who offer errand or messenger services, a proliferation of bazaars, and so on. From the point of view of a modernized economy, too many resources are devoted to these activities, for low productivity of labor is rife. An important reason for the continuance of such conditions is that they spread employment among the population, and, in effect, substitute for unemployment insurance, pensions, or welfare payments that exist in the United States and other industrialized countries. A similar—and even worse—situation obtains in agriculture in low and middle-income countries. This is implied by the enormously greater percent of labor engaged in agriculture compared to the percent of output produced in that sector.

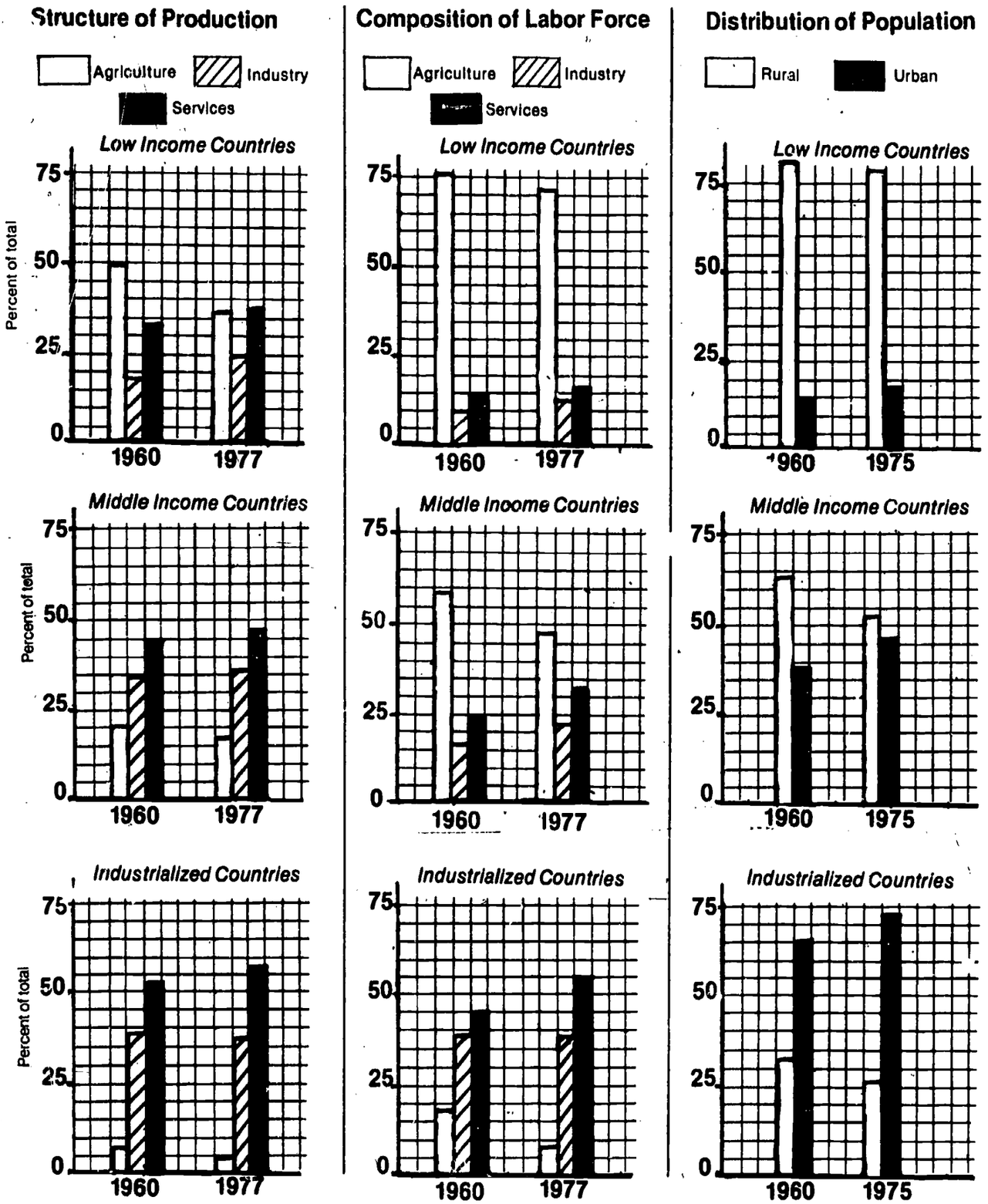
   The service sector of an industrialized country is typically also large—and tends to grow at the expense of the industrial sector. This is mainly because sophisticated service industries—e.g., communications, finance, air transport, computer-related services, medical care—are growing faster than the production of goods.
   d. The column labeled Distribution of Population gives the percent of the population living in rural areas and in urban areas.
4. Tell students to plot the data in Handout 7-2 on the appropriate blank charts of Handout 7-1, using ordinary lead pencils and the legends shown at the top of Handout 7-1. Make sure students understand that they are to construct *bar* charts. You may wish to show them a hypothetical version of Exhibit A or you can display some examples from textbooks, newspapers, or magazines.
5. After students have completed the charts, project Exhibit A. Allow time for students to correct their own charts and to ask questions.

6. Divide class into discussion teams—as many teams as there are spaces available on the chalkboard on which to complete the activity in procedure 8.
7. Instruct teams to study corrected graphs or Exhibit A and to develop one or more generalizations from the information on them, such as the comparative economic status of the country groupings, changes in this status with the passage of time, the kind of lives average people in the various groupings may lead, the probable economic and social problems typical of countries in the groupings, and the like. During the group discussions students may also find it desirable to refer to the data on Handout 7-2.
8. After allowing sufficient time for discussion (approximately 15 minutes) have each group write its generalizations on the chalkboard.
9. Distribute Handout 7-3. Allow time for reading and examination of the charts, then ask: Does this confirm the generalizations made by the class? not, how do they differ?

Evaluation: Have students complete the exercise on Handout 7-4.

Exhibit A

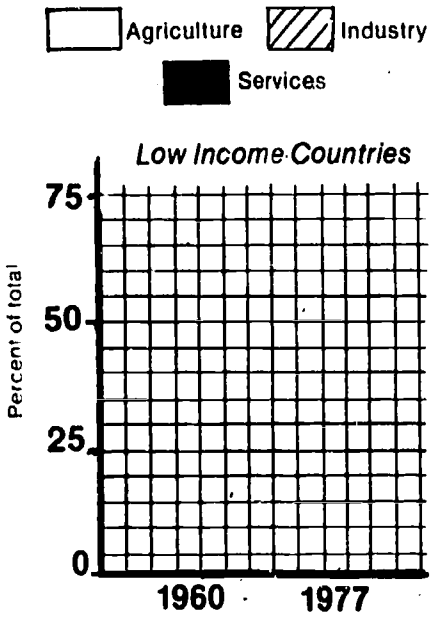
Patterns of Economic Development



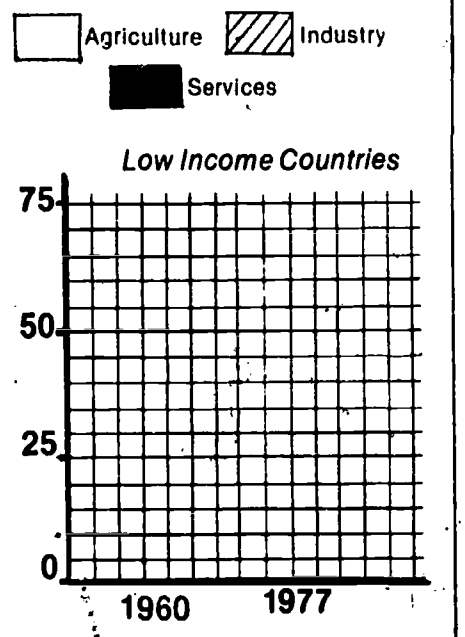
Handout 7-1

Patterns of Economic Development

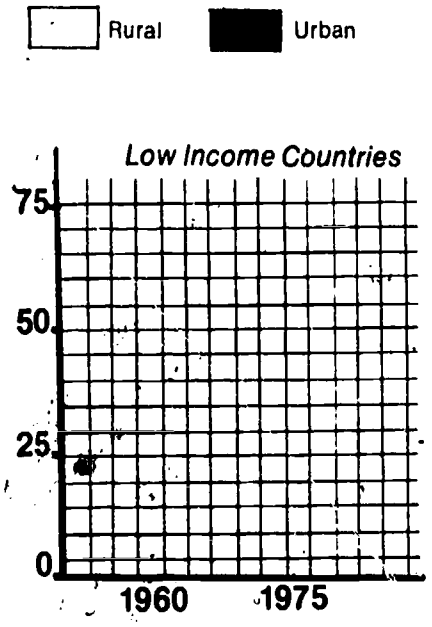
Structure of Production



Composition of Labor Force



Distribution of Population



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Handout 7-2

PATTERNS OF ECONOMIC DEVELOPMENT

Procedure: After receiving instructions and advice from your teacher, complete Handout 7-1, using the data shown below.

	Structure of Production (percent of total)					
	Agriculture		Industry		Services	
	1960	1977	1960	1977	1960	1977
Low income countries	50	37	17	25	33	38
Middle income countries	22	15	32	36	46	49
Industrialized countries	6	4	40	37	54	59

	Composition of the Labor Force (percent of total)					
	Agriculture		Industry		Services	
	1960	1977	1960	1977	1960	1977
Low income countries	77	73	9	11	14	16
Middle income countries	59	46	17	22	24	32
Industrialized countries	17	7	38	38	45	55

	Distribution of Population (percent of total)			
	Rural		Urban	
	1960	1975	1960	1975
Low income countries	85	81	15	19
Middle income countries	63	53	37	47
Industrialized countries	33	26	67	74

SOURCE: World Bank, *World Development Report, (1979).*

Handout 7-3

ECONOMIC GROWTH AND ECONOMIC STRUCTURE

The economic growth of nations has been associated with far-reaching changes in their social and economic structure. Modern economic development comprises a set of interrelated processes that transform essentially rural, agricultural societies into more urban, industrialized nations. Of particular significance are the processes of industrialization, urbanization and the sectoral redeployment of labor. The pace and character of structural change vary greatly across countries according to their size, resource endowments, demographic trends, sociopolitical histories and, perhaps most important of all, the development policies they pursue. But when their past experience is viewed as a whole, some broad patterns emerge.

[The charts]...illustrate...average patterns of change in the composition of production as . . . [economic growth and development proceeds.] The central feature is the increase in the share of industry in total output and the decline in the share of primary production (agriculture and mining) as countries develop. The poor countries of Asia and Africa are at present in the early part of the transformation, followed by the Middle Income nations of Latin America, East Asia and the Mediterranean region, while in the industrialized countries, where income per capita is highest, the rising share of services in the economy is accommodated by stabilization and eventual decline in the share of industry. This pattern of industrialization is the product of mutually interacting changes in supply and demand that accompany economic development. On the supply side, the accumulation of capital and skills augments the productive capabilities of an economy. The resulting increases in per capita income bring about important shifts in the composition of aggregate demand which, in turn, guide the sectoral composition of incremental output. Food consumption, for example, which accounts for two-fifths of aggregate demand in an economy [with]...US$150 per capita, accounts for less than a fifth of demand in an economy [with] US$3,000 per capita—a decline that explains much of the reduction in the share of primary production as the economy grows.

The evolving composition of production is reflected in similar changes in the deployment of productive factors, notably labor. As development proceeds, the work force moves from agricultural to non-agricultural occupations, while within each sector productivity is increased by new technologies, greater division of labor, and the accumulation of capital and skills. Though the underlying patterns are similar, the sectoral transformation of the labor force has historically lagged behind the transformation of production, partly because in most countries industrial development has been relatively capital intensive, so that labor productivity is higher in industry than in agriculture, but also because of the unprecedented growth of the labor force in recent decades, which has far exceeded industry's capacity to absorb labor. As a result, while industry and primary production account for equal shares of total output when the economy reaches an income level of just under US$700 per capita, parity in labor force shares is not achieved until average income is more than twice that level.

These changes in the sectoral composition of output and the labor force are closely related to shifts in economic activities from rural to urban locales. Modern industrial and service activities benefit greatly from the economies of agglomeration, and as these activities increase their shares in production and the labor force, they spur the growth of urban centers.

The broad trends outlined above also reflect other socioeconomic changes that are part of the development process, including demographic changes, shifts in foreign trade patterns, technological development, increasing specialization among economic activities, and the dramatic growth of institutions. Furthermore, the future pace and pattern of structural change may differ substantially from that observed in the past because of the powerful influence of population growth and changes in the age structure of the

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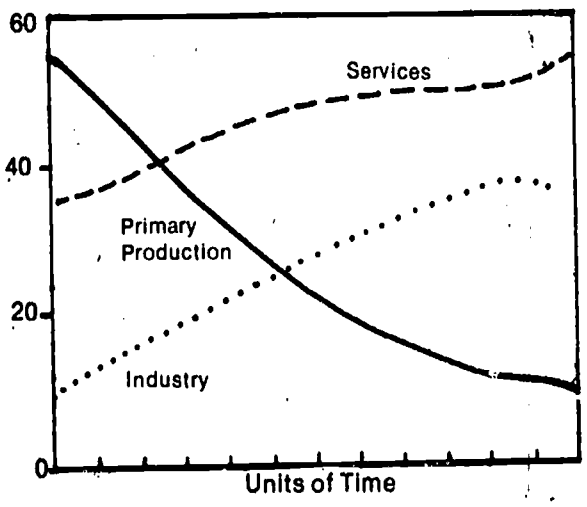
Text and graphs adapted from World Bank, *World Development Report, 1979*, pp. 44–45.

Handout 7-3 (concluded)

Typical Economic Changes As Countries Develop into Modernized Economies

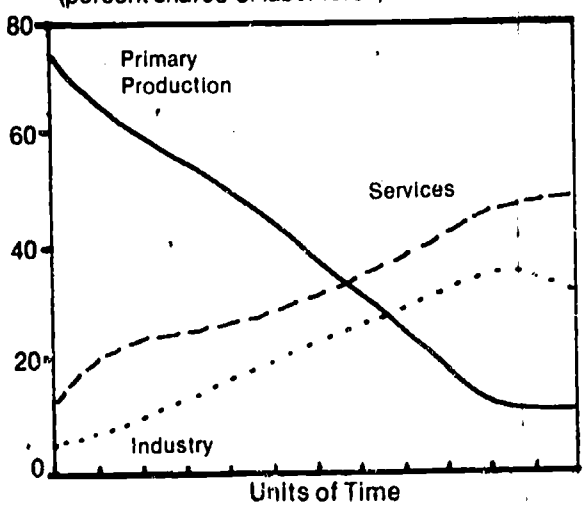
In Production

(percent shares of production)



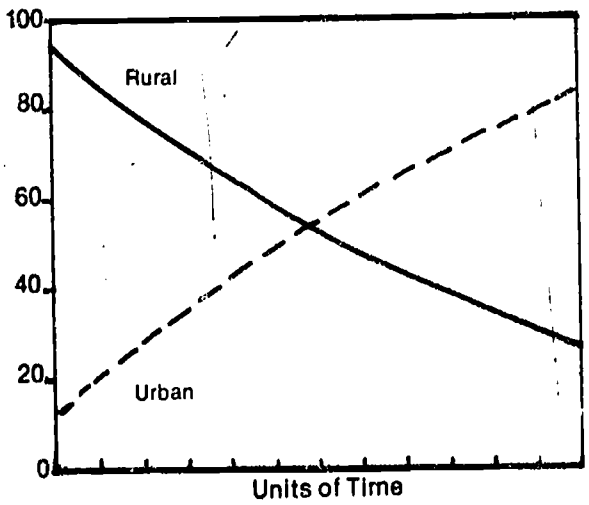
In Labor

(percent shares of labor force)



In Urbanization

(percent shares of population)



population. Though the rate of growth of world population is believed to have peaked in the early 1970s, the consequences of earlier growth will include an unprecedented expansion in the labor force of developing countries in the next two decades, with pervasive implications for the future character of structural change.

It must also be emphasized that the development patterns sketched ... [in the charts] are illustrative averages, not predetermined paths of development for individual countries. In any country, the trajectory of development and structural change depends to a large extent on the choice of development policies....

Handout 7-4

Procedure: Below are data on two developing economies. Study the data carefully. Then write a brief paper describing ways in which developments in these countries are similar to or different from the pattern of growth generally followed as developing economies become more industrialized. NOTE: Libya became an important producer of oil after 1960.

	Structure of Production (percent of total)					
	Agriculture		Industry		Services	
	1960	1977	1960	1977	1960	1977
Brazil	16	12	35	37	49	51
Libya	14	3	9	71	77	26

	Composition of the Labor Force (percent of total)					
	Agriculture		Industry		Services	
	1960	1977	1960	1977	1960	1977
Brazil	52	42	15	20	33	38
Libya	53	22	16	27	31	51

	Distribut. of Population (percent of total)			
	Rural		Urban	
	1960	1975	1960	1975
Brazil	54	39	46	61
Libya	77	56	23	44

SOURCE: World Bank, *World Development Report* (1979).

Lesson 8: Less Developed Economies

TIME REQUIRED: Three or four class periods. (If the activity in Procedure 9 is used, more time may be required.)

RECOMMENDED GRADE LEVEL: 10–12

CONCEPTS: Underdevelopment
Measurement: rate vs. amounts; use of tables and graphs
Interdependence
Income per capita
Structure of an economy

Instructional Objectives: Students will

- Understand the characteristics of developed market economies, centrally planned economies, and developing economies in terms of income per capita, growth of income per capita, rate of population growth, structure of production, and similar data;
- Comprehend the economic problems characteristic of developing countries, especially the less developed ones;
- Evaluate proposals for solving the economic problems of developing countries.

Rationale: At least two-thirds of the world's population live in economically "less-developed" countries. The growing economic interdependence of the world as well as humanitarian, political, and military considerations are making the fate of these countries of increasingly direct concern to the "developed" countries. As citizens of the United States and the world, students should be aware of conditions in the poorer countries.

Materials:

1. One each of handouts 8-1 through 8-8 for every student.
2. In order to engage the interest of the students, you may wish to show the film "Tilt"; 19 minutes; McGraw-Hill Films, 1221 Avenue of the Americas, New York, NY 10020. This film takes a lighthearted, often humorous, but nonetheless forceful, approach to problems of population, pollution, protection of the environment, use of resources, national development, international relations, and world armament. The film offers no specific solutions, only poses and considers some questions of priorities and inequalities that compound our current world difficulties.
3. Outline maps of the world (see Procedure 9).

Procedure:

1. Prior to lesson prepare one packet per student consisting of one copy each of handouts 8-1 through 8-7.
2. Distribute packets and have students read Handout 8-1.
3. OPTIONAL: To assist students in recording information obtained from the statistical tables and graphs in handouts 8-4 through 8-7 on their worksheets (Handout 8-3A), you may wish to conduct a "walk-through." Have students study the graph in Handout 8-4 and then ask:
   a. Which group of countries has the lowest rate of population growth? Which has the highest?
   b. What change occurred in the population growth rate for each group from the 1969–70 average to the 1970–77 average?
   c. Look at the worksheet. Based on the graph, what would you say was characteristic of population growth in the developed market economies? Centrally planned economies? The developing market economies as a whole? What additional information might you want to add for the three subclassifications of the developing economies?

   NOTE: If class seems to need more help, you may want to conduct similar "walk-throughs" with a subsequent handout or two.
4. Have students work in pairs or in small groups to complete the worksheet and to formulate descriptions of the three main categories of economies for Handout 8-3B.
5. At the beginning of the next class period have one student (or group) write a description of developed market economies on the chalkboard. Have the remaining students study the description and compare it with the descriptions they have written in Handout 8-3B. Where there are differences, have students refer back to the data and try to formulate a statement on which all can agree. Follow the same procedure for defining characteristics of centrally planned and developing economies.
6. Have students study the description of developing economies on which the class has agreed. Then ask: "What would you say are some of the major economic problems of developing countries?"
7. Distribute Handout 8-8. Have students read it in class or at home.
8. At the beginning of the next class period divide students into groups of five to six each. Instruct groups to use the reading and the graphs to complete the following activities:
   a. List the major economic problems of developing countries.
   b. Suggest alternatives for solving each of the problems suggested.
   c. Evaluate these alternatives on the basis of the probable consequences.
   d. Discuss the various recommendations in terms of their appropriateness or inappropriateness

for each category of developing country (low income, middle income, capital-surplus oil exporters).

9. OPTIONAL: To help students visualize where each type of economy is predominantly located, the following geographic exercise may be helpful. Each student will need two unlabeled maps of the world, showing outlines of countries. Students must also have access to maps that indicate where the 178 countries (or geographic entities) listed in the fivefold income classification of Handout 8-1 are. On the first map, ask students to locate each country according to its income group, using a different color for each group.

   On the second map, ask students to color the countries according to whether they are considered to be in the First World, Second World, or Third World. Have them use a different color for each of the three classifications. Inform the students that the countries of Western Europe usually included in the First World are Austria, Belgium, Denmark, the Federal Republic of Germany, Finland, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. The countries of Eastern Europe usually included in the Second World are Bulgaria, Czechoslovakia, the German Democratic Republic (East Germany), Hungary, Poland, and Romania.

Evaluation: Students can be evaluated on the basis of the completeness of Handout 8-3 and/or on the basis of their contributions to the group discussion of proposed solutions to economic problems faced by developing countries.

Handout 8-1

Instructions:
You will be asked to examine the data on handouts 8-4 through 8-7. These materials present graphs and statistics about some of the major aspects of the world's economies. You should think about what this information reveals concerning the state of various economies and then write your conclusions in Handout 8-3A. Your findings will constitute a list of characteristics common to economies in the same stages of economic development.

After you have completed the worksheet, carefully study the items you listed to describe each type of economy and write a definition or description of each type of economy as specified in Handout 8-3B. (You may wish to refer to the underlying graphs and data again.) Before you begin, also read and review the following background information:

In this exercise, the classification systems of the United Nations or of the World Bank are used.

United Nations Classification:
1. Developed Market Economies
2. Centrally Planned Economies
3. Developing Market Economies

These three categories correspond very well to the three-part division of the world—partially on economic, partially on political grounds—used for quick journalistic or other informal reference:

1. The so-called First World—developed countries whose political systems tend to be democratic (the United States, Canada, the countries of Western Europe, Japan, Australia, New Zealand);
2. The so-called Second World—developed command economies whose political system is communist (the U.S.S.R., the countries in Eastern Europe);
3. The so-called Third World—all the world's remaining economies that cannot be characterized as developed regardless of their political system[1] (see Handout 8-2, "The Semantics of 'Development'").

1. For example, the People's Republic of China, North Korea, Mongolia, Albania, and Cuba are *economically* classified in the Third World and *politically* classified in the Second World.

World Bank: Classification is based on per capita income in 1977:

Low Income Countries—per capita incomes of $300 or less;
Middle Income Countries—per capita incomes of more than $300 to about $3,000;
Capital Surplus Oil Exporters—per capita incomes of $6,000 and higher.
Industrialized Countries—per capita incomes of $3,000 and higher;
Centrally Planned Economies—per capita incomes of about $400 to about $4,750.

Three of the World Bank's groups—Low Income Countries, Middle Income Countries, and Capital Surplus Oil Exporting Countries—make up the Developing Market Economies, or Third World, of the previous set of classifications.

The Capital Surplus Oil Exporters are Saudi Arabia, Libya, and Kuwait. In 1977 they had per capita incomes of about $6,050, $6,700, and $12,300, respectively. They are called Capital Surplus Oil Exporters because their income from selling oil is so great that they have so far (1980) been unable to spend all of their oil income to satisfy the wants of their consumers or for investment purposes (e.g., build oil refineries, docks, factories, roads, airports, schools, hospitals, etc.). They invest their "surplus" income either ir the stocks and bonds of enterprises of the developed countries or of the governments of those countries, in directly buying businesses or real estate there, and—to some extent—in giving foreign aid to some needy Third World countries. How long Saudi Arabia, Libya, and Kuwait remain in "capital surplus" depends on whether their imports grow fast enough to use up their annual "surpluses," whether the development of new energy sources and energy conservation in the *oil-consuming* nations will dampen the demand for oil significantly, on future political and military developments in the Middle East, on the amount of foreign aid the three nations give out, and on how much the price of oil may rise.

Other Classifications: There are many other ways to classify countries. One is to use the World Bank income data to group countries solely by income without judgment as to the character of their economies or how they are organized. Here are the re-

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Handout 8-1 (concluded)

sults of this method according to per capita income in 1977:[2]

Less than $200 (21 countries): Bangladesh, Bhutan, Burma, Burundi, Cape Verde, Chad, Comoros, Ethiopia, Guinea-Bissau, India, Lao People's Democratic Republic, Malawi, Maldives, Mali, Mozambique, Nepal, Niger, Rwanda, Somalia, Sri Lanka, Upper Volta.

$200-$499 (41 countries): Afghanistan, Angola, Benin, Bolivia, Cameroon, Central African Republic, China (People's Republic of), Congo (People's Republic of the), Djibouti, Dominica, Egypt (Arab Republic of), Equatorial Guinea, Gambia (The), Ghana, Grenada, Guinea, Haiti, Honduras, Indonesia, Kenya, Lesotho, Liberia, Madagascar, Mauritania, New Hebrides, Pakistan, Philippines, Rhodesia, St. Vincent, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Sudan, Tanzania, Thailand, Togo, Tonga, Yemen (People's Democratic Republic of), Zaire, Zambia.

$500-$1,999 (56 countries): Albania, Algeria, Antigua, Argentina, Barbados, Belize, Botswana, Brazil, Chile, China (Republic of), Colombia, Costa Rica, Cuba, Cyprus, Dominican Republic, Ecuador, El Salvador, Fiji, French Guiana, Guatemala, Guyana, Iraq, Ivory Coast, Jamaica, Jordan, Kiribati (formerly Gilbert Islands), Korea (Democratic People's Republic of), Korea (Republic of), Macao, Malaysia, Malta, Mauritius, Mexico, Mongolia, Morocco, Namibia, Nicaragua, Nigeria, Pacific Islands (US Trust Territory of the), Panama, Papua New Guinea, Paraguay, Peru, Portugal, Romania, St. Kitts-Nevis, St. Lucia, Seychelles, South Africa, Suriname, Swaziland, Syrian Arab Republic, Tunisia, Turkey, Uruguay, Yemen Arab Republic.

$2,000-$4,999 (31 countries): Bahamas, Bahrain, Bulgaria, Channel Islands, Czechoslovakia, French Polynesia, Gabon, Gibraltar, Greece, Guadeloupe, Hong Kong, Hungary, Ireland, Isle of Man, Israel, Italy, Martinique, Netherlands Antilles, New Caledonia, New Zealand, Oman, Poland, Puerto Rico, Reunion, Singapore, Spain, Trinidad and Tobago, United Kingdom, USSR, Venezuela, Yugoslavia.

$5,000 and over (29 countries): American Samoa, Australia, Austria, Belgium, Bermuda, Brunei, Canada, Denmark, Faeroe Islands, Finland, France, German Democratic Republic, Germany (Federal Republic of), Greenland, Guam, Iceland, Japan, Kuwait, Libya, Luxembourg, Netherlands, Norway, Qatar, Saudi Arabia, Sweden, Switzerland, United Arab Emirates, United States, Virgin Islands (US).

Democratic Kampuchea (formerly called Cambodia), Iran, Lebanon, Uganda, and Vietnam are not included in this compilation.

2. SOURCE: *1979 World Bank Atlas*, p. 4. The worldwide inflation of recent years has raised per capita incomes since 1977, but has probably not changed the relative rankings of countries to any important extent.

Handout 8-2

THE SEMANTICS OF "DEVELOPMENT"

A number of terms have been used, more or less indiscriminately, to designate the poorer or less industrialized countries as a group: "underdeveloped countries," "have-not countries," "less developed countries" or LDCs, "developing countries," the "Third World" (the industrialized countries are the First World and the communist nations are the Second World), and sometimes—perhaps impolitely—"backward countries." Nowadays a distinction is often made within the Third World, so that this term designates poorer countries that have been making economic progress, and the "Fourth World," designates those whose progress has been nil or extremely slow. Another distinction that has gained currency is between the less developed countries that possess oil—i.e., the Organization of Petroleum Exporting Countries (OPEC)—and the rest of the "Third World." And the poorer LDCs, whose progress has been made even more difficult than before by the immense rise in oil prices beginning in November 1973, have in some instances been called the "Most Seriously Affected" nations (MSAs), which amounts to a more formal designation for the "Fourth World."

The Organization for Economic Cooperation and Development (OECD), which consists of the United States, Canada, Japan, Australia, New Zealand, the seventeen democratic countries of Western Europe—most of them developed—plus Iceland, Yugoslavia, and Turkey, has coined a useful special designation. It is applied to countries that cannot yet be considered fully industrialized or developed, but whose development has been rapid. The OECD calls them "Newly Industrializing Countries" and as of 1979 the list included Greece, Portugal, Spain, Yugloslavia, Brazil, Mexico, Hong Kong, South Korea, Singapore, and Taiwan.

In addition, there is the "Group of 77." It consists of a caucus of Third World (developing) countries in the United Nations who are active in the United Nations Conference on Trade and Economic Development (UNCTAD). UNCTAD is an organization in which developing and developed countries discuss matters related to trade, aid, and the transfer of modern technology to the LDCs. The so-called Group of 77 now includes about 123 countries. The Group of 77 also has an offshoot that is quite actively involved in monetary matters with the International Monetary Fund. It is called the "Group of 24," and is made up of representatives of eight countries each from Asia, Africa, and the Western Hemisphere.

UNCTAD and similar forums are sometimes called "North-South" discussions. A quick look at a map of the world suggests that most developed countries are located in the Northern Hemisphere and most developing countries in the Southern.

Key international agencies have adopted somewhat differing formal classifications. The main headings used by three of the chief agencies as of 1980 were:

United Nations[a]	**International Monetary Fund**[a]	**World Bank**[b]
Developed Market Economies	Industrial Countries	Low Income Countries
Developing Market Economies	Developing Countries	Middle Income Countries
Centrally Planned Economies	Non-Oil Developing Countries	Capital Surplus Oil Exporters
	Oil Exporting Countries	Industrialized Countries[c]
		Centrally Planned Economies

[a] The classification shown for the United Nations is that of the U.N. Statistical Office as of early 1980; that shown for the International Monetary Fund is a revision adopted in early 1980.

[b] Centrally planned economies, with the exception of Romania, Yugoslavia, Vietnam, Laos, the People's Republic of China, and Democratic Kampuchea (formerly called Cambodia), are not members of the International Monetary Fund or the World Bank. The World Bank, nevertheless, publishes statistics about many centrally planned economies.

[c] In some of the material accompanying this lesson, the title Industrialized Countries, used by the World Bank, has been changed to Developed Market Economies.

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980. Joint Council on Economic Education, 1212 Avenue of the Americas. New York, NY 10036.

Handout 8-3A

CHARACTERISTICS OF ECONOMIES

Worksheet

Developed Market Economies (First World)	Centrally Planned Countries (Second World)	Developing Market Economies (Third World)		
		Low Income	Middle Income	Capital Surplus Oil Exporters

NOTE: Use the top portion of the third main column (Developing Market Economies) to list characteristics common to Third World countries in general. In the lower portion, the special characteristics of the indicated subdivisions should be listed.

Name _____ **Class** _____

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Handout 8-3B

Questions on Handout 8-3A

Define or describe the three types of economic systems, using the data you have examined. Use less than 75 words for each definition.

Developed Market Economies (First World) _____

Centrally Planned Economies (Second World) _____

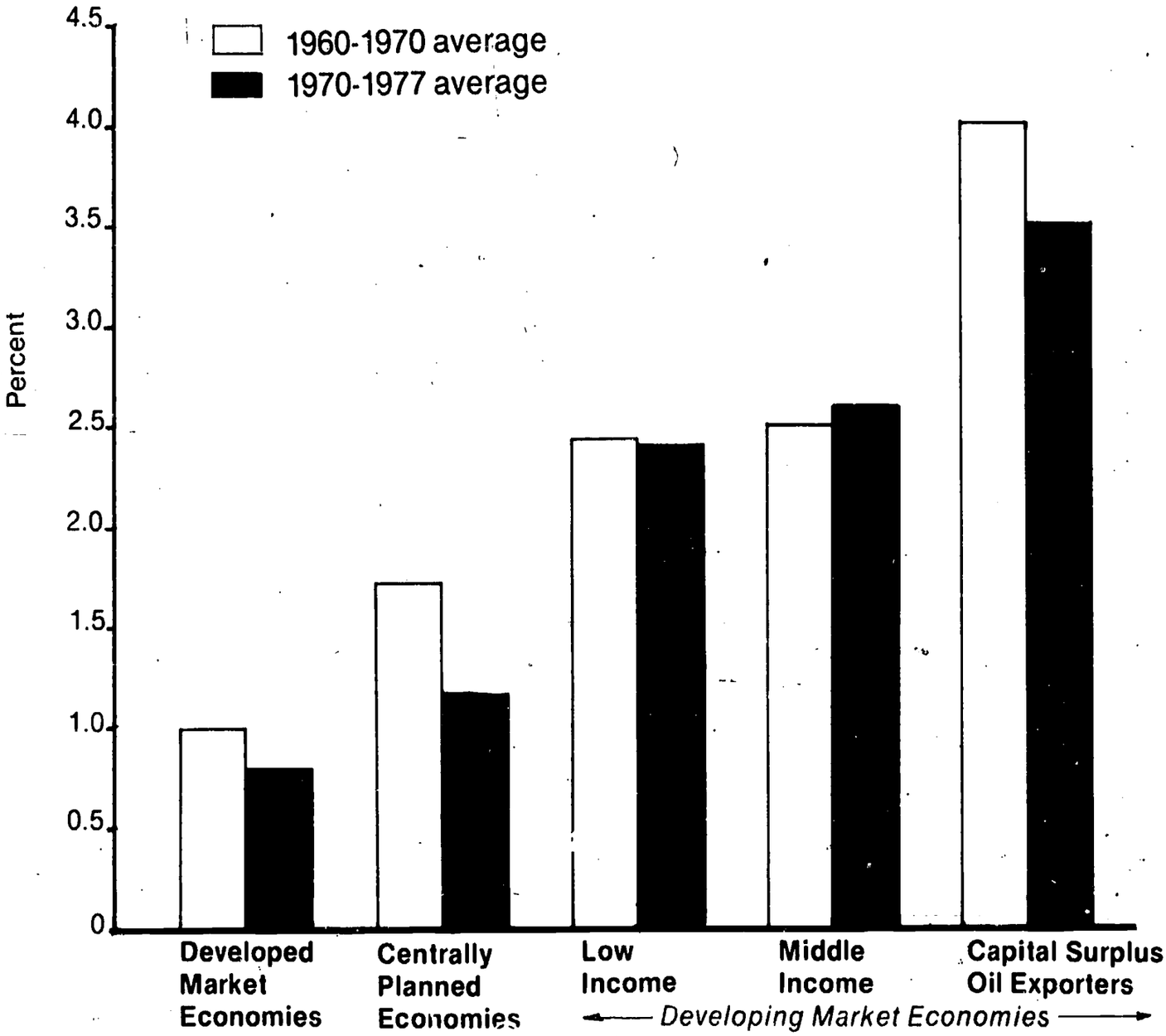
Developing Market Economies (Third World) _____

Name _____ **Class** _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980, Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 8-4

Annual Rates of Population Growth

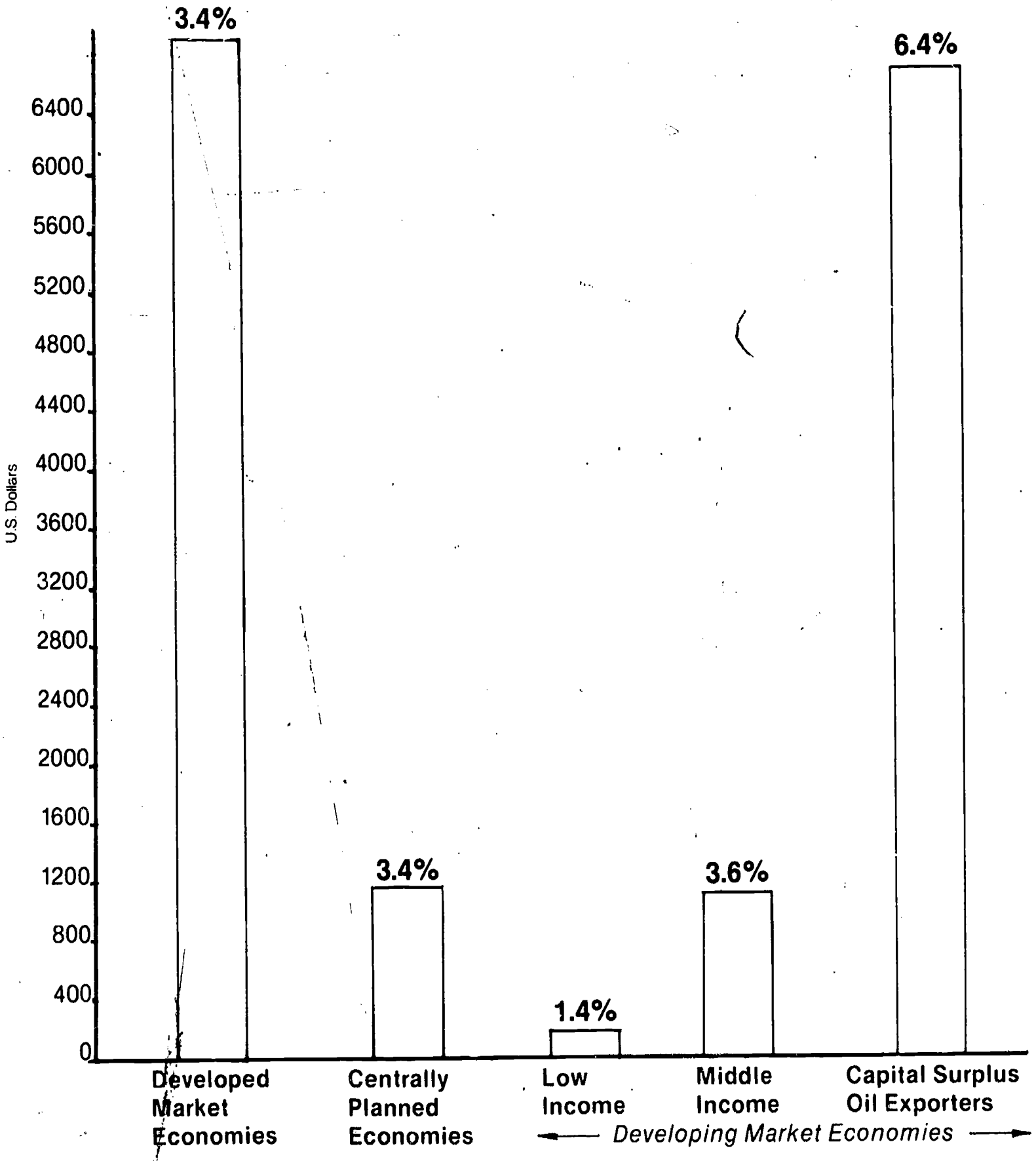


SOURCE: World Bank, *World Development Indicators* (1979).

Handout 8-5

Per Capita Income in U.S. Dollars in 1977

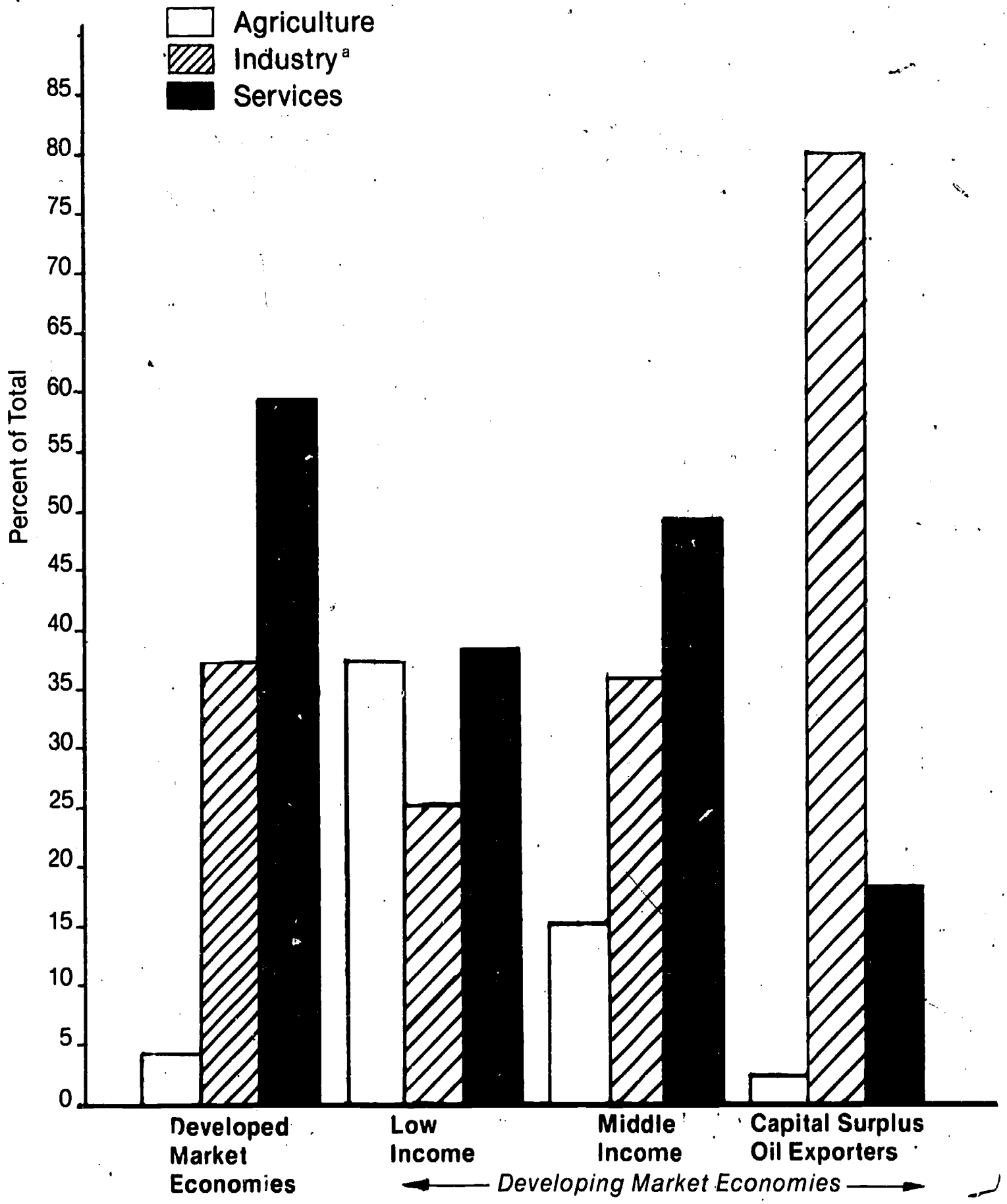
(figures above bars are average annual growth rates in per capita income, 1960-1977)



SOURCE: World Bank, *World Development Indicators* (1979).

Handout 8-6

Distribution of Production by Sector, 1977



NOTE: Data for centrally planned economies were not compiled by the World Bank.
SOURCE: World Bank, *World Development Indicators* (1979).
[a] Manufacturing, construction, utilities, and mining (including oil drilling, which is especially significant in the economies of the capital surplus oil exporter group).

Handout 8-7

Table 8-7A. Labor Force Participation, 1977

Type of Economy:	Percent of Labor Force in: Agriculture	Industry	Services
Developed Market	7	38	55
Centrally Planned	62	25	32
Low Income	73	11	16
Middle Income	46	22	32
Capital Surplus Oil Exporters	48	19	33

Table 8-7B. Composition of Exports in 1975 (percent of total)

Type of Economy	Primary Commodities	Manufactures
Developed Market	24%	76%
Centrally Planned	47	53
Low Income	94	8
Middle Income	82	17
Capital Surplus Oil Export	99	1

Table 8-7C. Shares of World Energy Production and Consumption

	Energy Production	Energy Consumption
Developed market economies	36.6%	57.3%
Centrally planned economies	29.8	28.2
Capital surplus oil exporters	12.7	0.7
Developing countries	20.9	13.8
	100.0%	100.0%

SOURCE: Data in Table 8-7A is from World Bank, *World Development Indicators* (1979), Table 19; Table 8-7B, *World Development Indicators* (1978), Table 7; Table 8-7C, *World Development Report, 1979*, p. 37.

Handout 8-8

CHARACTERISTICS OF DEVELOPING NATIONS*

Poverty

The most common characteristic of the developing nations is the grinding poverty of the great majority of their people. In the United States, annual per capita income is [in 1977 was] . . . about $8,520. Most of Western Europe and countries like Canada, . . . Japan and Australia . . . [had] per capita incomes [of $4,000 or more]. Per capita income of Eastern Europe and the Soviet Union . . . [was] estimated at about $3,125. The developing nations, with about two billion of the world's population, have an annual per capita income of . . . [about] $500—. . . [approximately one-seventeenth] of that of the United States. . . .

Startling as such figures are, they are mere approximations and more meaningful to economic theorists than to the human beings who live with them. How, for example, do we compare the value a dollar has for you with the value it may have for an Indonesian peasant? To the peasant, it may mean the difference between living and dying. And what does $500 per capita income mean to a farmer in a country where almost all of the annual $500 winds up in the hands of wealthy landowners? (Remember that "per capita" is an average.). . . .

Overpopulation and Lack of Human Capital

Most less developed countries suffer from high rates of population growth. Even though they may experience some increase in economic growth, the increase in population cancels out its benefits. The economic pie becomes larger, but not large enough to satisfy the needs of the growing number of people who must share in it.

. . . [E]conomic growth itself contributes to overpopulation—which in turn steals away its benefits. Economic growth generally means better living conditions and improved health care. More children survive to breed more children. Death rates of adults also decline, thus adding to the size of the population. Birth control and family planning . . . would seem to be imperative to solve this economic and social problem. . . .

There are signs that the population growth of many less developed nations has begun to slow down, and this is encouraging for the longer run. However, world population, which totaled about 4.3 billion in 1979, is nevertheless expected to grow to about 6 billion by the year 2000—an annual growth rate of about 1.7 percent, which would result in an enormous increase of about 40 percent in 20 years, almost all of it in the less developed countries.

Most of the richest countries are experiencing a population growth of 1 percent a year or less. At a growth rate of 0.5 percent a year it takes 139 years for the population to double, and at 1 percent, it takes only 69 years. But observe how soon doubling takes place at annual growth rates of 2.0 percent, 2.5 percent, and 3.0 percent, rates common among the poorer countries: the doublings take only 35 years, 28 years, and 23 years, respectively. (In 1979, the U.S. population was growing at 0.6 percent, a doubling time of 116 years.)

In addition to overpopulation, however, there is the problem of "population quality." (We are speaking here, of course, of the "economic" quality of a people, not of its human and cultural quality.) Most developing nations lack or are meagerly supplied with human capital. Their people are generally without the educational advantages necessary to develop skills needed for a viable and growing economy—especially a modern industrial economy. Literacy, without which very little human capital can be developed, is itself a pressing problem in many developing nations. . . .

Lack of Capital

A third characteristic common to most developing nations is lack of capital formation. As we know, economic growth is impossible without capital goods such as factories and machinery. As we also know, the funds for such goods come from investment of an economy's savings. But people can save only if they have more than enough income to meet their day-to-day needs. How can people accumulate capital for investment in the tools of economic growth when they can barely meet their own subsistence needs? The answer is, of course, that they can't.

It is true that a few developing nations have little or no natural resources on which to base economic

* From *Principles of Economics*, by Roger Chisholm and Marilu McCarty, pp. 378–391. © 1978 Scott, Foresman and Company, Glenview, Illinois. Reprinted by permission.

growth. Most, however, do have such resources—land expanse for agriculture, for example, or timber lands or valuable minerals. The problem, however, is that often these resources remain untapped or only partially tapped because of lack of capital for proper exploitation.

In many less developed nations, population is so great that agriculture cannot possibly provide savings for investment in capital goods. Everything that is produced—food and timber from the land, fish from the streams—is immediately consumed just to keep the population alive. There is no surplus production for investment to nonagricultural goods.

Some developing nations have natural mineral resources to help them toward economic growth. But there, too, lack of capital goods is likely to hinder full exploitation of the resource and thus prevent capital formation. . . .

The Vicious Circle of Underdevelopment

The economic bind in which developing nations too often find themselves may be thought of as a kind of vicious circle. . . . Start where you will in such a circle, there seems to be no way out of it.

For example, start [with] . . . a generally undeveloped economy. Such an economy probably has a population which has few job-market skills. This economically backward population means that the economy will remain less developed. This constitutes a circle in itself. If we consider rapid population growth which increases the population, we see that the situation gets worse. Underdevelopment makes it impossible to train the rapidly increasing population. . . . An economically backward population is a low-productivity economy. Low productivity leads to low per capita income. Low per capita income means that it is difficult to buy much and essentially impossible to save anything. Low savings rates mean that little or nothing is available for investment in capital goods or in human capital. Lack of capital returns us to low productivity and low productivity is assurance of an underdeveloped economy. We are back where we started from. The vicious circle remains unbroken.

Barriers to Economic Growth

The adverse economic conditions of most of the developing nations present a challenge that must be met if a stable world society is to endure and prosper. Gloomy as the situation may be, despair is not the answer. . . .

What, then, can be done to solve the problems of economic growth in developing countries? Let us take a closer look at these problems and examine some of the ways they may be solved or alleviated. The solutions, as we shall see, must come from two basic sources: *through internal changes in the developing nations and through assistance from nations whose economies have already advanced.**

Mention of outside assistance, which we will discuss in detail later in this chapter, brings up a point that should be noted now. It is true that the developed nations have, so to speak, been through the mill of economic growth. They have faced and solved many of the problems now facing less developed countries. But this is not to say that all the developing nations need do is follow the leaders. Economic and social conditions have changed over history. All cultures are not the same. All nations are not born equal. For advanced nations to tell poor nations to "do as we did" is not only insufferably smug; it may also be totally impossible for the poor nations.

As an obvious example, we may take the case of economic growth in the United States. It developed from a position of great land expanse and bountiful natural resources. It had the advantage of a skilled native labor force and ready access to the skills of millions of immigrants when they were needed for further economic expansion. It had the advantage of a culturally mixed population not bound by social or religious taboos against certain prerequisites of economic growth, such as an achievement-oriented population (which produces entrepreneurs) and labor mobility. Overpopulation was never a problem. And it had the advantage of a political system that emphasized individual freedom to achieve the benefits of a growing economy. Other now industrialized and advanced nations had similar if not identical advantages. No developing nation today is in such an enviable position.

Population Problems

As already noted, unchecked population growth is a powerful deterrent to economic growth. For example, even though India doubled its agricultural output between 1945 and 1976, its economic gains from this advance were practically wiped out by a doubling of the population in the same period. We have also noted that economic growth itself contributes to population growth.

*Editor's Note: Use of italic or boldface type follows original text throughout.

Handout 8-8 (continued)

Some nations have made a direct attack on the problem. Family planning and birth control information is widely disseminated. Birth rates are coming down in some of the less developed nations. But more and faster progress needs to be made and many barriers to this progress remain. For example, low-literacy levels often hinder dissemination of family-control information through the printed word. Lack of trained manpower and poor transportation facilities may obstruct attempts at personal instruction. Deliverance of chemical and medical means of contraception may be hindered by lack of adequate funds. In addition, a people's religious or cultural heritage may cause resistance to contraceptive methods and techniques. Even economic considerations may enter the picture. In some underdeveloped agricultural countries, children are looked upon as a source of economic security—that is, a source of unpaid farm labor to provide family sustenance.

Whatever the obstacles, however, it is clear that the less developed nations must continue to work toward an economically acceptable reduction in population growth. Without such reductions vigorous economic growth will be virtually impossible.

Employment and Human Resource Problems

Employment problems in developing nations are often of a different nature than employment problems in more advanced economies. In Western nations, when aggregate demand falls, workers are "laid off" and remain idle until demand quickens. In developing countries, however, the problem is not so much idle labor as unproductive labor. Such economies suffer from what is called **disguised unemployment.** Most of the labor force may be hard at work. Workers may toil more and much longer than in Western nations. But they produce much less per labor unit. Much of the working labor force is actually "unemployed" even though it is at work. For example, while the labor force is "working," it may not be producing much or much of anything which the market values. Thus, while energy is expended by the workers and they manage to work up a sweat, they might as well be idle for all the good that their effort does.

Most of the labor force in developing nations is engaged in production that is *labor intensive*; that is, in production that relies heavily on human labor inputs rather than on the labor-saving devices we call capital goods. Agriculture, for example, is very labor intensive, especially in nations lacking modern farm equipment and farming methods. And the economies of many developing nations are primarily agricultural. . . . [A]fter a certain point, adding more labor to a given amount of land results in less production per worker. Unfortunately, the traditions and culture of many underdeveloped nations contribute to overemployment (disguised unemployment) in agriculture. In many societies, if a father is a farmer, it is almost unthinkable that his sons will be anything other than farmers also. . . .

Of course, lack of other productive work also contributes to overemployment in agriculture. Many developing nations have little or no other industry to absorb their labor force. And what industry is available is itself likely to be labor intensive. . . . Owners of industry are likely to substitute human labor for investment in capital goods when labor is plentiful and cheap. Quick and high profits are the result—along with little or no real growth in GNP.

In other words, even though labor-intensive industries may provide much needed employment in overpopulated countries, such industries are necessarily low in productivity. More and better capital goods would seem to be called for. But even here caution is needed. Sudden influx of labor-saving capital goods, though good in the long run, may result in immediate and severe unemployment. India, for example, could obviously use more capital goods. But many of India's labor unions have fought introduction of certain labor-saving industrial improvements on the grounds that they would cause unemployment among India's vast urban population.

There is a further dimension to the problem of employment in developing nations. As noted above, the quality of the labor force is likely to be poor because of lack of health care and education. There is a lack of people with entrepreneurial, supervisory, and other skills needed in a modern industrial economy. The general shortage of people with entrepreneurial skills is particularly troublesome. Unless someone is willing to take the risks involved in investment, there will be no capital formation and no jobs for others. Lack of entrepreneurship hinders economic growth.

Many less developed nations have attacked this human resource problem by attempting to improve their educational and health facilities. But this is difficult to do when so much of the economy's output is needed for immediate life subsistence. Often, they send their most qualified younger citizens to educational facilities in industrialized countries, such as Western European nations, the United

Handout 8-8 (continued)

States, and, more recently, the Soviet Union. Many such students have returned to their home countries with much needed skills.

Careful planning, however, is needed for this kind of operation to attain its full potential. Some developing countries find that they now have too many people with skills too advanced for the actual state of the economy. They may have electronic experts, for example, but no computer capacities to absorb their expertise. Or highly trained surgeons, with no medical facilities adequate to their skills. In addition, there is the so-called **brain drain problem:** A certain number of the best qualified students will elect to remain in the host country, because the opportunities for personal achievement are greater there than at home. Also, some countries like India and the Philippines churn out college graduates in such large numbers that many never find appropriate jobs, because industries and technology have not grown fast enough to provide jobs for skilled labor. . . .

Natural Resource Problems

Some developing countries have a scarcity of natural resources to add to their economic difficulties. They may, for example, be burdened by lack of arable land, poor climate, lack of waterways, and absence of mineral wealth. Little can be done to overcome such handicaps except to see that what resources the nation does have are used efficiently.

Modern technologies suitable to nations with abundant resources may not be applicable in countries with less natural endowments. Mining techniques that bring quick profits but are wasteful of the commodity being mined could be disastrous to a country with very limited mineral resources. Drainage and irrigation techniques that work well in moderate climates may actually deplete agricultural resources in countries subject to severe weather extremes. For example, during years of favorable rainfall the people of the Sahel—those countries on the southern border of the Sahara desert in Africa—were able to develop lands for grazing and farming that had previously been too dry to use. However, when the rainfalls were very slight for a few years, the farming and grazing—now essential to the lives of many—destroyed land and turned it into desert (the Sahara thus expanded). The result was starvation for hundreds of thousands. . . .

A further complication arises when the economy of a developing nation depends primarily on a single natural resource, or even on relatively few resources. World technological changes may suddenly lessen or even wipe out the values of such commodities. Synthetic fibers, for example, have cut drastically into the market for hemp products. The development of synthetic rubber and plastics has severely damaged the value of natural rubber, which is grown mostly in less developed nations. . . .

Technological Problems

As we know, technological advances are an important component of economic growth. As a general economic rule, progress in technology occurs along with capital investment, which is needed to develop and utilize the new technology. But, as we have also seen, developing countries have particular difficulties in raising capital. However, the picture is not all dark. Fortunately, the cost of research and development of much new technology has already been met by the industrialized nations. It is available for use or adaptation by developing nations. . . . It is important to remember, however, that the situation may call for *adaptation* rather than *adoption*. Highly efficient methods for growing certain grains, for example, may actually be counterproductive if the grain does not answer the nutritional traditions of the populace.

As the economy of a developing nation grows, more of the available technologies will come to be used, which in turn will foster further growth. *Such nations, however, are forced to be more selective in their choices of technology than are the developed countries*. Technology in industrialized nations tends to be labor saving and capital consuming. In developing nations, labor is plentiful and capital scarce. Often, developing nations must be content with technology that increases productivity and organizational efficiency but may add little to existing capital goods—new complex machinery, for example, or new factories. Advances in technology mean slow and steady economic progress for developing nations. They cannot, overnight, become industrialized giants on the Western model.

Social Capital Problems

. . . What is social capital? It is the communication network and public social services without which modern economies cannot function. It is paved roads, railways, airways, telephones, post offices, and mail services. It is electric generators and other energy-producing facilities. It is schools, hospitals, sewage plants, and housing. The list could go on and on.

Handout 8-8 (continued)

Developing nations are likely to have a shortage of social capital—and few ways to obtain it. Yet, . . . social capital is essential to vigorous economic growth. The problem is further complicated by the fact that social capital is seldom immediately productive. The temptation is to neglect accumulation of social capital in favor of more immediately profitable investment in capital goods. The dilemma is that both types of investment are needed simultaneously.

Government and Economic Growth

The role of government in developing countries is of great importance to their economic growth. It is historically true that government intervention in the economic growth of most Western nations started at a relatively low level. But, . . . intervention has grown with economic growth itself. And, it is obvious that government intervention in the economic life of developing nations is today at least as prevalent as it now is in developed nations—and in many underdeveloped countries much more so. Leaving aside the pros and cons of such intervention—its potential for loss of personal freedoms, for example—why is the role of government so important to the growth of underdeveloped nations? The basic answer would seem to be that there is no other institution present to do the job. The characteristics necessary for a viable market system to work its Western economic wonders are absent.

For example, only government can deal with the basic problem of overpopulation in developing nations. Only government can launch a contraceptive campaign massive enough to have any real effect. Government is [often] the only institution that . . . provide[s] the social capital necessary for economic expansion. And only government can impose monetary and fiscal policies to guide the economy toward a pattern of economic growth.

It is imperative then that the government of a developing nation be honest, stable, and strong enough to fulfill these functions. Unfortunately, some developing countries lack the political and social traditions necessary to this kind of government. Others, because of internal and external pressure, find such a government difficult to maintain. Such problems can only be solved with time—and perhaps by humanity's instinct for social as well as self-preservation.

Given an able government, what can the leaders of developing nations do to promote economic growth? In some situations, government may only need to ensure basic conditions conducive to growth—social stability, for example, or an orderly business climate. In other cases, more positive intervention is needed.

Government may engage in long-range economic planning. It may inaugurate five-year or ten-year plans to coordinate growth to the benefit of all sectors of the economy. It may take positive steps to deal with overpopulation, train its citizens in industrial and business skills, and provide necessary social capital.

Government may also dictate land reforms and other economic reformations to increase savings for investment in growth capacity. Proper land reform would eliminate the holding of large farms by absentee landlords who "rent" parcels of land to a large class of peasantry. Such reforms could make farmers more productive and hence give them a potential for saving. A farmer, or anyone else for that matter, is more productive and works harder when working for himself than when working for others. Tax incentives may be used to induce the wealthy to invest in the nation's needed capital goods. The power of taxation may also be used to redistribute the nation's wealth more equally and toward investment in the nation's general welfare. If the nation's level of sustenance is high enough, government may tax all its citizens to decrease immediate consumption in favor of capital investment.

Caution is in order, however. Too harsh and arbitrary use of government power can easily become counterproductive. An overtaxed citizenry may lose incentive to produce or to sacrifice for the common good. Capital may flee the nation for more permissive and profitable economic climes. To avoid such possibilities, and for other political and economic reasons, some developing nations resort to inflationary policies to enhance growth. They simply print more money to pay for ongoing needs. This kind of "taxation" falls most heavily on the nation's already poor or near-poor and will ultimately destroy economic growth.

In addition, the governments of less developed nations must be careful not to try to do too much, not to overregulate the economy. Such actions could stifle initiative and slow growth.

The Problem of Capital Accumulation and Investment

Each of the challenges to economic growth in developing nations that we have enumerated above is related in one way or another to perhaps the most important challenge of all—the problem of how to accumulate capital for investment in growth. We

know that most developing nations are woefully weak in the productive facilities—factories, heavy machinery, and so on—necessary for economic growth. And we have seen that the basic poverty of the economy and its people is the root of the problem. An economy that barely provides enough for its citizens' sustenance of life cannot hope to accumulate savings for investment in capital goods.

The situation is not a great deal better for developing nations with somewhat more advanced economies. Although some domestic saving may occur, it is likely to be slight. It may not be enough to give the economy the kind of boost it needs to begin and maintain the process of capital accumulation. Investment in capital goods increases production, which in turn increases capital accumulation. If original investment is too meager, the process may never really be set in motion. The economy cannot break out of the vicious circle of underdevelopment.

A shortage of savings is not the only unfortunate characteristic of capital accumulation in less developed countries. The investment process itself has problems peculiar to or aggravated by social and economic conditions in many such countries.

In the first place, wealthy citizens of developing nations may hesitate or refuse to invest their savings in domestic capital goods. Wealthy landlords, for example, may prefer to spend these profits on purchasing more land or on grandiose consumption. Or savers may not wish to risk their money by investing in an undeveloped domestic economy.

What profit will there be, for example, from investing in a shoe factory if the population is too poor to buy shoes? Lack of domestic market is a disincentive to investment. Or why should people invest in a steel mill, say, in a country with no railways and few roads to bring iron ore to the plant and to distribute the plant's production, or where facilities to produce the plant's raw material are poorly developed? Lack of social capital and of complementary industries is a further disincentive to invest.

Furthermore, most developing nations lack educated workers. They also have a lack of managerial talent. Under these circumstances, success of a new business enterprise may be a risky proposition. In addition, investors in the domestic industries of less developed nations may face crippling competition from the products of the already industrialized nations. . . .

Foreign Investment in Developing Nations

Foreign Private Capital Investments

Historically, foreign private investments have been important sources of capital for developing nations. Until comparatively recent times, such aid was more often than not primarily for exploitive rather than developmental purposes. Colonialism was the order of the day; the bulk of the underdeveloped nation's wealth was extracted for the benefit of foreign, more "advanced" countries. Today, such blatant economic colonialism is almost entirely a thing of the past. *Nationalism*—a sense of country and culture—has all but wiped it away.

Private foreign capital no longer "follows the flag." That is, it is for the most part truly private. Investors who risk their savings in foreign lands no longer do so with assurance that their profits are more or less guaranteed by the military might of their industrialized homeland. It is worth noting, however, as we shall see below, that rumblings of "economic imperialism" are still heard. . . .

Private capital investments from foreign sources may take the form of money investment in an already established business or industry. Or the money may be used to set up a new firm, with as much managerial responsibility as possible being given to local residents. Sometimes, capital goods are sent directly to a developing nation, along with personnel to operate machinery and/or to train local people to do so.

A flow of private foreign capital may bring important peripheral benefits to less developed nations. Most such nations welcome private aid and are willing to do all that they can to encourage its continued flow. To encourage private foreign capital they know they must provide social capital and a stable political and economic climate. A stable economy and government and a satisfied citizenry mean higher productivity. Domestic economic growth feeds on foreign capital and engenders further capital flows from foreign sources. Growth feeds on growth to the benefit of all.

Foreign private capital investment, however, is not the perfect solution to the problem of capital accumulation in developing nations. Such investments also bring problems. Although political colonialism is more or less dead in our times, various forms of economic colonialism are still a possibility. Developing nations often find there is conflict between their own national interests and the profit-motivated interests of the suppliers of capital. . .

Handout 8-8 (continued)

In most cases, however, problems arising out of foreign capital flows are more subtle and complex. Even when the developing nation and the foreign providers of capital attempt to strike a balance between their sometimes conflicting interests, problems may still occur. Too often the operation and maintenance of capital goods bought with foreign capital become the prerogative of foreign managers and workers. Local labor is employed only for low-skill and dead-end jobs. Little or no attempt may be made to train and educate the local labor force and thus contribute to long-term economic growth of the developing country. . . .

Problems of foreign capital investment may also arise from the attitudes and actions of the host country. As we have noted, the power of taxation may be used to increase capital accumulation in underdeveloped nations. But it may also be used to discriminate against the legitimate profit expectations of foreign investors. Host countries sometimes erect obstacles to the interests of foreign investors in the form of regulations that inhibit good business practices or restrict the flow of profits earned by foreign investments. Some developing nations may deliberately lag in supplying social capital necessary for profitable investment. In addition, there may be the problem of official graft and corruption to add to the difficulties of doing business in foreign lands. And, of course, there is always the threat that the host nation may *nationalize* (take over, sometimes with little or no recompense) the property of foreign investors.

The actual barriers to foreign investment may not be as high as business thinks. But, if investors think there will be problems, the barriers may be "real" because investment will be reduced.

Foreign Government Investment

In the interest of world order and in their own self-interest, foreign governments also contribute to the social and economic capital accumulation of the developing nations. The United States, for example, gives aid in the form of low-cost loans and outright grants to many developing nations. Food is sent to poorer nations in on-going programs and in particular emergencies. Loans for capital improvements and technical assistance are made through our *Agency for International Development* (AID). These are very long-range low-cost loans. In point of fact, the loans are often more like grants than loans. The receiving nation is seldom pressed for repayment, and sometimes the loan is repaid in the overvalued currency of the developing country.

As with private foreign capital, the contribution of foreign governments to capital accumulation presents problems for the developing nation. First, of course, there is the danger of political or military domination by the donor nation. In addition, foreign capital may be used unwisely and thus not contribute to domestic savings necessary for growth. Or it may be wasted on grandiose projects—monumental government buildings, for example—that contribute little to economic expansion. All too often developing nations devote too much of foreign aid to building up military forces. Finally, the developing nation may find itself so debt ridden that its dream of economic growth is shattered in the cold dawn of near or actual bankruptcy.

In addition to acting as suppliers of capital for developing nations, foreign governments play a vital role in an important aspect of their economic growth we have only touched upon. . .—foreign trade, as it relates to the economic well-being of developing nations (and of all nations). . . .

Most foreign aid, however, is administered on a more business-like and international basis. For example, the *International Bank for Reconstruction and Development* was formed in 1944 at a conference of world leaders. Commonly called the **World Bank,** it operates in a manner similar to commercial banks but for the express purpose of lending capital to underdeveloped nations to stimulate economic growth. The five largest contributors of funds, or shareholders in the bank, are the United States, Great Britain, France, West Germany, and . . . [Japan]. Other shareholders represent various blocks of nations throughout the world. Because of sound management and its large initial funding, the bank is able to borrow funds from world money markets. . . . It passes these funds along to needy nations at a lower rate than they could likely receive elsewhere or if they tried to borrow directly from the money markets.

The World Bank also operates the *International Development Agency* (IDA). IDA loans are made to needy countries that have little or no short-range means of repayment. The loans extend for 40 years, with no repayment necessary at all for the first 10 years. There is a nominal service charge for the loan, but no interest charge. The World Bank, through its affiliate, *International Finance Corporation* (IFC), also makes loans to private industries within developing nations for expansion beneficial to the economic growth of the nation.

World Bank loans are used for building social capital in the developing nation—for education,

Handout 8-8 (concluded)

health services, roads, airfields, energy generators, and so on. Or, among many other purposes, they may be used for industrial development, especially in mining, iron, and steel manufacture. Or for flood control and irrigation projects to assist agricultural production.

However, there are problems with such loan policies. The World Bank has noted that even though the growth capacity has increased in those countries where loans are made, the very poor often are not really being helped. The increased wealth is not spread evenly; because of power and ownership, the upper classes (even in socialist-oriented developing countries) manage to net nearly all of the gains. So in 1977, World Bank President Robert McNamara announced a shift in direction. The Bank would start instituting a *basic-needs policy* with loans partially contingent on the loans being used for projects that redistribute wealth to those suffering abject poverty. More loans would be made for projects that improved the health, food, housing, and education of the poor.

Lesson 9: The Problem of Modern Command Economies—Meeting Consumer Needs

TIME REQUIRED: Two or three class periods

RECOMMENDED GRADE LEVEL: 11–12

CONCEPTS: Determinants of supply and demand in a command economy (U.S.S.R.)
Investment policy
Consumer needs
Economic growth

Instructional Objectives: Students will

- Summarize the goals of a U.S.S.R.-style economy;
- Describe Soviet progress toward meeting these goals;
- Understand the conflict between consumer needs and capital-military needs in the Soviet Union, and why it poses a major problem for that country.

Rationale: A student is in a better position to view Soviet economic policies today, particularly in respect to its relations with the United States, if the student understands the conflict in the Soviet Union about the allocation of resources between the needs of the consumer and capital/military requirements, and how the authorities attempt to ameliorate that conflict.

Materials: One copy each of handouts 9-1, 9-2, and, 9-3 for every student.

Procedure:

1. Distribute Handout 9-1. Explain to students that the table summarizes the amount of labor time that a typical factory worker in the United States and in the Soviet Union must have expended (as of May 1976) to make enough money to buy the commodities given on the list. These figures serve as a rough index of standards of living. (The comparison would be more favorable to the U.S.S.R. if it included the costs of rent, medical services, and certain of the basic foodstuffs, which are cheaper for consumers there than in the United States.)
2. Have students compare the worktime of the items listed and ask: With these comparisons in mind, what do you think would increase the satisfaction of the Soviet consumer?
3. Distribute Handout 9-2. The material studied in the previous exercise compares the effort that must be expended in two different countries in order to attain some important constituents of a given standard of living. The result conforms to the usual assumption that the higher the per capita income (or, as in the foregoing example, the lower the amount of labor time needed to buy something), the higher the material quality of people's lives. Handout 9-2 presents an array of countries with some different and nonmarket measures of the quality of life: the infant mortality rate, the average life expectancy, and the percent of the population age 15 and older that is literate. These three indicators are also incorporated in a single index in order to express their combined effects. It shows relative per capita income is a reasonably good indicator of the quality of life. After students have studied the handout, see if they reach the above conclusion by themselves. Among other things, ask them especially about the disparity between per capita income and the quality of life in Saudi Arabia, the seeming disparities for South Africa vs. Cuba, and why the data for the Low Income Countries appear to make sense. Most importantly, note whether the students realize that the Soviet Union stands much closer to the United States in the comparisons here than in those of the previous exercise. Point this out if students do not. Discuss the implications of all the foregoing anomalies: Although the amount of per capita income is a reasonably good indicator of the physical quality of life, it may not be completely reliable in all circumstances.
4. Distribute Handout 9-3. Have students read it in class or as a home assignment. After students have completed the reading have the class discuss the following:
   a. What has been the general evolution of the Soviet economy from the 1917 revolution to the present, i.e., what changes have taken place in the mix of private and public enterprise, the pattern of investment, the structure of the economy, the rate of economic growth.
   b. How does the Soviet economy compare with the U.S. economy in respect to (i) the mix of public and private enterprise; (ii) the structure of production, (iii) the rate of economic growth; (iv) per capita income; (v) patterns of consumption and investment?
   c. What does the comparison of the consumption-investment patterns of the United States and the U.S.S.R. imply for the consumers in each country?

d. What were the major economic goals and results of the Soviet Five-Year Plans before 1970?
e. What were the goals of the Ninth Five-Year Plan? How well did the Soviet economy achieve these goals?
f. Describe the major features of the 1976–80 plan (the Tenth Five-Year Plan)—i.e., the goals established and the specific actions planned for achieving these goals.
g. What factors does the author suggest will determine the success or failure of the 1976–80 plan?
h. The U.S.S.R. has been seeking expansion of trade with the United States and seeking access to the technology of the United States and other market economies. What do you think is the reason for this?

Evaluation: Have students discuss or write a short essay on the following: Why has the Soviet economy tended to become more consumer oriented? What are the implications for the future if this new orientation is too weak?

Handout 9-1

Comparative Standard of Living
(approximate worktime[a] required for average manufacturing employee to buy selected commodities in retail stores in Washington, D.C., and at state-fixed prices in Moscow during May 1976)

Commodity	Washington, D.C.	Moscow
White bread (1 kg.)	21 minutes	20 minutes
Hamburger meat, beef (1 kg.)	34 minutes	3.5 hours
Sausages, pork (1 kg.)	71 minutes	2.6 hours
Potatoes (1 kg.)	8 minutes	7 minutes
Apples, eating (1 kg.)	16 minutes	5.4 hours
Sugar (1 kg.)	9 minutes	65 minutes
Milk (1 liter)	7 minutes	21 minutes
Eggs (10)	10 minutes	97 minutes
Vodka (0.7 liters)	67 minutes	9.8 hours
Cigarettes (20)	10 minutes	23 minutes
Soap, toilet (150 grams)	5 minutes	72 minutes
Lipstick	31 minutes	7.8 hours
Panty hose	17 minutes	9 hours
Men's shoes (black, leather)	6.7 hours	36 hours
Man's business suit	25 hours	106 hours
Refrigerator, small (150 liters)	47 hours	168 hours
Color TV set, large (59 cm. screen)	3.9 weeks	19.5 weeks
Small car (Fiat or Zhiguli)	6.9 months	3.1 years

SOURCE: Radio Liberty Research Supplement, June 16, 1976. Reprinted with permission of the National Federation of Independent Business, San Mateo, California.

[a]Worktime is based on average *take-home* pay of male and female manufacturing workers. Income taxes, social security taxes, and health insurance premiums in the United States have been deducted from wages; family allowances in the U.S.S.R. have been added. The data are for a worker with three dependents. Hourly take-home pay in January 1976 was $3.83 for American workers and $1.10 for Russian workers.

Handout 9-2

	Per Capita Income (1977 U.S.$)	Physical Quality of Life (PQL)			
		PQL Index[a] (scale range: 0–100)	Infant Mortality (rate per 1,000 live births)	Life Expectancy at Age One (years)	Literacy (% aged 15 and over)
Developed Economies					
United States	8,520	94	16	72.2	99
Saudi Arabia	6,040	29	152	52.0	15
Japan	5,670	96	10	73.7	98
East Germany	4,680	94	16	71.2	99
Czechoslovakia	3,890	93	21	71.5	100
Italy	3,440	92	21	72.5	94
Poland	3,150	92	25	70.8	98
U.S.S.R.	3,020	91	28	70.0	100
Middle Income Economies					
Brazil	1,360	66	82	65.4	66
South Africa	1,340	53	117	57.9	57
Cuba	910	85	29	71.1	78
Low Income Economies					
Kenya	270	39	119	55.7	23
Afghanistan	190	17	182	47.9	8
India	150	41	122	55.9	34
Zaire	130	32	160	51.3	31

SOURCE: Per capita income: World Bank, *World Development Indicators* (1979), Table 1; PQL data: Morris David Morris, *Measuring the Condition of the World's Poor: The Physical Quality of Life Index* (New York: Pergamon Press for the Overseas Development Council, 1979), App. A.

[a]The PQL index is a simple average of the three components shown, with equal weight given to each. For this purpose, the components were converted to a scale ranging from 0 to 100. Zero is designated as the worst experience observed in the post-World War II period, and 100 as the best experience anticipated by the end of the century.

Handout 9-3

THE EVOLUTION OF THE SOVIET ECONOMY*

In the more than half a century since the Bolshevist Revolution of 1917, the Soviet Union has undergone major economic changes. Lenin's New Economic Policy of 1921–1927, which provided for a restoration of private farming and marketing but the retention of state enterprise in the key industries, constituted only a pause in the movement towards a socialist society. During these years, the advocates of balanced economic growth, who would have paid more attention to consumer preferences and would have placed more reliance on the free functioning of the market system, lost out to the advocates of unbalanced growth, whose aim was the forced and rapid industrialization of the Soviet economy. In 1924, the private capitalist sector of this economy accounted for 23.7 percent of gross industrial output, whereas the socialist sector accounted for 76.3 percent. By 1937, after two of Stalin's five-year national plans, the elimination of the New Economic Policy, and the forced and widespread collectivization of agriculture, the private capitalist sector was all but eliminated—it provided only 0.2 percent of gross industrial output. By 1937, Stalin had completed the transition from a mixed private-public-enterprise economy to a mainly public-enterprise or socialist economy.

The transformation of the Soviet economy after 1928 was accompanied by rapid economic growth and significant changes in the structure and functioning of this economy. According to official Soviet statistics, which are not fully acceptable to Western analysts, gross industrial output increased sixty times in the years 1913 to 1965, at an average annual rate of about 8.2 percent. . . . [There were] large increases in the output of major industries in the years 1928–1970. [But] in 1928, the Soviet economy was . . . little advanced over its position in 1913. The big upsurge in economic growth took place after the Second World War.

In the years since 1917, major changes have occurred in the structure of the Soviet economy. In 1913, when the Russian economy was largely agricultural, 52.8 percent of the total number of industrial workers were employed in the light and food industries, and 14.4 percent in the engineering and metalworking industries. In 1965, only 26.3 percent of the workers were employed in the light and food industries, and 34.1 percent were employed in the heavy industries. Although today the Soviet Union is one of the world's major industrialized countries, a comparison of national income by sector of origin in the Soviet Union and the United States reveals some very significant economic differences between these two large industralized countries.

. . . Whereas 21 percent of Soviet national income originated in the agricultural sector in 1969, only 3 percent of the U.S. national income came from this sector. Also, the service sector is much larger in the United States than in the Soviet Union. This sector accounted for 57 percent of the United States national income, but for only 32 percent of the Soviet national income. An analysis of the composition of fixed investment in the United States and the Soviet Union shows that the Soviet Union invests relatively more heavily in industry and agriculture and less in housing, trade, education, transportation, communications, and other services than does the United States.

The American economic system is a mature industrial economy with the world's highest standard of living. . . . [In 1977, per capita GNP in the United States was $8,520, as compared with $3,020 in the Soviet Union. The Soviet GNP in 1977 was estimated to be $780 billion; the American GNP as $1,875 billion. With a larger population (259 million) than that of the United States (220 million) and GNP estimated to be less than one-half that of the United States, the Soviet Union had a much lower standard of living.] GNP is considerably higher in ". . . [most] of the Western European countries than in the Soviet Union. Furthermore, the Soviet Union's per capita GNP is much smaller than that of East Germany and Czechoslovakia but larger than that of most of the other Eastern European countries as well as the Asiatic communist countries.

The American economy can be described as a high-consumption, low-investment economy, whereas the Soviet economy is a low-consumption, high-investment economy. . . . [In 1970, a representative year,] private and public consumption [took] up 72 percent of . . . [GNP] in the former and only 56 percent in the latter. The situation is reversed

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*Excerpted from *Comparative Economic Systems: Competing Ways to Stability, Growth, and Welfare*, 2nd edition, by Allan G. Gruchy, pp. 415–419 and 438–445.

Handout 9-3 (continued)

regarding investment. Private and public investment use 17.8 percent of GNP in the United States; these investments absorb 33 percent of the Soviet GNP. Both nations devote a sizable part of their output to national defense.

Since 1917, the economic gap between the Soviet Union and the United States has been closing. The Soviet Union has borrowed the industrial technology of the West, increased its supply of engineers and technicians from 310,000 in 1941 to 2,554,000 in 1965, organized a total work force of 128 million, and established a large-scale industrial system. In 1913, according to Soviet calculations, the output per industrial worker in Russian industry was one-ninth that in the United States, but by 1968 this labor-productivity gap was reduced to one-half. By 1968; 5.5 percent of all industrial enterprises employed 42 percent of all industrial workers, and accounted for 56 percent of total gross industrial output. In 1970, the Soviet Union claimed to have surpassed the United States in the level of output for coal, coke, iron ore, pig iron, lumber, cement, wheat, cotton, and wool.

The Ninth Five-Year Plan states: "If we assume that the United States develops in the 1971–1975 period at the same rate as in the 1966–1970 period, in 1975 the national income produced in the USSR will constitute 80 percent of the level in the United States. industrial output will constitute 85 percent of the level in the United States, and with respect to agricultural output the USSR will approximately reach the level of the United States." Even if these total goals were reached in 1975 [(actual performance fell far short of these goals)], the per capita gap between the two countries would still be large, since the Soviet Union's population exceeds that of the United States by approximately 39 million. A factor favoring the Soviet Union has been its higher annual economic-growth rate. According to the statistics of the Joint Economic Committee, industrial production in the Soviet Union increased at the annual rate of 6.7 percent in the years 1960–1971; in the United States the growth rate was 4.7 percent. While higher growth rates in the Soviet Union have helped in the past to narrow the economic gap with respect to the United States, the reduction of this gap may be more difficult in the future. In the past decade, the industrial growth rate has been declining in the Soviet Union as the movement from low-productivity to higher-productivity economic activities has slowed down, and also as labor has moved into the lower-productivity service industries. If these economic trends continue, the Soviet Union will find it increasingly difficult to reduce the Soviet-American per capita output or national income gap.

In spite of the increasing concern with consumer welfare in the Soviet Union since 1953, the Soviet economy remains a high-investment, low-consumption economy. . . . [From 1928 to 1965] private consumption as a share of GNP decreased from 64.7 to 46.2 percent, while public consumption increased from 5.1 to 9.9 percent. Total private and public consumption, which accounted for 69.8 percent of GNP in 1928, continued to decline after 1928, until in 1965 total consumption was 56.1 percent of GNP. Defense, which took up only 2.5 percent of GNP in 1928, had increased to 11.3 percent by 1965. Total investment, which absorbed 25 percent of GNP in 1928, accounted for 30.4 percent in 1965. Although total private consumption declined as a relative share of GNP during the years 1928–1965, absolute per capita private consumption rose, because total private consumption was a declining relative share of a GNP that was increasing in absolute size. The statistics on the trends in per capita consumption show that this consumption increased after 1944 but at a declining average annual rate. There is no evidence of any significant change in these trends since 1965. The Soviet society is still far from being a consumers' society, and no prospect of any major change in this direction appears likely in the near future. . . .

The Ninth Five-Year Plan, 1971–1975

The first five of the five-year plans, covering the Stalinist period 1928–1953, emphasized extensive planning, in which economic growth was achieved by increasing labor and capital inputs. Stress was placed upon securing plan fulfillment without much regard for efficiency or rational economic decision making. Stalin's antipathy toward the economics of the Western world made it difficult for Soviet economists to underline the importance of using economic science in order to maximize the output from a given supply of scarce resources. During the years 1953–1964, between Stalin's death and Khrushchev's removal from office, an interest developed in a kind of planning that would pay more attention to the intensive and efficient use of labor and capital. Not much was accomplished during the Malenkov-Khrushchev era (1953–1964) to make planning more rational and efficient. Much of Khrushchev's concern was focused on the agricultural problem, which had been badly neglected by Stalin.

Handout 9-3 (continued)

During the Sixth Five-Year Plan (1956–1960), abandoned in 1958, and the Seven-Year Plan (1958–1965) planning and management techniques were not much improved; considerable advance, however, was made in the universities and research centers of the U.S.S.R. Academy of Sciences in mathematical economics and its theoretical implications for planning and management.

The Eighth Five-Year Plan, which began in 1966, drew attention to the new era in Soviet planning, in which intensive rather than extensive planning would be emphasized, and the traditional methods of planning would undergo considerable modification. The economic reforms introduced by Brezhnev and Kosygin in 1965 were calculated to improve greatly the planning and management system. While these reforms have not been as effective as their originators asserted they would be, nevertheless, they represent a marked improvement over the economic decision making carried on by planners and enterprise directors during the Stalin era. In spite of the setbacks experienced by the Brezhnev-Kosygin reforms, Western analysts generally agree that the reform movement in the Soviet Union is by no means dead. . . . The Ninth Five-Year Plan continued the effort "to provide further improvement of the planning system, to continue to pursue a rise in the scientific substantiation and the accuracy in the balancing of plans, and optimum combination of branch, territorial, and combined planning."

The Ninth Five-year Plan (1971–1975) was the second plan to be carried out since the end of the Khrushchev era. Like the Eighth Plan (1966–1970), the Ninth Plan was designed to cope with a declining economic growth rate at a time when the national goals emphasized the importance of enlarging consumer welfare as well as securing a high economic growth rate. The report of the Central Committee of the Soviet Communist party to the 24th party Congress in 1971 stated that "The main task of the five-year plan is to ensure a substantial rise in the material and cultural standard of living [of the workers and employees] on the basis of high rates of development of socialist production, a rise in production efficiency, scientific and technical progress, and a faster growth of labor productivity." Whether or not the Soviet planning authorities achieved a significant rise in the general population's standard of living during the plan period 1971–1975, they intended to maintain high growth rates for national income and industrial production. High economic growth is essential for industrial progress and the support of the military and space exploration programs.

Some of the major targets of the Ninth Plan [were the following:] . . . National income, officially reported as growing at an annual rate of 7.1 percent in the plan period 1966–1970, was expected to increase at the annual rate of 6.8 percent in the years 1971–1975. Industrial output, having increased at the average annual rate of 8.5 percent, according to the Eighth Plan, was estimated to increase at a rate of 8 percent in the Ninth Plan. For the first time in Soviet planning experience, consumer goods were projected in the years 1971–1975 to increase at a faster rate (8.3 percent) than producer goods (7.9 percent). With real per capita income rising at an average annual rate of 5.6 percent and the flow of consumer goods enlarged, some positive steps could have been taken in the years 1971–1975 to improve the general population's standard of living.

A major feature of the Ninth Plan was the projection of a large annual improvement in labor productivity. This productivity in industry was projected to increase at an annual rate of 6.8 percent and was to be accompanied by an annual increase in capital investment at the rate of 6.7 percent. Earlier five-year plans had secured high economic growth by making use of large inputs of labor and capital into the economy. The Soviet planners can no longer depend upon securing large increases in the supply of labor, because the rate of population growth has been falling; also, the possibility no longer exists of any large-scale shifts of labor from the agricultural to the industrial sector.

Major Ninth-Plan Targets

The Ninth Plan presented control figures or targets for industry, agriculture, personal consumption, and other sectors of the economy. . . . Besides the usual increases in such basic outputs as steel and electric power, the industrial targets showed large planned increases in the output of oil and natural gas and a very limited increase in coal, which is losing out to oil and gas. The changes in the fuel industry are accompanied by major changes in the chemical industry, where the output of plastics and synthetic resins was planned to increase at an annual rate of 16.1 percent; this rise was well above the rate of expansion of steel, electric power, oil and other basic raw materials.

Handout 9-3 (continued)

A 10.2 percent annual increase in the output of chemical fertilizers was planned to provide for sizable annual increases in meat, grains, milk, eggs, and other food products. The comprehensive plan for agriculture proposed a redistribution of national income to the advantage of the agricultural sector. This meant that agriculture during the years 1971–1975 was to receive larger supplies of machinery, fertilizers, herbicides and other chemical products. Output per one hundred hectares of land was projected to increase one-third. The output of meat measured in kilograms per person per year was planned to increase from forty-eight in 1970 to fifty-nine in 1975. These improvements in agricultural output were expected to contribute significantly to a higher standard of living.

Further improvements in the standard of living were to be achieved by raising per capita consumption from 815 rubles in 1970 to 1,083 rubles in 1975 (measured in 1965 prices). The light industry was to increase the supply of scarce consumer goods and improve the quality of consumer goods in general. The supply of household chemical products was projected to rise at the very high annual rate of 13.4 percent. The amount of total floor space per urban resident was planned to go from 11 square meters in 1970 to 11.9 in 1975. The supply of domestic services, such as dry cleaning, laundering, and car repairing, was projected to double during these years, while the annual output of passenger cars was planned to rise from 513,000 in 1970 to 1,260,000 in 1975. If these consumer goals had been achieved by 1975, the Soviet society would not yet be a consumer society, but considerable progress would have been made in raising the nation's standard of living.

Performance under the Ninth Plan, 1971–1975

Although the Soviet government hailed the Ninth Five-Year Plan at the Twenty-fifth Congress of the Communist party, February 24, 1976, as a major contribution to stable economic progress, it was conceded that a number of production targets had not been met by 1975 and that much of what was produced was of poor quality and not the desired assortment. . . . National income, which had been projected to increase 38.6 percent over the five-year plan period, increased only 28 percent or at an average annual rate of 5.1 percent instead of the planned 6.7 percent. An analysis of the statistics . . . shows that the production of consumers' goods was curbed in favor of producers' goods; the increase in real per capita income fell much below its planned goal; agricultural production was far below its target; and the production of steel, oil, and gas while impressive was below targeted goals.

The Soviet government attributed the inadequate performance of the Soviet economy to a number of factors which included the wasteful use of raw materials, poor industrial management, a slowness in adapting technological advances to industry, bottlenecks in the supply and contract system between industrial enterprises, deficient economic planning procedures, and delays in completing new investment projects. It should be pointed out that while the Soviet Union suffered an economic slowdown during 1971–1975, it was spared many of the economic dislocations that were visited upon the advanced Western economies during the recession of 1974–1975.

One of the factors that has been a drag on the performance of the Soviet economy since 1970 has been the fluctuating level of grain output. The Ninth Plan projected an average annual output of 195 million metric tons of grains in 1971–1975. The grain output which fell to 167 million tons in 1972, increased 222.5 million tons in 1973; in 1975, however, it again fell to an estimated 140 million tons. In an exceptionally good year like 1973, a part of the harvest has been lost because of inadequate transportation, storage, and other facilities. In a poor harvest year like 1972, the rationing of products like meat, poultry, and dairy products has been made necessary. In order to offset the adverse developments in the Soviet Union's agricultural sector, deliveries of farm equipment from the heavy industries have been speeded up; supplies of chemical fertilizers have been increased; pools of spare parts have been established on the collective and state farms; and, in some cases, factory workers have been drafted to increase the supply of farm workers.

As a consequence of these efforts to bolster the agricultural sector, output has been transferred from the heavy industry sector, which in turn has drawn resources from the consumer goods sector. As has been explained, the Ninth Plan had proposed to reverse the pre-1971 trends and to increase the supply of consumer goods at a faster annual rate than the supply of producer goods. After the disastrous 1972 crop year, there was a reversion to the pre-1971 program of favoring the supply of producer goods over that of consumer goods.

Handout 9-3 (concluded)

The Tenth Five-Year Plan, 1976–1980

In June 1975, the Soviet Council of Ministers met and examined the draft of the basic directions in the construction of the Tenth Five-Year Plan for 1976–1980. The Council instructed the State Planning Committee to pay particular attention to the following matters in their further work on this draft. The development of the economy during this five-year period is to be based on accelerated technological progress, increased labor productivity, and improved quality indices. The increased effectiveness of capital investment is to be achieved through the modernization and reequipment of existing industrial enterprises, increasing capacity at these enterprises, and accelerating the process of putting new plant and equipment into operation and bringing them up to their full output potentials.

In this plan, special attention is to be given to the discovery of additional resources of metals and to the production of equipment for the metallurgy, chemical, and electrical engineering industries. Fuel production is to be enlarged, and special steps are to be taken during the plan period to conserve the use of fuel resources. The material and technical base of the agricultural sector is to be strengthened further in order to increase agricultural output. The people's standard of living is to be raised further by ensuring high growth rates of consumer goods, expanding consumer services, and improving the quality of both consumer goods and services. No mention was made by the U.S.S.R. Council of Ministers of increasing the supply of consumer goods at a rate faster than that of producer goods. In general, the Tenth Five-Year Plan appears to continue the basic directions that guided the Ninth Plan.

. . . It is clear from [available] . . . statistics that the Tenth Plan is much more modest than the Ninth Plan. National income is projected to increase during 1976–1980 at a slower rate than during 1971–1975. Also, there is a return to the traditionally higher rate of growth of producers' goods than consumers' goods due to the shortages and bottlenecks in the supplies of basic industrial materials, especially fuels, and to the expanding military burden. Under the Tenth Plan, major investments are to be made in western Siberia in order to increase the output of oil and gas. Special attention is also to be given to the improvement of agriculture, which will take 33 percent of total investment in the years 1976–1980.

The success of the Tenth Plan will depend very much upon the improvement in labor productivity in the various branches of the economy, since the labor supply will increase less than 4 percent. During the Tenth Plan, the improvement in labor productivity is projected to provide 90 percent of the increase in industrial output and all the increase in agricultural output in the plan period. Such a large improvement in labor productivity will require rapid advances in industrial management, economic planning, and the application of technological advances to industry. These are advances that many Western Soviet analysts do not believe will be forthcoming. It is their view that too much of the traditional overcentralized planning system survives in spite of economic reforms to prevent the needed 5 percent annual overall increase in labor productivity if the Tenth Plan is to be successful.

Lesson 10: Limits to Growth

TIME REQUIRED: Three to four class periods

RECOMMENDED GRADE LEVEL: 11–12

CONCEPTS: Scarcity and choices
Productive resources
Economic growth

Instructional Objectives: Students will

- State the major arguments of those who are concerned about the long-run adequacy of resources to supply the world's needs;
- State the major arguments of those who believe that such concerns are overstated or unrealistic;
- Relate the question of resource adequacy to the question of how long world economic growth can be sustained;
- State their personal expectations for the future and justify these on the basis of their stance on the "limits to growth."

Rationale: The present rate of use of the world's resources may have important implications for the future. While some people predict that resources are being used so rapidly that a "doomsday" is bound to result, others foresee a future of economic growth and plenty—more of a utopia than a doomsday. This lesson provides an opportunity for students to examine the various possibilities.

Materials: One copy each of handouts 10-1, 10-2, and 10-3 for every student.

Procedure:

1. To help students relate the lesson to their own lives, have each develop a list of ten personal expectations for the future. It should contain matters such as their expectations with regard to having a family, to holding a particular job, to the amount of leisure time they hope to have and how it would be spent, the kind of home and general environment—including the type of area—they wish to live in, the goods and services they would like to enjoy (e.g., clothing, transportation, medical care, food), etc. After students have completed their lists ask them to rank the items in order of preference. You may either collect the lists or have students place the lists in their notebooks for future reference.
2. Distribute Handout 10-1. Have students read through portion titled "Background" and direct their attention to the world model in Figure 1. Then have them discuss the following:
   a. Based on your reading thus far and Figure 1, how do you think living conditions in the year 2000 will differ from living conditions in 1900? How will living conditions in 2100 differ from those that exist now (or those existing in the year 2000)? What seem to be the prospects for the twenty-second century (2100-2200)? (In short, by about 2075 a dismal world will have come into being. There will be a large population and few resources to provide for its needs. Consequently, living standards will fall far below those of the present. The students' answers to the three specific questions above should be more detailed.)
   b. Why is population shown as continuing to increase after food and industrial output per capita start to decline? (There is a time lag because of the age structure. That is, the world population now—and for some time to come—will consist of relatively more younger people than older people. Thus the number of young women entering the childbearing ages will continue to be large. Even if they have few children, it will take many years of low birth rates to reduce and then to end world population growth.
   c. What factors cause the decline in population shown in Figure 1, apart from voluntary limitations of family size? (High rates of infant mortality, lack of sufficient food and health services, death from pollution, a severe decline in available resources and in industrial output per capita.)
   d. Resource depletion in the model occurs earlier than population decline. How would this relative timing affect the standard of living? (Cause it to deteriorate.)
3. Direct students' attention to Figure 2. In Figure 2, the authors of *The Limits to Growth* show the effects of their "stabilized world model." This model depends on carrying out (beginning in 1975) policies to recycle resources, control pollution, increase the lifetime of capital equipment, replace worn-out capital equipment but not allow it to increase, stabilize population, change consumption patterns. Have students discuss the following:
   a. How could such policies be carried out? Would they come about only through government intervention or could they come about through "natural forces" such as those of the market and of personal preferences? What about a combination of the foregoing?
   b. How likely is it that such policies or results will be achieved?
4. Have students read the remainder of Handout 10-1. Then have them discuss the following:
   a. What are some of the reservations of econo-

mists about the limits-to-growth argument that are cited in the reading? (Ignores price mechanism, is pessimistic about future technological advance, does not allow for changes in demand patterns of consumers as incomes rise, ignores historical experience about population growth, does not differentiate between the economic problems of different types of countries.)

b. Which view do you tend to favor? The view expressed in *The Limits to Growth* or the view expressed by the economists?

5. Distribute Handout 10-2. Allow time for reading in class or assign as an overnight reading. (The purpose of the reading is to give students a more concrete understanding of the kinds of specific events in economies and markets that lead many economists to be skeptical of limits-to-growth arguments. Initiate discussion by asking:
   a. January 1985: What has caused copper prices to skyrocket? (Reduction in supply and increase in demand.)
   b. July 1985: Why are utility companies seeking alternatives to using copper? (To prevent a sharp rise in their costs. Much more expensive copper would also force them to raise the price of electricity, which would cut the demand for it.)
   c. August 1985: Previously, it had been unprofitable to obtain copper from igneous rock. Why has it suddenly become an alternative? Can you relate this situation to efforts to exploit new sources of fossil fuel? (In both cases rising prices enable producers to consider sources of raw materials that were unprofitable to produce before the prices increased.)
   d. November 1985: Why has the price of copper fallen? (The market structure has changed as people have found substitutes, the alternatives proved to have advantages over copper, and manufacturers don't want to undergo the risk of using copper again. In the end, supplies of copper become plentiful again, but demand is lower than it used to be.)
   e. Is the scenario believable? Is the outcome satisfactory? Is the outcome fair to all? If not, which parties gained, which parties lost? Are there realistic alternative scenarios? What might they be? Would the outcomes be more or less satisfactory than the outcome of the scenario as presented? Why? (Open-ended discussion.)
6. **Optional:** Have students read Handout 10-3 and summarize the issues by developing lists of the arguments used by supporters and critics of the limits-to-growth model.

Evaluation: Instruct students to study the list made earlier concerning their individual expectations for the future. In a short essay they are to state:

1. What changes, if any, they would make in the items listed and/or the priority ranking.
2. Justify their decision to change or to maintain their original lists on the basis of the limits-to-growth argument or alternative scenarios of the future.

Handout 10-1

ON THE "LIMITS TO GROWTH"

Background

When Thomas R. Malthus, the early nineteenth-century economist, predicted eventual disaster because population would outrun the food supply, many people branded him a crackpot. More than a hundred years elapsed before the Malthusian specter was widely recognized as a grim reality in many parts of the world. And even then, it took several decades before enough people began to concern themselves with it.

Two groups that have become very much concerned with the problem are the so-called "doomsayers" and their critics. The doomsayers are best represented by the Club of Rome, an international business association which sponsored two somber bestsellers, *The Limits to Growth* (Potomac Associates, 1972) and *Mankind at the Turning Point* (Dutton, 1974). Critics of the doomsayers include many economists as well as "futurologists." Among the latter group are Herman Kahn and his associates at the Hudson Institute, a private consulting firm specializing in long-range predictions.

Doomsayers: Shades of Malthus

The doomsayers use "system dynamics" to construct a computer model that simulates the conflict between economic growth and human survival. In *The Limits to Growth* the conclusion drawn is that further progress must take man over the edge of the abyss and result in the end of civilization sometime during the last half of the next century.

The study, which aroused worldwide interest, rested on two basic propositions:

1. Five controlling variables—population, food production, industrialization, pollution, and consumption of nonrenewable natural resources—determine the course of economic growth. These variables are all interconnected; in the language of servomechanics, the variables interact on one another through "feedback loops."
2. The annual increase of the five controlling variables follows a pattern that mathematicians call exponential growth. This means that the variables expand at an accelerating rate, sometimes even geometrically, thereby doubling within certain time intervals.

The study shows that under different sets of assumptions interactions among the five controlling variables trace out different growth paths. However, they always lead to the same end result: the eventual collapse of civilization around the year 2075, give or take as much as 25 years.

For example, what would happen if worldwide birth-control measures were introduced? A lowered birth rate would effectively increase per capita food production and capital investment. According to the computer model, population would then expand to take advantage of the larger food supply, while increased industrialization would accelerate the pollution crisis. Even a cut in the birth rate by as much as one-third (which is highly improbable) would, according to the study, delay the impending disaster by only 20 years at best.

Similar dire results are projected when other conditions of the model are allowed to vary. For instance, if new natural resources are developed, capital investment and industrialization will be encouraged; this will stimulate population growth—and eventual collapse from pollution. Alternatively, if pollution levels are reduced, population will grow and will absorb land that would otherwise be available for agriculture; hence, if pollution doesn't put an end to civilization, starvation will.

And so it goes, with each possible scenario leading to eventual disaster, as typified by Figure 1, which shows what would happen if present trends continue. Figure 2, on the other hand, illustrates a stabilized world model approaching a "steady state" or "equilibrium" condition. This is possible, according to the study, only if: (*a*) average family size is limited to two children, (*b*) capital investment is limited to replacing worn-out equipment, and (*c*) technological innovations such as recycling and the development of longer-lasting machinery succeed in retarding the rate of resource depletion.

The sections titled "Background" and "Conclusion: Quantity Versus Quality" are from *Contemporary Economics*, 3rd edition, by Milton H. Spencer, pp. 330–332 (New York: Worth, 1977). The section titled "Critiques" is from *Economics: An Introduction to Analysis and Policy*, 9th edition, by George Leland Bach, © 1977, pp. 613–614. Reprinted by permission of Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Handout 10-1 (continued)

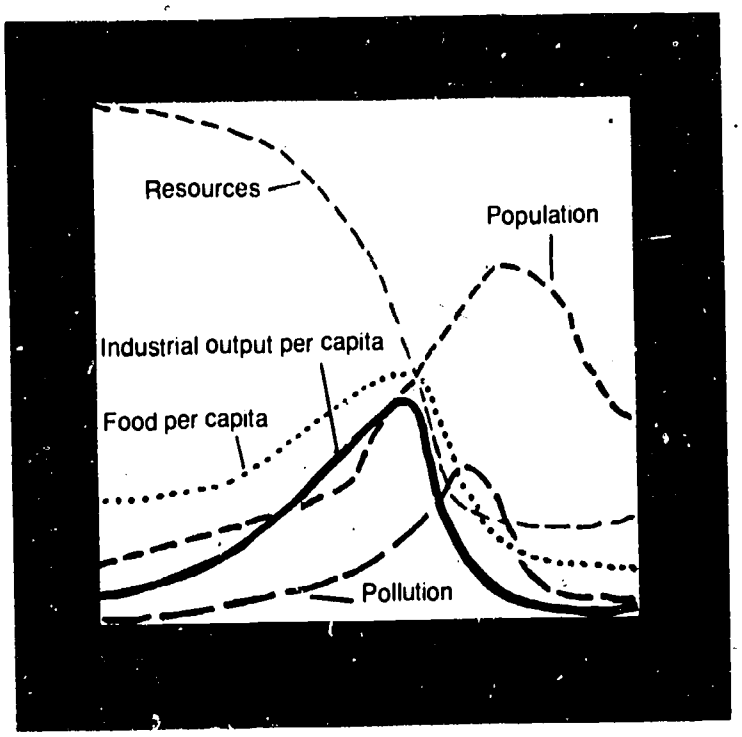

Figure 1

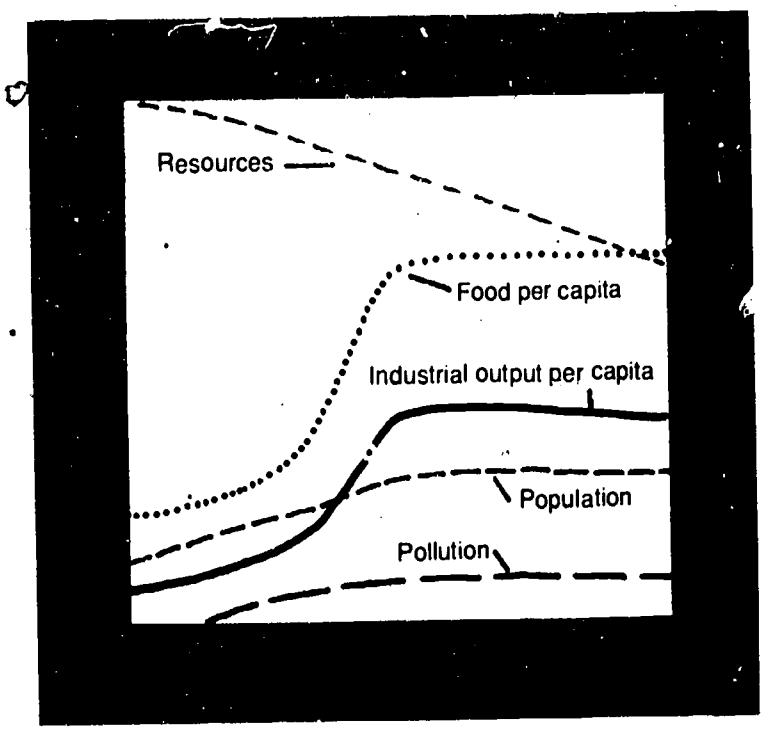

Figure 2

Recent Findings

The *Limits* study was published in 1972. Recognizing the embryonic nature of the report, two engineering-systems scientists, M. Mesarovic and E. Pestel, turned out a revised and updated project two years later: *Mankind at the Turning Point.* Supported by a team of about sixty collaborators and consultants, the authors of the newer study again look at the world through a computer. However, instead of treating the entire globe as an undifferentiated unit, Mesarovic and Pestel construct a world model with ten regions, some developed and some underdeveloped. Using "scenario analysis"—the insertion of specific decisions in the model (such as the amount of foreign aid, investment, price of oil, etc.)—alternative policies are tested by projecting their long-term consequences. As in the earlier study, the conclusions reached in the more recent study are almost equally pessimistic: prolonged regional starvation in the underdeveloped world—particularly South Asia—and regional, if not world, collapse, perhaps by the middle of the next century.

Can anything be done to prevent this? Perhaps, say the authors of *Mankind at the Turning Point.* The most significant step is for the overcrowded, underdeveloped countries to formulate some sort of "population-equilibrium" policy. Failure to do so, Mesarovic and Pestel believe, will drown the underdeveloped countries in a "sea of humanity."

Critiques

Although the [limits-to-growth concept] received widespread acclaim by environmentalists, most economists expressed serious reservations. Why?

1. The price system appears nowhere in the Meadows analysis. Yet history demonstrates that when something becomes scarce, its relative price rises, with the three crucial results emphasized in the text—increased production and new modes of production; reduced consumption; and development of substitutes. This has been the history of the industrial and technological revolutions. This is not to deny that supplies of some natural resources may be exhausted, but to suggest that this process will stimulate an effective search for substitutes and means of extending supplies.
2. Meadows' assumptions on technological advance appear to be unduly pessimistic. Even his most optimistic models, assuming "unlimited natural resources," seem to many observers

not much more optimistic than the actual performance of technical advance to date. This is especially true in the critical area of food and agriculture.

3. Meadows assumes that as incomes rise, people continue to demand the same mix of goods and services as in the past. Thus, the demand for manufactured goods rises sharply. But all historical evidence suggests that as societies grow more wealthy, they choose a rapidly growing share of services in the output mix they demand. Such a shift to services would alleviate the natural-resources and pollution problems.
4. Meadows' analysis assumes a blind continuation of population growth until it is checked by famine, even if world living standards rise dramatically. Again, history shows convincingly that population growth slows with affluence and rising living standards. Even Malthus recognized that voluntary restriction of births might occur to avoid famine, and modern birth-control methods are making this far easier. The extremity of Meadows' population assumption is indicated by the fact that beginning with two people, his system would blow up from overpopulation within 500 years. As one critic put it, apart from putting the Garden of Eden in the fifteenth century, what's new?
5. The Meadows analysis is entirely on a one-world basis. But we know that the growth issues are very different for different nations. Population growth rates, pollution, availability of raw materials and food, and other critical variables differ widely among nations, especially between the developed and less-developed countries. An analysis that fails to differentiate between the problems facing the United States and Western Europe on the one hand and Laos and India on the other is of limited use.

Conclusion: Quantity Versus Quality

In light of these conflicting viewpoints, is economic growth—the expansion of the nation's output or economic pie—good or bad? The issues are dramatic, and the answers are by no means simple. But there is much that is fruitful in the controversy. The "antigrowthers" force us to question the values of growth and to recognize the social costs that a heedless consumption of resources may entail. The "progrowthers" point out that growth (rather than redistribution) will eventually eliminate poverty, and that only affluent countries can afford social services such as public assistance and free medical care for the needy. The poor countries have not achieved the rates or levels of growth that are required to provide these forms of redistribution.

But what about the *quality* of life in the next century? All thing considered, the fact that the earth may be able to support a much larger population is not necessarily the point. More fundamental is the kind of life which a larger population will experience. The idea was well expressed by the British philosopher and economist John Stuart Mill more than a century ago.

> A population may be too crowded, though all be amply supplied with food and raiment. . . . If the earth must lose that great portion of its pleasantness which it owes to things that the unlimited increase of wealth and population would extirpate from it, for the mere purpose of enabling it to support a larger, but not happier or a better population, I sincerely hope, for the sake of posterity, that they will be content to be stationary long before necessity compels them to it.

Handout 10-2

A SCENARIO ABOUT COPPER SHORTAGES

January 1985 After American copper resources are depleted in the late 1970s or early 1980s, and the demand for copper doubles, the price of copper rises from $1 per pound in 1984 to $10 per pound in May, 1985.

May 1985 As the value of scrap copper, most of which is easily salvageable, increases from 70 cents to $9 per pound, metal dealers realize that existing United States copper supplies above the ground amount to almost 90 million tons. This, if salvaged, would be worth $1.7 trillion. A rush develops to locate old brass beds, brass handles, copper pots, lamps, locks, and all other copper scrap. Sixty-five billion pennies, now worth 5 cents apiece, are turned in to scrap dealers.

July 1985 Utility companies go into a crash program to substitute aluminum for copper in transmission lines, engineers begin designing copperless heat exchangers, many radiant-heated floors and walls are ripped open to get the copper tubing [for scrap], and plumbers are in great demand to replace copper pipes and tubing in homes and buildings.

August 1985 CBS News reports one engineer's calculation that copper could be profitably extracted from many of the above-average grades of igneous rock at a cost of about $4 per pound. At a $6-per-pound profit from copper, the higher-grade volcanic rock in the United States is now worth about $5 a ton (net profit) and the engineer estimates that there is more than $1,000-trillion worth of this rock within 100 feet of the surface. The next morning there is a stampede at every mining claims office in the world.

September 1985 People line up with barrels full of copper artifacts at every scrap yard in the developed world, waiting for their turn to sell.

October 1985 A major retooling has been accomplished; nearly everything that used to be made out of copper has been redesigned to use other metals. Where used at all, copper is applied in only very thin films, as in electroplating.

November 1985 Quotations on copper futures [in commodity markets] plummet, and they continue to crash during the next 38 days. By the end of the year copper is once again $1 per pound, and a month later it is only 50 cents a pound. Some of the new alternatives are found to have unanticipated advantages over the original copper construction, many substitute projects are already under way, and manufacturers are loath to risk using copper again.

December 1985 The copper affair sends shock waves throughout the world's economies; some organizations go bankrupt, and many people who had bought copper futures at $8 to $10 a pound are completely ruined.

What the Scenario Signifies

A number of conclusions can be drawn from this scenario:

1. Copper is a [recoverable] resource. Mining and smelting just change it from a low-grade ore below the ground to a very high-grade ore above.
2. The aboveground reserve is scattered but easily collectible—when the price is right.
3. There will be about 90 million tons of copper in the United States—aboveground.
4. At about $4 a pound the amount of copper available from ores becomes essentially unlimited.
5. Nothing made in quantity from copper today is critical. The electrical and heat-conduction properties of copper are excellent, but substitutes are available and some may even be cheaper once the capital is invested.
6. The price of copper will be limited in the long-term future by the cost of mining it from lower-grade ores or extracting it from marine sources. Either source will be much less than $4 a pound throughout the next century.

From "Good News From Mr. Bad News," by Edward Jay Epstein, *New York*, August 9, 1976. Reprinted by permission of Mr. Epstein.

Handout 10-3

CAN THE WORLD SURVIVE ECONOMIC GROWTH?

. . .This status quo prescription—the report calls it "global equilibrium"—is as chilling as the doomsday prophecy. Halting economic growth is not merely a matter of the already affluent giving up such frills as electric toothbrushes or power windows. Sacrifices would be made by the poor, who have not yet collected the benefits of the industrial revolution. . . .

Redistribution of existing wealth is no solution, because the rich and middle classes would not give up their wealth unless it was forcibly taken from them. . . .

More than that, a no-growth world would have extreme difficulty providing either social justice or freedom. It is hard to see how growth could be halted, or even substantially slowed, without a world dictatorship—the more so as citizens of underdeveloped countries already suspect that the no-growth argument is . . . [the] white man's conspiracy to lock them into perpetual poverty. . . . Corporations would have a hard time expanding; for every one that did expand, another company would have to contract. . . .

Even the authors of the Club of Rome report [see Handout 10-1] confess that there is only one conceivable reason for stopping growth: [it] is the only way to prevent certain global cataclysm. But is it really?

. . . [C]ritics are sharply assailing Meadows' methodology. Their most telling point is that the M.I.T. computer shows only the "bad" trends—such as population and economic growth—increasing exponentially. Some tendencies that might save the world are allowed only "linear" growth, as in simple interest rates. The difference is dramatic. At exponential rates, anything that grows 7% a year would double in size in just over ten years and increase by 86,672% in 100 years. But at linear rates, a 7% increase would lead to a doubling in just over 14 years and an increase of 700% in 100 years.

Critics of the Club of Rome report insist that exponential growth is also possible in the technology that enables society to utilize new resources, wring more food from the land and curb pollution. In the resources field, some experts sketch this scenario: long before resources run out, scarcities would force price boosts. The expense would prod industrialists and consumers to substitute one material for another, develop recycling techniques to use existing supplies more efficiently, and redouble efforts to find ways of using materials—for example, oil-bearing shale—that were previously uneconomic or technically impossible to exploit. Before long, commercial harnessing of thermonuclear fusion could make available limitless quantities of low-cost energy, which could in turn be used to unlock new raw materials from the earth.

Ecologist Barry Commoner, a vehement foe of mindless growth, considers Meadows' treatment of pollution "quite simplistic." It assumes that more growth inevitably means more pollution. Yet the alarming rise in pollution, says Commoner, has been caused not by growth per se but by changes in the composition of growth—for example, the postwar shifts from soaps to detergents. Shifting back to cleaner (and costlier) products and techniques could decrease pollution much more than the Meadows team foresees, while permitting output to continue rising. In essence, the Meadows team projected current trends into the future without analyzing how man might alter them. The whole exercise, say critics, proves again that the past is a shaky gauge of the future, and that the value of the conclusions coming out of a computer depends totally on the quality of the assumptions programmed into it. Computer [experts] sum up this idea with the acronym GIGO—"garbage in, garbage out."

Yet *The Limits to Growth* cannot be dismissed as just another cry of wolf. The catastrophes that it predicts *could* happen. . . .

Meadows probably erred in placing the potential day of reckoning around 2050, and whether it comes then or in, say, 3050 makes a gargantuan difference to people alive today—and to their immediate heirs. The later it is, the more chance there is in the interim of raising the world's poor toward a decent life. But only a superoptimist would insist that growth can continue forever; that would presuppose that resources are literally infinite. Even if the earth's resources and its capacity to absorb pollution could be extended without limit—or if

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Handout 10-3 (concluded)

humanity could colonize other worlds—no one could be certain that that could be done rapidly enough to permit infinite growth at the pace and of the type occurring today. To banish the Club of Rome's nightmares, some changes in growth patterns should start now.

Economists, ecologists and entrepreneurs should strive to increase clean, nonpolluting growth and to restrain the kind of growth that exhausts resources and pollutes the environment. One problem is that there is no reliable indicator that measures and distinguishes between different kinds of growth. Economic performance is gauged by the gross national product, a truly gross and misleading measure. Activities that are useless (like the printing of reports that the recipients throw in the wastebasket without reading) or even destructive (the development of highly polluting production technologies) swell G.N.P. as long as money is spent on them. At best, G.N.P. tends to overemphasize the kind of growth symbolized by steel, stamping presses, cars and dishwashers—precisely the kind that chews up natural resources and pours out pollution. . . .

A better, even if less precise measure of economic growth might be "an increase in material well-being." In poor countries, the redefinition is not so important: their people still need every cooking pot, pair of shoes and bicycle that can be produced. But in the industrialized world, and especially in the U.S., it is possible to envision a policy that would devote a dwindling share of new investments to traditional industry while channeling more into such tasks as cleaning streets, improving education and law enforcement, upgrading mass transit and expanding low-cost medical service. . . . Litter-free streets, safer trains, better medical care and increased protection against muggings might well increase human well-being more than a higher output of cars, chemicals and electric can openers. Unemployment would not rise; fewer people would work in basic industries, but more people would find jobs as teachers, park attendants and medical technicians. Poorer nations could continue to concentrate on increasing G.N.P., though the poor, too, should ponder whether they might not be better off building bicycle plants instead of auto assembly lines, even if car factories raise G.N.P. more.

There are drawbacks. The Government would have to take over more of the direction of the economy, taxing away dollars that citizens otherwise would use for private purchases and pouring them into public investments. . . .Never again, for example, could industry assume that almost any new production technique that is developed must be put into use, regardless of whether it conserves or depletes resources, reduces or increases pollution. . . .

To carry out completely such a shift in public policy, and the change in popular psychology on which it must be based, could take decades, even generations. M.I.T. computers to the contrary, society probably has the time. But it must not squander that time in a heedless pursuit of the wrong kind of growth.

Lesson 11: Protectionism in Foreign Trade

TIME REQUIRED: About three class periods

RECOMMENDED GRADE LEVEL: 11-12

CONCEPTS: Tariffs
Quotas
Subsidies
Embargoes

Instructional Objectives: Students will

- Be able to explain the meaning of tariffs, quotas, subsidies, embargoes, nontariff barriers, and the like and the arguments for and against them;
- Do the simulation about free traders versus protectionists and try to reach conclusions reasonably satisfactory to both consumer and producer interests.

Rationale: Practically all governments engage in protecting domestic industries against competition from imports, and the process has been going on for centuries. Protectionism still exists today, and students should learn how the pressures for and against it arise. (Many governments also promote exports by granting subsidies or other advantages to domestic producers.)

Materials: One copy of Handout 11-1, 11-2, 11-3, or 11-4 for each group member (see Procedure 2); one copy of Handout 11-5 for every student.

Procedure:

1. Start the lesson by asking:
   a. Can you think of any reasons why a country might want to restrict imports of any foreign goods or promote exports of domestic goods? (List responses on the chalkboard.)
   b. What are some of the methods of interfering with international free trade? (Tariffs, quotas, embargoes, subsidies, dumping, nontariff barriers. Most students are acquainted with tariffs. Definitions and descriptions of other measures affecting foreign trade may be found in almost all general texts on economics or on the economics of international trade.)
2. Divide the class into four groups. Designate the groups as follows, distributing handouts (one for each group member) as indicated:
   I. Steel Manufacturers (Handout 11-1)
   II. Automobile Manufacturers (Handout 11-2)
   III. Rice Producers (Handout 11-3)
   IV. Rice Consumers (Handout 11-4)

   Instruct the groups to discuss each of the questions listed on their respective handouts. When agreement on answers is reached, each member of the group should write the group decision in the appropriate space. (NOTE: You may wish to place a limit on the amount of time groups will be allowed.)
3. After group discussions are completed reorganize students into groups of four, each group consisting of two steel manufacturers and two automobile manufacturers *or* two rice producers and two rice consumers. The opposing interests should:
   a. Present their positions as to what government trade policy should be;
   b. Attempt to formulate a trade policy to which both parties agree.
4. Have each group present its compromises on policy. Conduct a class discussion in which students examine the suggested trade policies in terms of their potential benefits or costs to each of the following: business, workers, and consumers, as well as trade relations with foreign countries.
5. Distribute Handout 11-5 and have students read it either at home or in class. This news article shows how protectionism among countries can build up and how complex the resulting problems can become. To make certain that students grasp as many of the implications as possible, you may want to lead a class discussion centered on questions such as:
   a. Can you name all the products involved in this controversy? (Synthetic fibers, textiles, steel, oil, natural gas, plastics, fertilizers.)
   b. What is the basic complaint of the European Economic Community (Common Market) against the United States? (The U.S. government has been keeping the prices of the chief raw materials—oil and natural gas—needed to make synthetic fibers, synthetic textiles, and plastics under price controls. Therefore, U.S. manufacturers of these products have been able to price them below those made in the Common Market. Producers in Britain have suffered the most.)
   c. What is the basic complaint of the United States against the European Economic Community? (Manufacturers of steel in the Common Market can sell it in the United States below prices charged for steel by U.S. manufacturers because Common Market manufacturers receive subsidies from their governments.)

The strategies in this lesson are based upon classroom activities prepared by Elayne Feldman, Fridley Senior High School, Fridley, Minnesota. In their original form the material earned a first-place award in the 1976-77 International Paper Company Foundation Awards Program for Teaching Economics.

d. What do Common Market and U.S. government officials fear may happen in the long run? (Mounting pressures in the Common Market and in the United States for protectionist policies and actions. If such pressures result in additional trade restrictions, the amount of international trade could be adversely affected and cause slower economic growth as well as an increase in unemployment.)

Evaluation: Have students discuss the final compromises reached in the simulation. (The probable conclusion is that trade restrictions benefit some parties and hurt others. Economists, however, generally agree that for most nations when taken as a whole, the benefits of free trade outweigh the disadvantages.) Assess the extent and quality of student participation in the discussion as well as the quality of the group reports and the individual students' contributions to them.

Handout 11-1

STEEL MANUFACTURERS (GROUP I)

Name _____ Class _____

DIRECTIONS: Your group represents steel manufacturers in Globaland. Read the following paragraph and decide whether the industry would be in favor of free trade, protective tariffs, quotas, or subsidies under the given circumstances. State your reasons for your decisions. Answer the questions following the reading.

The emergence of an efficient steel industry in Zoisialand has cut into Globaland's steel production. Globaland steel firms have been priced out of many markets around the world. They are now even struggling with foreign competitors for markets in neighboring North Globaland. Environmental protection regulations and lower productivity have driven the price of Globaland steel so high that many domestic steel users are obtaining larger and larger quantities from imports. Your group, the steel manufacturers, is going to lobby in the National Parliament to make your opinions known. To do so, you will need to take a position on the following questions.

1. What policy does your industry want the government to follow and why?

2. How would your recommended policy affect Globaland steel producers? Why?

3. How would your policy affect the consumers in your nation? Why?

4. How would your policy affect foreign steel producers? Why?

5. If your government fails to adopt your stated policy, what compromises would you accept?

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: World Studies (Secondary)*, 1980. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 11-2

STEEL USERS (GROUP II)

Name _____ Class _____

DIRECTIONS: Your group represents the Globaland automobile manufacturers, an industry that consumes much steel. Read the following paragraph and decide whether the manufacturers would be in favor of free trade, protective tariffs, quotas, or subsidies under the given circumstances. State your reasons for your decision. Answer the questions following the reading.

The emergence of an efficient steel industry in Zoisialand has lowered the world price of steel. Auto manufacturers in Globaland, besides buying a great deal of steel from domestic producers, have in recent years also imported much foreign steel, because it is less expensive than domestic steel. The steel manufacturers of Globaland are losing many sales and want the government to protect them. Your group, the auto manufacturers, is going to lobby in the National Parliament to make your opinions known. To do so, you will need to take a position on the following questions.

1. What policy or policies does your industry want the government to follow and why?

2. How would your recommendations in relation to question 1 affect domestic steel producers?

3. How would your policies affect other steel-using industries and consumers in Globaland? Why?

4. How would your policies affect foreign steel producers?

5. If the National Parliament fails to adopt your policies, what compromises would you accept?

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Handout 11-3

RICE GROWERS (GROUP III)

Name _____ Class _____

DIRECTIONS: Your group represents the rice producers of Globaland. Read the following paragraph and decide whether the industry would be in favor of production controls. State your reasons. Answer the questions following the reading.

From 1954 to 1974 the Globaland Ministry of Agriculture controlled the production of rice. It did so by setting annual acreage restrictions on the planting of rice. In 1974 the ministry removed the restrictions, and 1975-76 were bumper years for the Globaland rice crop. The countries of Samioka and Hylos have also had good crops and have been especially successful in increasing rice exports in recent years. Since Globaland is also a rice exporter and the world price of rice has dropped from $17.50 per hundred-weight in June 1974 to $6.75 in 1977, partly because of the added large supplies from Samioka and Hylos, the government of Globaland is deciding whether to reinstate production controls. You, the rice producers of Globaland, are very concerned about the falling world prices for rice.

1. What policy do you want your government to adopt and why?

2. How would your recommendations in respect to question 1 affect the Globaland rice producers? Why?

3. How would your policies affect Globaland consumers of rice? Why?

4. How would your policies affect foreign rice producers? Why?

5. If the National Parliament fails to adopt your policies, what compromises would you accept?

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Handout 11-4

RICE CONSUMERS (GROUP IV)

Name _____ Class _____

DIRECTIONS: Your group is an organization of Globaland consumers. Read the following paragraph and decide whether the industry or group would be in favor of production controls. State your reasons. Answer the questions following the reading.

From 1954 to 1974 the Globaland Ministry of Agriculture controlled the production of rice. They did so by setting annual acreage restrictions, on the planting of rice. In 1974 the ministry removed the restrictions, and 1975-76 were bumper years for the Globaland rice crop. The countries of Samioka and Hylos have also had good crops and have been especially successful in increasing rice exports in recent years. Since Globaland is also a rice exporter and the world price of rice has dropped from $17.50 per hundred-weight in June 1974 to $6.75 in 1977, partly because of the added large supplies from Samioka and Hylos, the government of Globaland is deciding whether to reinstate production controls. Your consumer organization is very concerned about holding down the cost of food.

1. What policy do you want your government to adopt and why?

2. How would your recommendations in respect to question 1 affect Globaland rice producers? Why?

3. How would your policy affect Globaland consumers? Why?

4. How would your policy affect world rice producers? Why?

5. If the National Parliament fails to adopt your stated policies, what compromises would you accept?

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Handout 11-5

E.E.C. LETS BRITISH CURB U.S. FIBERS

London to Make Decision Friday

BRUSSELS, Feb. 5—Western European governments agreed today to allow Britain to restrict its soaring imports of American synthetic fibers, but decided not to allow other countries to do so, to lessen the danger of a damaging trans-Atlantic trade war.

Foreign ministers of the nine member countries of the European Economic Community accepted a report by their Executive Commission. It said the damage that imports of cheap American fibers were doing to Europe's textile industry did not yet justify general protectionist measures, although Britain's case may be different.

Tonight Britain's Conservative Government was reported moving toward a decision to put new restrictions on imports of American polyester filament yarn, which now accounts for 26 percent of total national consumption compared with less than 4 percent in 1977.

Britain's Trade Minister, John Nott, said he was "grateful" for the understanding shown his country's problems, adding that the Government would announce next Friday whether it planned restrictions.

Retaliation Feared

Some officials here expressed concern that even unilateral action by Britain would strengthen the hand of protectionist forces in the United States, increasing the risk of retaliatory action there. But others hope that Britain's strong support for President Carter on the Afghanistan crisis will dissuade him from such retaliation.

By deciding against Europe-wide restrictions on United States fiber imports, the nine Common Market governments and the commission hope to strengthen President Carter's resolve to resist growing pressures by the American steel industry for new restrictions on European steel imports.

They also believe that today's decision means Europe is keeping its end of the private bargain that Roy Jenkins, commission president, made with President Carter in Washington 10 days ago, under which both leaders agreed to fight mounting pressures in Europe and the United States for protectionist action.

During their talks, both President Carter and Mr. Jenkins reportedly agreed that any new trade restrictions carried a high risk of spreading in today's difficult economic climate, undermining Western efforts to preserve free trade despite slowing economic growth and rising unemployment.

U.S. Price Controls Cited

Western European governments believe that America's oil and natural gas price controls now give its synthetic fiber and other plastics manufacturers an increasingly unfair price advantage in overseas markets. But in the United States, steelmakers complain that European steelmakers are being unfairly subsidized by their governments.

On February 18, President Carter will send his chief trade negotiator, Reubin Askew, to Brussels to try to resolve these and other trade disputes smoldering between Europe and the United States. Officials here, however, seem doubtful of substantial progress.

Meanwhile, Europe has opened discussions with the United States in Geneva on the broader trade implications of energy price controls, arguing that the Western industrialized world should accept a common position, in case the oil-exporting countries of the Middle East start providing cheap oil feed stock to the plastics and fertilizer industries they are now building.

An Annotated Catalog of Other Resources

General

This annotated catalog has purposely been kept short because teachers should be able to find many fine historically oriented materials that have a global perspective. The references here were selected because they complement the Master Curriculum Guide and deal strictly with the issue at hand—economics in world studies—or will lead teachers to such materials. Prices are as of Spring 1980.

Economics and The Global Society (1975). Educational Audio Visual, Inc., Pleasantville, NY 10570. Kit, $83.00. A multimedia program designed to help students and teachers understand the economic forces shaping today's world economy. It gives special attention to the processes of economic development, basic principles of international trade, and the national economic policies of both developing and industrialized countries. The package includes a teacher's text, spirit masters for readings and visuals, three filmstrips and cassettes, case studies, and a simulation exercise.

Global Marketplace (1975). Schloat Productions for Prentice-Hall Media, Inc., 150 White Plains Road, Tarrytown, NY 10591. $45 with discs or cassettes. The debate over multinational corporations often takes place without an awareness of how these giant businesses fit into the global economy. This two-part color sound filmstrip plus teacher's guide takes up the part the multinational corporations play in a world of growing interdependence. From their different points of view, representatives of labor, management, and government discuss the impact of worldwide corporate activity and how it relates to the growing problems of resource scarcity, unemployment, and the special economic problems of poorer nations. The program raises questions about the power of multinationals, the lack of global economic controls, and the impact of the changed world economy on the United States.

Global Perspectives: Education for a World in Change. Global Perspectives in Education, Inc., 218 East 18th Street, New York, NY 10003. Free. This newsletter examines and reviews trends in curriculum development and curriculum resources, and is a source of information on global issues. Provides a good way for teachers to keep abreast of methods of teaching world studies and economics in an interdisciplinary way.

Harter, Lafayette G., Jr. *Economic Responses to a Changing Economy*. Glenview, Ill.: Scott, Foresman and Company, 1973. This absorbing college textbook is an amalgam of economics and economic history, enabling teachers of world studies to fill any gaps that may exist in their own knowledge. Several chapters serve as a "parallel text" for our series of lessons. For example, Chapter 2, "The Escape from the Traditional Society," discusses the economics involved in the medieval manor and city and the rapid changes brought about by the intellectual, scientific, and religious revolutions, the age of exploration, and the appearance of constitutional government. Chapter 3, "The Industrial Revolution," deals with innovations in mining, iron and steel production, and transportation; mechanization in textiles; the factory city created by machine technology; leaders in the emerging discipline of economics, e.g., Smith, Malthus, and Ricardo. The author stresses the resulting impacts on economic policy. Chapter 5, "The World Economy," explores topics such as why nations trade, how international payments are made, and the traditional gold standard. Chapter 12, "Economic Development," takes up the traditional society, obstacles to its development, the financing of its development, and the usual population problems such a society faces.

Harvard International Review. Harvard International Relations Council, Inc., P.O. Box 401, Cambridge, MA 02138. Seven issues for $6.50. A magazine on world affairs that includes feature articles on aspects of the world economy. Authors are university professors, government officials, and specialists from the United States and other nations. Contains nontechnical expositions of international issues that in many cases are policy-oriented.

Heilbroner, Robert L. *The Making of Economic Society*, 6th edition. Englewood Cliffs, NJ: Prentice-Hall, 1980. This classic is a "must" for teachers who want to explore the fascinating history of how economic systems have developed. Several of the lessons in the present volume are based on Heilbroner's classification of economic systems by the mechanisms the system uses to allocate scarce resources—i.e., by tradition, by command, and by market.

International Economics (1978). Public Information Department, Federal Reserve Bank of New York, New York, NY 10045. Kit, $31.50; discount of 20 percent on orders for three or more. Kit contains sound filmstrips, a teacher's guide, and spirit masters. Provides students with a clear explanation of why nations specialize and why they trade. It introduces students to concepts of absolute and comparative advantage and to the role of the Federal Reserve in international money markets.

"International Trade and Finance" (1979). Illinois Council on Economic Education, Northern Illinois Univeristy, DeKalb, IL 60115. A resource package compiled for high school debaters. Items include background materials prepared by the U.S. Department of State, the European Economic Community, the Federal Reserve System, and the Foreign Policy

Association. For information on availability and price, write to the Illinois Council.

World Eagle. World Eagle, Inc. 64 Washburn Avenue, Wellesley, MA 02181. Ten issues per year. Subscriptions: United States, $14.00; Canada, U.S.$16.00 or Can.$18.88. Contains current national, regional, and global information, maps, statistics on economic geography, trade, development, environment, and other material relevant to world studies. Format allows easy reproduction of contents for classroom use, either as transparencies or as student handouts. *Junior Eagle*, a companion publication of 120 pages by the same organization, is issued annually and treats similar topics. It is designed for younger students or the less academically talented (United States, $7.75; Canada, U.S.$8.50 or Can.$9.95).

The World Economy and Multinational Corporations (1978). World Economy and Multinational Corporations, Box 14302, Dayton, OH 45414. Free. Published under a grant from the Caterpillar Tractor Company. A booklet containing spirit masters, tests, and suggested teaching activities. The material shows how to use basic economic concepts to analyze international trade issues and explains the role of multinational corporations.

National Organizations

Many private organizations in the United States interested in world economic affairs provide relevant analysis or information. Some of their material may be nonpartisan and some may be geared to their special viewpoints. Prominent among such organizations are the trade associations and trade unions connected with any industry for which exports and/or imports matter a great deal.

Among the most important national organizations, all located in Washington, D. C., are:

Research Department AFL-CIO
815 16th Street, N.W.
Washington, D.C. 20006

International Division
Chamber of Commerce of the United States
1615 H Street, N.W.
Washington, D.C. 20062

International Affairs Department
National Association of Manufacturers
1776 F Street, N.W.
Washington, D.C. 20006

Information Division
Committee for Economic Development
1700 K Street, N.W.
Washington, D.C. 20006

Official International Organizations

A number of organizations that are composed of groups of countries issue compilations of international statistics on a monthly, quarterly, and/or annual basis, and also issue reports on specific subjects or problems. Some of these sources have been used in this volume.

Among the most important of such official international organizations are:

Publishing Service
United Nations
New York, N.Y. 10017

World Bank
1818 H Street, N.W.
Washington, D.C. 20433

International Monetary Fund
700 19th Street, N.W.
Washington, D.C. 20431

Organization for Economic Cooperation and Development
1750 Pennsylvania Avenue, N.W.
Washington, D.C. 20006
(This is the United States office. Its headquarters are in Paris.)

International Labor Office
1750 New York Avenue, N.W.
Washington, D.C. 20006
(This is the United States office. Its headquarters are in Paris.)

Other Organizations

Joint Council on Economic Education. The JCEE provides a good deal of material on international economics or world studies for teacher and classroom use, some in printed, some in audiovisual form. Of special help in locating materials are two catalogs: *A Guide to Games and Simulations for Teaching Economics* (1979) and *Audiovisual Materials for Teaching Economics* (1980). These and other materials are described in the JCEE *Checklist*, a catalog issued semi-annually. To obtain the *Checklist*, write to:

> Joint Council on Economic Education
> 1212 Avenue of the Americas
> New York, NY 10036

Center for Economic Education, College of St. Thomas, St. Paul, MI 55105. This center is one of more than two hundred in the JCEE's network of affiliates. The College of St. Thomas Center specializes in world economics. Center personnel assist teachers by providing annotated bibliographies, offering in-service graduate courses and guest speakers for local teachers, sharing expertise with

other JCEE centers, and maintaining a library of current curriculum materials in the field. Address inquiries to the Director.

Center for Global Perspectives, 218 East 18th Street, New York, NY 10003. A nonprofit educational agency that seeks to provide students with a greater understanding of world problems concerning conflict, change, war, and peace. To help teachers build effective programs for students, the center collects and evaluates materials produced by other agencies and prepares new materials where it discerns gaps. One of its publications, *Intercom*, serves as a resource guide and contains selected readings, references, and teaching ideas for teachers who wish to introduce their students to global problems.