

DOCUMENT RESUME

ED 105 082

CE 003 312

AUTHOR Idleman, Hillis K. Ed.
TITLE Cars, Cycles, and Consumers.
INSTITUTION New York State Education Dept., Albany. Bureau of
Secondary Curriculum Development.
PUB DATE 74
NOTE 118p.
EDRS PRICE MF-\$0.76 HC-\$5.70 PLUS POSTAGE
DESCRIPTORS Consumer Economics; *Consumer Education; Costs;
Course Content; Course Objectives; Credit (Finance);
*Curriculum Guides; Driver Education; *Learning
Activities; *Motor Vehicles; Purchasing; Secondary
Education
IDENTIFIERS Motorcycles

ABSTRACT

The purpose of this consumer education module is to provide information and skills, and the ability to raise questions and find answers, while seeking the best automobile or motorcycle buy available for the money. The module may be used for a full or part semester course. The five sections (cars and the consumer, renting and leasing cars, cars and the energy crisis, cars and consumer safety, and cycles and the consumer) emphasize the improvement of consumer skills and the provision of specific information which can be put to immediate use. The subsections are presented in the form of detailed discussion of questions and topics that should be raised. In all subsections the material is organized under the headings of understandings, suggested pupil and teacher activities, and sources for further information. (SA)

CARS, CYCLES, AND CONSUMERS 1974

one of a series for expanded programs in CONSUMER EDUCATION



ED105082

3312

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Secondary Curriculum Development
Albany, New York 12234
1974

CARS, 'CYCLES, AND CONSUMERS

ED105082

One of a series for Expanded Programs in Consumer Education

The University of the State of New York/The State Education Department
Bureau of Secondary Curriculum Development/Albany/1974

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of The University (with years when terms expire)

1984 Joseph W. McGovern, A.B., J.D., L.H.D., LL.D., D.C.L., Litt.D. Chancellor -----	New York
1981 Theodore M. Black, A.B., Litt.D., LL.D., Pd. D. Vice Chancellor -----	Sands Point
1978 Alexander J. Allan, Jr., LL.D., Litt.D. -----	Troy
1987 Carl H. Pforzheimer, Jr., A.B., M.B.A., D.C.S., H.H.D. ---	Purchase
1975 Edward M. M. Warburg, B.S., L.H.D. -----	New York
1980 Joseph T. King, LL.B. -----	Shelter Island
1981 Joseph C. Indelicato, M.D. -----	Brooklyn
1976 Helen B. Power, A.B., Litt.D., L.H.D., LL.D. -----	Rochester
1979 Francis W. McGinley, B.S., J.D., LL.D. -----	Glens Falls
1986 Kenneth B. Clark, A.B., M.S., Ph.D., LL.D., L.H.D., D.Sc. -----	Hastings on Hudson
1983 Harold E. Newcomb, B.A. -----	Owego
1988 Willard A. Genrich, LL.B., L.H.D. -----	Buffalo
1982 Emlyn I. Griffith, A.B., J.D. -----	Rome
1977 Genevieve S. Klein, B.S., M.A. -----	Bayside
1981 William Jovanovich, A.B., LL.D., Litt.D., L.H.D. -----	Briarcliff Manor

President of the University and Commissioner of Education
Ewald B. Nyquist

Executive Deputy Commissioner of Education
Gordon M. Ambach

Deputy Commissioner for Elementary, Secondary, and Continuing Education
Thomas D. Sheldon

Associate Commissioner for Instructional Services
William L. Bitner III

Assistant Commissioner for General Education and Curricular Services
Vivienne N. Anderson

Director, Division of Curriculum Development
Gordon E. Van Hooft

Chief, Bureau of Secondary Curriculum Development

FOREWORD

In 1967, the State Education Department published "Consumer Education — Materials for an Elective Course." This material has since been introduced into more than 500 of the New York State high schools. The original syllabus had a chapter on Purchasing and Maintaining an Automobile. However, since that material was published in 1967, it seems desirable to up-date and revise the ideas presented in the light of developments during the last 7 years. As a result of the interest in Consumer Education in the State and Nation, the Department has developed a series of modules — Expanded Programs of Consumer Education. This module, "Cars, 'Cycles, and Consumers," is the 13th to be produced. Those already distributed are:

- Consumer Issues and Action
- Education and the Consumer
- The Consumer and Recreation
- Consumer Problems of the Poor
- The Consumer and His Health Dollar
- The Consumer Looks at His Automobile Insurance
- The Consumer and Transportation
- Beauty Products and the Consumer
- Taxes and the Consumer
- Credit and the Consumer
- Coping with the Problems of a Technological Age
- Law and the Consumer

Nothing touches the lives of the disadvantaged more than the constant struggle to stretch limited financial resources to meet the increasing costs of living. These modules are designed in the hope that they will help the poor to make better use of their income, as well as with the expectation that those of higher income will be more understanding of their own problems and of the problems of their fellow citizens.

Unlike the original syllabus, where 12 units covering various phases of Consumer Education were bound together, the modules in Expanded Programs of Consumer Education are being prepared as separate publications to provide greater flexibility. Each of the modules in the series may be used as a discrete unit, or with other units in the series. The modules may be presented as a semester or part of a semester course, or presented in conjunction with the original syllabus which covers such areas as the purchase of food; shelter; appliances; and a consideration of credit; money management; fraud, quackery, and deception; banking and savings; life and health insurance; security programs; and consumer law.

It is hoped that the presentation of the modules as separate publications will tend toward flexibility in their use as mini-courses in such fields as social studies, business education, home economics, industrial arts, agriculture, and other areas of the curriculum.

The suggestions to the teacher found in "Consumer Education — Materials for an Elective Course," pages 1-4, apply equally to each of these modules. The reaction and suggestions of those using these materials in the field will be helpful to the Department in planning further materials for Consumer Education and in making necessary revisions of the material.

The original material for this module was developed and written by John U. Holmes, social studies teacher, Hudson Falls High School.

The Department acknowledges with appreciation the suggestions of those who reviewed the manuscript and in particular the following who made substantial contributions:

- . Mrs. Jean Fatica, Policy and Programs Group, New York State Department of Transportation
- . Frank Conley, Director of Program Development, New York State Department of Motor Vehicles
- . Paul J. Hawthorne, engineer and long-time trail rider, whose expert judgment helped to refine the material on cycles.

Appreciation is also expressed to Commissioner Arnold R. Fisher of the Department of Motor Vehicles and to Commissioner Raymond T. Schuler of the Department of Transportation for assigning staff members to this task and for their cooperation in the effort.

Hillis K. Idleman, associate in secondary curriculum development, edited the material and prepared the module for publication.

GORDON E. VAN HOOFT
Director, Division of
Curriculum Development

CONTENTS

	Page
Foreword -----	iii
Introduction -----	1
Section I - Cars and the Consumer -----	3
Is an Automobile Necessary? -----	3
Is a Second Or Additional Car Necessary? -----	5
If You Were Buying a Car Would You Buy a New One Or a Used One? --	7
What Should You Know About Buying a New Car? -----	10
Where Can the "Best Buy" in Cars Be Secured? -----	18
What Should One Know About Financing a Car? -----	20
What Should You Know About Buying a Used Car? -----	30
On-the-Lot Tests - Keyword B-E-L-T-S -----	35
On-the-Road Tests - Keyword H-A-R-B -----	38
Is Advertising More Than a Limited Help in Buying a Used Car? ----	42
What Information Should Be Obtained From a Dealer? -----	42
How Might You Estimate the Cost of Putting a Used Car in Satisfactory Operating Condition? -----	45
What Is the Importance of a Warranty Or Guarantee? -----	46
Of How Much Value Is a Guarantee Or Warranty? -----	49
How Much Will It Cost To Operate and Maintain a Car? -----	50
What Is the Cost to the Consumer for Pollution Controls? -----	55
Section II - Renting and Leasing Cars -----	58
Growth of Car Rental And Leasing Plans -----	58
Difference Between Renting And Leasing -----	58
Requirements To Rent a Car -----	58
Costs of Renting a Car -----	58
Special Rates -----	59
Price Ranges -----	59
Cost of Leasing -----	59
Summary -----	60
Why Might a Person Be Interested in Renting an Automobile? -----	61
Where Can You Rent a Car? -----	62
What Does It Cost To Rent a Car? -----	63
Who Pays for Insurance on a Rented Car? -----	63
Who Can Rent a Car? -----	65
Why Might a Person Decide To Lease an Automobile? -----	65
Where Can Automobiles Be Leased? -----	67
What Precautions Should a Prospective Lessee Observe? -----	68
Should an Individual Consider Leasing a Car Instead of Buying a Car? -----	70
Section III - Cars and the Energy Crisis -----	76
How Is Automobile Use Affected by the Energy Crisis? -----	76
What Can Consumers Expect As a Result of the Energy Crisis? -----	81
Are There Other Types of Fuels That Might Replace Gasoline? -----	84
Section IV - Cars and Consumer Safety -----	86
What Is Being Done by Public Agencies To Assist the Public in Maintaining Safer Cars? -----	86
What Is Being Done by Private Agencies To Provide Assistance to the Consumer in Auto Safety? -----	87

	<u>Page</u>
What Actions by the Driver Will Make for Safer Driving? -----	89
What Is a Driver's Responsibility When Driving a Car? -----	92
Section V - Cycles and the Consumer -----	98
Why Are Motorcycles So Popular as a Transportation and Recreation Item -----	100
What Should Be Considered When Buying a Motorcycle? -----	102
What Should You Be Aware of When Buying a Used Motorcycle? -----	106
Used Motorcycle Buying Checklist -----	107
Motorcycle Safety Checklist -----	108
How Can You Finance a Motorcycle? -----	109

INTRODUCTION

The automobile is considered by many in today's society to be practically a necessity and no longer a luxury. However, the automobile still remains, for many Americans, a status symbol, indicating to others that the owner has climbed another rung on the ladder of success.

Ownership of an automobile is one of the foremost desires of most teenagers and of many adults. It becomes a major goal of most teenagers to "have wheels" as soon as they are able to earn money. Many adults have an exaggerated drive for the most powerful, the most comfortable, the "most everything" automobile that they can get. Our society is centered on the idea that to own an automobile is a "right" and anyone who dares suggest that perhaps not all people should have an automobile runs the risk of strong social criticism.

A number of factors have made Americans conscious of the fact that we may not be able to provide ownership of cars at the increasing rate that has characterized the last 30 years. It is estimated that there are now four times as many automobiles on the road as there were in the early 1940's. Many families have two or more cars, with three-and four-car family ownership not unknown. But the shortage of fuel, the increasing costs of car ownership, the pollution of our air, the injuries and deaths caused by traffic accidents, and the congestion on the highways point to the fact that something may need to be done to cut down on the number of cars produced and owned.

The American's love affair with big, fast, powerful cars has caused him to take a rather simplistic attitude toward automobile ownership. Americans tend to gauge a person's material worth by the car he drives. The bigger and more costly the car, the more a person is supposed to be worth. Of course this does not always hold true and thus ownership becomes only a symbol of attempted status. The idea still prevails, however, that the financially disadvantaged are the only ones without cars and the only ones who have continuing transportation problems.

Many of our citizens are faced with a genuine mobility problem. Those most seriously faced with this problem tend to live in our cities, are the least able to afford an automobile, and are confronted by a deteriorating public transit system. These people are usually classified as the disadvantaged. For many of these people the automobile has been, in many instances, the only solution to their transportation problem. With the tremendous cost involved in automobile ownership, our economically disadvantaged persons are caught in an ugly web. They need transportation, but cannot afford the only kind of transportation readily available to them, except by extreme and costly sacrifice. This problem has been dealt with in the module *The Consumer and Transportation*, part of the series on Expanded Programs in Consumer Education.

We should further realize that another kind of disadvantaged citizen exists in our society and that is the uninformed consumer. The purpose of this module is to provide the consumer with the information, skills, and ability to raise questions and find answers while seeking the best buy available for the money.

The new requirements of our government in the areas of safety and pollution emission place the American consumer at a disadvantage because they add to the cost of automobiles. Yet the consumer lacks knowledge about the operation and performance of these new cars. He is forced to rely upon the integrity of the automobile dealer, the manufacturer, and the governmental agencies affecting these industries, which have not always acted in the best interest of the consumer in the past. The American consumer finds himself frustrated because he seems to play an ever lessening role in determining what will be produced by our industries; instead he must satisfy himself with buying what is available for purchase, without regard as to whether it is what he needs and wants.

However, we must note that perhaps we are beginning to see the "light at the end of the tunnel." Due to some consumer-oriented legislators, the impact of Consumer Education programs, and as a result of a general consumer movement, the consumer's opinion and presence is beginning to be felt in the design and type of cars produced.

All consumers need to be as careful and thoughtful about their automobile purchases as possible. Those who must make their purchase out of very limited resources should be particularly attentive to the true need for a car and place its purchase in relation to all other needs.

This module will deal with several questions concerning the purchase of an automobile. It will make suggestions for improved consumer skills and will give some specific information that the consumer can put into ready use. The module is limited at best as to the amount and kind of information it can provide. Therefore, additional information should be sought to answer special needs.

The study of this module should help the student to:

- identify his real automobile needs and act accordingly
- compare the value, need, and cost of a new and used car and purchase according to what the best dollar value is
- demonstrate wise consumer practices in the purchase, maintenance, and operation of an automobile
- differentiate between what automobile transportation needs are and what automobile wants are
- establish priorities in automobile purchases so that the purchase is not out of line with needs and ability to pay
- support programs on both public and private levels to obtain safer, better built, longer lasting, and more efficient automobiles
- educate those with whom he is in contact to the social problems caused by the automobile and to the need to rethink our "right" to have a car or cars
- realize that in our increasingly complicated society the attitudes of yesterday toward car ownership may not be appropriate today.

Section I CARS AND THE CONSUMER

IS AN AUTOMOBILE NECESSARY?

- . The first issue that should be raised when considering the purchase of an automobile is whether a car is needed or just wanted.
- . Some questions which might be raised concerning this issue are the following:
 - For what will the automobile be used?
 - Where will it be driven?
 - How many cars are already owned?
 - Where will it be stored?
 - What will insurance cost?
 - What other forms of transportation are available?
 - Other questions brought up by the students.
- . Refer to the section on Needs and Wants of "General Principles of Consumer Purchasing" in Consumer Education, Materials for an Elective Course.
- . To properly determine the need for an automobile, an evaluation of the existing transportation possibilities is necessary.
- . Some questions which might be raised concerning this issue are the following:
 - Is there a public transit system available?
 - Are there taxis or car pools available?
 - Is it more economical to pay someone else to take you wherever you wish to go?
 - Can some other form of transportation such as a bicycle or motorbike meet your transportation needs?
 - Other questions raised by students.
- . See the Consumer Education unit on The Consumer and Transportation.
- . Note: the syllabus and each of the modules have been distributed to all New York State Secondary School Administrators. Additional copies may be requisitioned by such administrators.
- . It might be advisable that the questions raised in these first two understandings be developed, along with

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

- student questions, into a type of questionnaire that could be used as a survey to determine the need for an automobile.
- . We should consider the psychological pressures that are placed upon each of us. We sometimes believe that we need something that we really only want.
 - . A discussion of advertising stimulation should accompany this understanding. See "General Principles of Consumer Purchasing."
 - . Obtain information from local advertising councils.
 - . American Advertising Federation, 1225 Connecticut Avenue, N.W., Washington, D.C.
 - . Ask students to bring to class as many examples of new car advertising as they can. Have them make either written evaluations of the ads or do so in class. Have them tell how the particular ad affects them.
 - . Association of National Advertisers, 155 E. 44th Street, New York, N. Y. 10017
 - . Even though you conclude that a car is necessary, because of added convenience, you must weigh other factors not directly connected with transportation.
 - . Have students make a survey of family and friends to determine what additional costs are for storage, maintenance, replacement parts, insurance, interest, etc., over and above purchase costs.
 - . Students should be made aware of the fact that though it is concluded that a car is necessary, there are factors that may make ownership impractical. In such cases taxis, rented cars or other nonpublic conveyances may be the only alternative.
 - A car must be stored when not in use.
 - . How many students lack automobile storage facilities at their home?
 - . Many people feel that if their car is stored in their garage or their yard it costs them nothing. The teacher should help students understand that taxes, building maintenance, and the like are part of this storage cost.
 - . If a car must be left on the street, what regulations does your community have concerning such cars? If there is no all night

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

parking, what alternatives are available for storage? What is the cost?

- If the car is financed, you must be able to meet payments at all times, even when income may be limited.

- Even the best and newest car requires maintenance and these costs are not cheap.

- Automobiles have a knack of requiring expenditures at the most unexpected times; i.e., blown tires, broken exhaust pipe.

- Insurance costs are steadily rising. Factors in insurance costs are how much insurance you carry, the type of insurance, where you live, how you would use your car, age of owner or other family members that will drive, past driving record, and the year and make of the car.

. Discuss with the student the change that has occurred as a result of No-Fault auto insurance.

. Has No-Fault insurance had the results that its proponents said it would?

. This might be a good point to introduce some elements of the cost of automobile insurance. See The Consumer Looks at His Automobile Insurance.

IS A SECOND OR ADDITIONAL CAR NECESSARY?

. A car that is used for business meets an entirely different set of demands than an additional car for family convenience.

. How many students have two or more cars in the family? How many are for business purposes?

. Many of the issues that are raised to determine whether a first car is necessary apply with greater weight to the purchase of a second or additional car.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> . An additional car that is used to provide transportation to work for family members should meet needs that cannot be met by one car. 	<ul style="list-style-type: none"> . Why do the families of the students have an additional car? . In the era of gas shortage, is the additional car really worth the extra cost and problems it presents? 	<ul style="list-style-type: none"> . Use publications of U.S. Department of Transportation. See "Cost of Operating an Automobile," Superintendent of Documents, Washington, D.C. 20402 (\$.15).
<ul style="list-style-type: none"> . It should be realized that an additional car will cost more money to own and operate than only one car. 	<ul style="list-style-type: none"> . Have students try to determine how much more money an additional car will cost. 	
<ul style="list-style-type: none"> . It should be pointed out that most insurance companies give discounts for each additional car on the same policy. 		

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
IF YOU WERE BUYING A CAR WOULD YOU BUY A NEW ONE OR A USED ONE?		
<ul style="list-style-type: none"> . The decision to purchase a new or used car depends upon an individual's economic resources, his personal likes and dislikes, his desire to acquire status, and individual factors peculiar to each buyer. 	<ul style="list-style-type: none"> . Have students explain what reasoning they would use to determine whether to buy a new or used car. . What is the "need" that the car will meet? 	<ul style="list-style-type: none"> . "Your Automobile Dollar," Money Management Institute, 1968, Household Finance Corp., Prudential Plaza, Chicago, Ill. 60601 (\$.25)
<ul style="list-style-type: none"> . This decision will be determined by advantages and disadvantages of buying a new or used car. <ul style="list-style-type: none"> - Advantages of a new car <ol style="list-style-type: none"> 1. Pride of new car ownership 2. New car warranty 3. Operating costs may be lower 4. Maintenance costs may be lower 5. Reliability should be greater 6. New innovations, safety, and latest engineering features will be included. 	<ul style="list-style-type: none"> . Have students find items in advertisements, magazine articles, or manufacturers' literature giving advantages of a new car. 	<ul style="list-style-type: none"> . Make use of Reader's Guide to Periodical Literature to find up-to-date articles on new cars. These articles may consist of test reports, feature articles, or descriptive articles based on new features for the model year. . Consumer Reports: "The Buying Guide," Consumers Union, Mount Vernon, New York, 10551
<ul style="list-style-type: none"> - Disadvantages of a new car <ol style="list-style-type: none"> 1. Large initial cost 2. Finance charges are more because larger amount of money is borrowed. 3. More expensive collision insurance premium 4. New, untested equipment 5. Greater depreciation during the first 2 years. 	<ul style="list-style-type: none"> . Have students find out how much collision insurance decreases each year on a car. Why? . Obtain a copy of a used car appraisal book. <ul style="list-style-type: none"> - Kelley Blue Book Auto Market Report - National Automobile Dealers Association Official Used Car Guide 	<ul style="list-style-type: none"> . Contact a local insurance agent. . Many public libraries have copies of used car appraisal books. . Kelley Blue Book is used mainly on the Pacific Coast.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> - Advantages of a used car <ol style="list-style-type: none"> 1. Initial investment is lower and thus total finance costs should be less. 2. Value of the car will depreciate less during the initial years of ownership. 3. Mechanical problems may have been corrected by the previous owners. 	<ul style="list-style-type: none"> . Discover what the warranty program on the new car is and how it affects new, less perfected items on the car. . Compare the cost of financing a new car and a used car of the same make and model. . Employing used car appraisal and sale books, determine the depreciation on a new car the first year. . The repair or recall record of the car is an important item to consider. 	<ul style="list-style-type: none"> . National Automobile Dealers Used Car Guide Co., 2000 K Street, N.W., Washington, D.C. 20006 . Copies of new car warranty programs may be obtained from new car dealers. . Check with a local lending agency for this information. . Copies of the Blue Book or used car guide may be obtained from a car dealer, some libraries, and some book stores. . "Facts You Should Know about Buying New or Used cars," Better Business Bureau of Metropolitan Boston
<ul style="list-style-type: none"> - Disadvantages of a used car <ol style="list-style-type: none"> 1. The maintenance and operating costs may be higher. 2. Financing may be difficult to obtain or the interest rate might be higher. 	<ul style="list-style-type: none"> . The students should ask friends or relatives who have had experience with new and used cars what their reactions are. . Ask students who have bought used cars what their experience has been. 	<ul style="list-style-type: none"> . Consumer Reports: "The Buying Guide," Consumers Union . "How to Buy a Used Car," Editors of Consumer Reports, 1970, Consumers Union of U.S. Inc., 256 Washington Street, Orangeburg, N. Y. 10962 (\$.25) . "Financing Your Used Car," Motor Trend, June, 1971, p. 114 . "How Sam Marshall Makes Out With His 'Deal' [Dealership]," Fortune, LXXXVI (December 1972) p. 120 ff.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
3. The car might be less reliable because of age, mileage, or previous care.	. What are some of the new safety, mechanical, or pollution features that new cars have which older cars do not have?	. Check with an automobile dealer and he can probably give you this information.
4. Older cars may not include safety or improved features which newer cars have.	. Discuss the statement: "When we buy a used car, we buy someone else's headaches."	. Many auto manufacturers have publications giving these new and improved features. Ex., "Car Buying Made Easier," Ford Motor Co., The American Road, Dearborn, Mich. 48121
5. Mechanical problems may have been the reason why the car was put up for sale by the previous owner.		
. Car buyers need to learn to distinguish between their needs and their desires before purchasing a car. Most buyers spend more money on a car than they really need to because their desires become almost uncontrollable.	. What is the basic need for a car? Is it transportation, convenience, comfort, speed? How do we determine our basic needs as distinguished from our wants (desires)?	. See the unit on "General Principles of Consumer Purchasing" of Consumer Education, Materials for an Elective Course.
. The decision whether to buy a new or used car should be based on the advantages and disadvantages of each in terms of the purposes for which the car is to be purchased.	. Discuss the items that motivate and stimulate us to buy things.	. Felsen, Henry Sergor, "A Teenager's First Car," Dodd, Mead; 1966
	. Try to get students to look at the purchase of a car in the light of reality, not the excitement of "getting wheels."	. "Buying Your First Car," So You Want Wheels, Changing Times Education Service, The Kiplinger Washington Editors, Inc., Editors Park, Md. 20782
	. Discuss the energy crisis and its implications for automobile drivers.	. "Energy - the Ultimate Resource," U. S. Government Printing Office Publication 68-184-0
		. Thomas Browne, Public Service Commission, 44 Holland Avenue, Albany, N. Y.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> . A person probably would do better to buy a small, new car than a used, large car. (This is a value judgment.) 	<ul style="list-style-type: none"> . Have students discuss the reasons for buying a new, small car, instead of a used, large car. This example could be used to illustrate the need for establishing a definite set of priorities in car buying. 	<ul style="list-style-type: none"> . Levy, Leon, Feldman, Robert, & Sasserath, Simpson, "The Consumer in the Marketplace," Pitman Publishing Company, p. 398
<p>WHAT SHOULD YOU KNOW ABOUT BUYING A NEW CAR?</p>	<ul style="list-style-type: none"> . Discuss the gas shortage and rising prices for gasoline. What effect will these have upon the type of car to be bought? . Have the students either use newspaper ads or actually talk with an automobile dealer. Using this information, have them make a comparative chart of automobile prices. . Have a car dealer or sales manager talk to the class to explain how dealers arrive at the selling price in order to make a profit and stay in business. Ask the speaker to explain what they figure their overhead, profit margin, and dealer's cost to be. Can a dealer really sell at \$100 over dealer's cost? Why or why not? 	<ul style="list-style-type: none"> . "Fuel Misers and Gas Guzzlers," The National Observer, September 29, 1973, p. 8 . Some automobile manufacturers have published material that will give price quotations which can be used as a guide. Example, "Car Buying Made Easier," Ford Motor Co. . Most new car dealers are willing to send a representative to your class to talk to the students. Remember, these people are salesmen, not teachers. It is advisable to meet with the representative first to explain what you wish done and to help the representative to do a better job of presentation to your class.
<ul style="list-style-type: none"> . Consider the various things that are included in the price each dealer gives you. 	<ul style="list-style-type: none"> . Ask a person who has bought a new car why he bought where he did. 	<ul style="list-style-type: none"> . "The Consumer in the Marketplace," Unit 45, pp. 389-397 . "Dealer Prep," The National Observer, December 1, 1973, p. 9

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> An individual must not allow the excitement of new car buying to interfere with good consumer practices. 	<ul style="list-style-type: none"> Discuss gasoline shortages and rising gasoline prices. 	<ul style="list-style-type: none"> Jelley, Herbert M. & Henman, Robert O., "The American Consumer, Issues and Decisions," McGraw-Hill Book Co., N. Y. p. 161
<ul style="list-style-type: none"> Salesmen use the trick of asking you to "fill out a possible order" to get you in the psychological mood to buy a car. NEVER sign such an order unless you really intend to buy the car. 	<ul style="list-style-type: none"> Have students present a skit on the right and wrong way to approach the buying of a car. What is the salesman's motive? What are the dangers for the consumer if caught up in such an action? How can the consumer guard against being caught in this type of psychological or possibly legal trap? Discuss the provisions of the sample Retail Motor Vehicle Order found on page 13. 	<ul style="list-style-type: none"> See "General Principles of Consumer Purchasing" in "Consumer Education, Materials for an Elective Course," for directions on overcoming emotion and excitement when buying. See p. 12 and 13 for a sample of a Retail Motor Vehicle Order. Use this form with the class and read the provisions on page 14.
<p>The needs of the buyer should be examined before making a purchase. He should determine his needs as regards:</p> <ul style="list-style-type: none"> - Car size - Engine type - Transmission type - Other options. 	<ul style="list-style-type: none"> Have students pretend to buy a new car. Have them list what they would buy, include options, and give reasons for their purchase. Are the additional costs worth the increased price? 	<ul style="list-style-type: none"> "How To Get the Best Deal on Your Next New Car," Better Homes and Gardens, September, 1971, p. 30 Price lists of options are available at auto dealers. Use figures of cost per mile to determine cost of travel.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> . Consideration should be given to the location and reputation of the dealer. <ul style="list-style-type: none"> - The dealer's reputation for fair treatment on warranty service, maintenance service prices charged for labor, and related factors should be considered. . The value allowed on a trade-in will make a difference in the amount of cash that must be paid out. <ul style="list-style-type: none"> - A new car depreciates most the first year and then less each year thereafter. 	<ul style="list-style-type: none"> . Is the cost and inconvenience of travel worth dealing out of town? What would it cost to travel to obtain service? . Ask parents or friends what their experience has been with the dealer they bought their car from. Would they deal there again? Why or why not? . When is the best time to trade in a car? Have students discuss this question. Is there a rule of thumb which will apply in most cases? . Obtain a copy of the National Automobile Dealers Association price guide for used cars. This will tell you the average value of a car on a month by month basis. The Kelley Blue Book Auto Market Report may also be used here. . Why will there be a difference between what dealers will allow on a used car? Ask an auto dealer to explain how he arrives at the value of a particular car. 	<p>"Coping with the Problems of a Technological Age."</p> <p>"Cost of Operating an Automobile," Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. (\$.15)</p> <p>The best place to get a copy of the price guide is through an auto dealer who is interested in educating the public. Copies may be seen at banks, and some municipal libraries also subscribe to this service.</p> <p>Contact a local dealer and ask for a representative to talk to the class on pricing used cars and the other factors that go into making an offer to a customer.</p>
<ul style="list-style-type: none"> - Some dealers will allow more on a certain car than others will. Watch out for dealers who allow high amounts on trade-ins but charge "sticker prices" for the new car. The difference between what the dealer allows for the used car and what he charges for the new car is what really matters. 		

ADDITIONAL TERMS AND CONDITIONS

1 As used in this Order the terms (a) "Seller" shall mean the authorized Dealer to whom this Order is addressed and who shall become a party hereto by its acceptance hereof, (b) "Purchaser" shall mean the party executing this Order as such on the face hereof, and (c) "Manufacturer" shall mean the Division of General Motors Corporation that manufactured the vehicle or chassis, it being understood by Purchaser and Seller that Seller is in no respect the agent of Manufacturer, that Seller and Purchaser are the sole parties to this Order and that reference to Manufacturer herein is for the purpose of explaining generally certain contractual relationships existing between Seller and Manufacturer with respect to new motor vehicles.

2 Manufacturer has reserved the right to change the price to Dealer of new motor vehicles without notice. In the event the price to Dealer of new motor vehicles of the series and body type ordered hereunder is changed by Manufacturer prior to delivery of the new motor vehicle ordered hereunder to Purchaser, Dealer reserves the right to change the cash delivered price of such motor vehicle to Purchaser accordingly. If such cash delivered price is increased by Dealer, Purchaser may, if dissatisfied therewith, cancel this Order, in which event if a used motor vehicle has been traded in as a part of the consideration for such new motor vehicle, such used motor vehicle shall be returned to Purchaser upon payment of a reasonable charge for storage and repairs (if any) or, if such used motor vehicle has been previously sold by Dealer, the amount received therefor, less a selling commission of 15% and any expense incurred in storing, insuring, conditioning or advertising said used motor vehicle for sale, shall be returned to Purchaser.

3 If the used motor vehicle which has been traded in as a part of the consideration for the motor vehicle ordered hereunder is not to be delivered to Dealer until delivery to Purchaser of such motor vehicle, the used motor vehicle shall be reappraised at that time and such reappraised value shall determine the allowance made for such used motor vehicle. If such reappraised value is lower than the original allowance therefor shown on the front of this Order, Purchaser may, if dissatisfied therewith, cancel this Order, provided, however, that such right to cancel is exercised prior to the delivery of the motor vehicle ordered hereunder to the Purchaser and surrender of the used motor vehicle to Dealer.

4 Purchaser agrees to deliver to Dealer satisfactory evidence of title to any used motor vehicle traded in as a part of the consideration for the motor vehicle ordered hereunder at the time of delivery of such used motor vehicle to Dealer. Purchaser warrants any such used motor vehicle to be his property free and clear of all liens and encumbrances except as otherwise noted herein.

5 Unless this Order shall have been cancelled by Purchaser under and in accordance with the provisions of paragraph 2 or 3 above, Dealer shall have the right, upon failure or refusal of Purchaser to accept delivery of the motor vehicle ordered hereunder and to comply with the terms of this Order, to retain as liquidated damages any cash deposit made by Purchaser, and, in the event a used motor vehicle has been traded in as a part of the consideration for the motor vehicle ordered hereunder, to sell such used motor vehicle and reimburse himself out of the proceeds of such sale for the expenses specified in paragraph 2 above and for such other expenses and losses as Dealer may incur or suffer as a result of such failure or refusal by Purchaser.

6 Manufacturer has reserved the right to change the design of any new motor vehicle, chassis, accessories or parts thereof at any time without notice and without obligation to make the same or any similar change upon any motor vehicle, chassis, accessories or parts thereof previously purchased by or shipped to Dealer or being manufactured or sold in accordance with Dealer's orders. Correspondingly, in the event of any such change by Manufacturer, Dealer shall have no obligation to Purchaser to make the same or any similar change in any motor vehicle, chassis, accessories or parts thereof covered by this Order either before or subsequent to delivery thereof to Purchaser.

7 Dealer shall not be liable for failure to deliver or delay in delivering the motor vehicle covered by this Order where such failure or delay is due, in whole or in part, to any cause beyond the control or without the fault or negligence of Dealer.

8 The price for the motor vehicle specified on the face of this Order includes reimbursement for Federal Excise taxes, but does not include sales taxes, use taxes or occupational taxes based on sales volume, (Federal, State or Local) unless expressly so stated. Purchaser assumes and agrees to pay, unless prohibited by law, any such sales, use or occupational taxes imposed on or applicable to the transaction covered by this Order, regardless of which party may have primary tax liability therefor.

9. *There are no warranties, expressed or implied, made by the seller herein on the vehicle or chassis described on the face hereof. In the case of a new vehicle or chassis the printed General Motors New Vehicle Warranty delivered to purchaser with such vehicle or chassis shall apply and the same is hereby made a part hereof as though fully set forth herein. The New Vehicle Warranty is the only warranty applicable to such new vehicle or chassis and is expressly in lieu of all other warranties by the seller, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose. In the case of a used vehicle or chassis, the applicability of an existing manufacturer's warranty thereon, if any, shall be determined solely by the terms of such warranty.*

10. Any used motor vehicle sold to Purchaser by Dealer under this Order is sold at the time of delivery by Dealer without any guarantee or warranty, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, as to its condition or the condition of any part thereof except as may be otherwise specifically provided in writing on the face of this Order or in a separate writing furnished to Purchaser by Dealer.

11. The Purchaser, before or at the time of delivery of the motor vehicle covered by this Order will execute such other forms of agreement or documents as may be required by the terms and conditions of payment indicated on the front of this Order.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> - Dealers will usually sell a new car for less money on a cash deal than on a trade-in. 	<ul style="list-style-type: none"> . Ask a dealer to explain why dealers are more likely to sell for less on a cash deal than on a trade-in. 	<ul style="list-style-type: none"> . The energy crunch has created such a demand for small cars that the "sticker price" has become the selling price.
<ul style="list-style-type: none"> . Circumstances such as the energy crisis affect the value of a car, both new and used. 	<ul style="list-style-type: none"> . Why should the cost of warranties add to new car costs? 	<ul style="list-style-type: none"> . "Slow-Moving Cars," The National Observer, December 1, 1973, p. 9
<ul style="list-style-type: none"> . The type of New Car Warranty may add to the cost of the car. 	<ul style="list-style-type: none"> . Ask the automobile dealer to explain the difference in cost between a current model and a leftover. 	<ul style="list-style-type: none"> . "Progress Seen on Car Warranty," The New York Times, September 28, 1972, p. 43
<ul style="list-style-type: none"> . A buyer may save by buying a "leftover" at the end of a model year. 		<ul style="list-style-type: none"> . A local automobile dealer can best answer the question of "leftover" prices for your locality. The practice of dealers will vary with location and size of dealer.
<ul style="list-style-type: none"> . Some dealers receive a rebate from the manufacturer on all unsold new cars on his lot when a new model year starts. 	<ul style="list-style-type: none"> . How do automobile dealers handle leftovers? Are they a good buy? Can a buyer save money? What about the turn-in value when the consumer wishes to buy yet another new car? 	<ul style="list-style-type: none"> . "A Leftover '72 May Be a Buy," The New York Times, September 28, 1972, p. 43
<ul style="list-style-type: none"> - The new car when bought as a "leftover" is already a year old and thus loses about 1/3 of its original value when bought. 	<ul style="list-style-type: none"> . Seat and shoulder belts are a good example of these required devices. Survey your class and ask how many students and parents use these belts? Do they have the warning systems for belts and ignition keys disconnected or by-passed? What is their attitude 	<ul style="list-style-type: none"> . Much information on safety and pollution devices is available from the U. S. Department of Transportation, National Traffic Safety Administration, Washington, D.C. 20590 or from automobile manufacturers.
<ul style="list-style-type: none"> . The safety and pollution devices now required on all new cars cost more. The consumer must pay the added cost. 		

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> . The energy crisis is of growing importance. It will probably affect the type of car to be selected, and the operation and maintenance of cars for years to come. 	<ul style="list-style-type: none"> about the safety and pollution devices? . Has the energy crisis affected the lives of pupils and their families? What changes have been made in the use of cars? Has mileage traveled diminished significantly? Have vacation plans been changed? . What suggestions have students to cope with the energy crisis? What changes in motor vehicles do they see emerging? 	<ul style="list-style-type: none"> . New York State Department of Motor Vehicles, Swan Street Building, Empire State Plaza, Albany, N. Y. 12228 . Major oil companies . "Energy-The Ultimate Resource," report of the Task Force on Energy of the Subcommittee on Science, Research and Development, U.S. House of Representatives, October 1971 . Thomas Browne, Public Service Commission, 44 Holland Ave., Albany, N. Y. . "Coping with the Products of a Technological Age," Parts I & II.
	<ul style="list-style-type: none"> . Why is a sizeable portion of the motoring public so opposed to the use of safety devices? . Is the concept of governmental mandates for public safety wrong? Should we have such laws or should a totally laissez-faire position be maintained? . How can the general public be educated 	<ul style="list-style-type: none"> . In the 1973 full size automobile there is about 70 feet of belt and shoulder strap webbing. The warning devices for the seat-belt cost about \$50 per car and the warning for the keys, lights, etc., about another \$50. Those people who do not use these protective items, which are for their own benefit, are simply wasting their money. This money

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

. The pollution control devices greatly affect the efficient operation of the car and result in lessened mileage per gallon of gasoline.

to recognize the value of the required safety devices?

is not an optional expense, but is a mandated expense which is paid for whether one uses the items or not.

. Ask a student or shop teacher who knows something about cars to explain how pollution control devices cut down on efficient motor operation.

. Each state or even sections of a state may have special laws concerning automobile pollution (air and noise). Check with your State Department of Transportation, State environment control agency, or local environment control agency for specifics of the law.

. Get a copy of the law and study what the penalties may be for disconnecting the pollution devices or not having them properly working.

. New York State Department of Transportation, State Campus, Albany, N. Y. 12226

. One dealer estimates that the average car would get five miles more per gallon if it were not for the pollution devices. Considering both the environmental problem and the energy crisis what should be the attitude of consumers toward these devices?

. New York State Department of Environmental Conservation, 50 Wolf Road, Albany, N. Y. 12207

. Discuss the newer Volkswagon lap and shoulder belts and compare with other shoulder belts such as those of Ford and General Motors.

. N.Y.S. Department of Motor Vehicles, Swan Street Building, South Mall, Albany, N. Y. 12228

. Major oil companies

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

A wise consumer tries to gain as much information as possible about each automobile which he considers before making a decision to buy.

- Sources of information:

1. Independent testing agencies
 - Consumer Reports
 - Consumer Bulletin
 - Motor Trend
 - Popular Mechanics
 - Hot Rod magazine
2. Experience of friends and relatives
3. Repair records of the automobile.
4. Recall records
5. Reliability of automobile dealer

WHERE CAN THE "BEST BUY" IN CARS BE SECURED?

. Many individuals today are members of consumer buying groups through their place of employment, union, professional organization, or neighborhood organization. Opportunities often are available for these members to purchase cars at considerable savings.

. What kind of information would be of use in deciding which vehicle to buy?

. Many types of information are available to the car buyer. How should the buyer make use of this information? What good is it?

. What other types of information are available which the consumer might use?

. What suggestions do the students have for obtaining reliable information?

. United States Environmental Agency, 1129 20th Street, N.W., Washington, D.C. 20460

. Let the students be the sources for the answers to this question. Try to get them to incorporate all that they have learned in developing their answers.

. "Repair Records," section of Buying Guide Issue, Consumer Reports, Consumers Union, Orangeburg, N. Y. 10962

. Teachers who are members of the New York State United Teachers, Inc. have such an opportunity. Information about their consumer buying plan should be available from any local teachers group.

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

Just as there are times of the year when cars may be purchased for less, there are times of the day and week which are better than others.

- The latter part of a day when the weather has been bad is often a better time to try to make a deal than a bright sunny day when other people might be out shopping also.

- The last part of the week, on a Friday or Saturday, when the weather has been adverse all week, might be a good time to shop for a car, especially in sections of the country where a bad snow storm has brought business to a standstill.

. Ask an automobile dealer to comment about the best time to buy, if any. Most dealers will not admit that weather conditions, vacation periods, Christmas, and other outside factors affect their willingness to make deals.

. Why might an auto dealer be more willing to make a better deal under such conditions than he would otherwise? What factors might influence such a deal?

. "The Art of Buying a Car," Changing Times, March, 1971, p. 25. Also available as a Mini Unit for classroom purposes from Changing Times Education Service

. "How To Get the Best Deal on Your Next New Car," Better Homes and Gardens, September 1971, p. 30

. Keep in mind that no dealer is going to make a deal on which he will lose money, but he may be willing to make less profit on a deal, especially when business has been slow, so as to have some income and to move stock which represents money.



We can give you a good deal on a day like this!

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
WHAT SHOULD ONE KNOW ABOUT FINANCING A CAR?		
<ul style="list-style-type: none"> . The financing of a new car will not be difficult, but may be expensive. - Different types of loans for purchasing a new car are available: <ul style="list-style-type: none"> . Automobile loan . Personal loan . Demand loan . Depending on the lending institution, other plans may exist. 	<ul style="list-style-type: none"> . Have students investigate the differences in types of loans. What are the advantages or disadvantages of each loan? . Investigate sources of loans and determine current rates of interest. Consider: <ul style="list-style-type: none"> - Automobile finance companies - Personal finance companies - Credit unions - Banking institutions - Life insurance companies - Loans from friends or family. . Consider the advantages and disadvantages of each source of loan. While a loan from family or friend might seem to be the most appealing, what disadvantage to both lender and borrower might such a loan pose? . Consider the advantages and disadvantages of saving the money to pay in full for the car before actually making the purchase. 	<ul style="list-style-type: none"> . See a copy of The New York Motor Vehicle Retail Installment Sales Act, following on pages 21-23. . An automobile loan from a bank or automobile finance company may have a higher interest rate than a loan on a pass-book account. Lenders will require that you carry collision insurance. The car is the loan security. . A personal loan may have no security for the loan or may use security other than the car and therefore does not require collision insurance. A demand loan is sometimes called a pass-book savings book loan. In this type of loan you sign over part of a savings account, stock, or other cash security equal to the amount of the loan to the bank as security for the loan. The interest rate is low and you repay the principal as you wish. The interest comes due at regular intervals. No collision insurance is required. All of the above may vary depending on the bank where the loan is obtained.

Selected Provisions
of the
New York Motor Vehicle Retail Installment Sales Act

Note: The purpose of the N.Y. Motor Vehicle Retail Installment Sales Act is to regulate installment sales of motor vehicles in New York State. Many of its provisions are designed to protect purchasers from being induced to sign contracts without knowing all the terms of the contract. Carrying charges which may be added to the cash price are spelled out. However, carrying charges are not stated in terms of percents. Consequently, comparisons are difficult to make--especially for those who are not aware of the intricacies of finance. For this reason, the dollars per annum carrying charge figures found in the law are also expressed in No. 11 below as approximate percents per annum (sometimes referred to as the (1) Effective Annual Interest Cost, (2) Annual Cost Rate or (3) True Annual Cost).

1. To be enforceable the contract between the buyer and the seller must be in writing and signed by both parties.
2. The following notice (or the alternative provided in the law) must appear in the contract:

Notice to Buyer

- a. Do not sign this contract before you read it or if it contains any blank space.
 - b. You are entitled to a completely filled in copy of this agreement.
 - c. Under the law, you have the right to pay off in advance the full amount due and under certain conditions to obtain a partial refund of the credit service charge.
 - d. According to law, you have the privilege of purchasing the insurance on a motor vehicle provided for in this contract from an agent or broker of your own selection.
3. The seller should deliver to the buyer, or mail to him at his address shown on the contract, a copy of the contract signed by the seller.
 - a. Until the buyer receives a copy of the contract, he has the unconditional right to rescind the contract.
 4. The contract must contain a complete description of the car: make, year model, model and identification numbers.

Calculation of "Time" Balance

5. The contract must show (a) the cash sale price (including taxes, additional equipment and cost of any alteration, or repairs); (b) down payment in cash or trade-in, (c) the balance due, (d) amount, if any, for insurance, specifying coverages or New York standard form reference, (e) filing fees, (f) principal balance, (g) credit service charge, (h) time balance, (i) time sale price.

Example (New Car, current model year)

(a) Cash sale price (includes taxes, accessories, repairs, etc.)		\$2,200.00
(b) Down Payment:		
Cash -----	\$100.00	
Trade-in -----	400.00	
	<u>\$500.00</u>	
(c) Balance due		<u>500.00</u> \$1,700.00
(d ¹) Insurance (N.Y. Standard Policy Form No.)		178.00
(d ²) Insurance - Creditor Life Insurance		<u>20.00</u>
Sub-Total		\$1,898.00
(e) Filing fees		2.00
(f) Principal balance		\$1,900.00
(g) Credit Service charge (\$7* per hundred annum)		<u>133.00</u>
(h) Time balance		\$2,033.00
(i) Time sale price (b + h)		\$2,533.00

6. Number of installments, amount of each installment expressed in dollars, and due date of each installment. In the example above, if this contract were for 12 months, then the following should be shown on the contract:

$$\frac{\text{Time balance}}{\text{No. of installments}} = \frac{\$2,033}{12} = \$169.42 \text{ a month}$$

7. The insurance rates must be the same as those filed with the Superintendent of Insurance for similar insurance. (Same rule also applies to term insurance coverage on the life of the buyer.)

*rates for used cars are higher and range from \$10 to \$13 per hundred, depending on the age of the car.

8. Late payment charges may be imposed if an installment is ten days past due but not in excess of 5% of each installment or \$5.00--whichever is less.
 - (a) In case the buyer defaults on the contract, the seller or assignee may make a charge for attorney's fees not exceeding 15% of the amount due. But, this charge can only be made if a private attorney who is not an employee of the lending agency is used.
9. If the contract is assigned to a finance company by the seller, the buyer must assert any claims for defects in the merchandise against the assignee (finance company) WITHIN TEN DAYS in writing. The buyer must give full information including the parties to the contract, and the description of the vehicle.
10. The contract may not contain an agreement whereby the buyer makes an assignment of wages to the seller or assignee in case he fails to make payments as agreed.
11. Credit Service Charge Limitations

- Class 1. New motor vehicles of the current model year.
Not more than \$7.00 per one hundred dollars per annum on the amount to be financed.
*When converted to an effective annual rate, this amounts to approximately 12.9% per annum.
- Class 2. New motor vehicles not of the current year or a used car manufactured one or two years prior to the year the sale is made. Not more than \$10 per hundred dollars per annum on the amount to be financed.
*When converted to an effective annual rate, this amounts to approximately 18.5% per annum.
- Class 3. Any used car not in class 2--not more than \$13 per hundred dollars per annum on the amount to be financed.
*When converted to an effective annual rate, this amounts to approximately 24% per annum.

*Calculated by using a constant-ratio formula. An explanation of the use and limitations of this formula may be found in the following reference: Phelps, William C., *Using Installment Credit*. Studies in Consumer Credit No. 4, Educational Division, Commercial Credit Company, Baltimore, Md. 1965, pp. 22-26.



Securing a loan is easier than paying it back.

- The cost of the loan will vary according to the source:
 1. Finance companies are usually the most expensive sources from which to borrow.
 2. Full commercial banks and certain savings banks make auto and personal loans. Savings and loan association and some savings banks cannot make such loans. Bank loans are generally less expensive than loans from finance companies, but terms may vary with the bank.
- . Why will finance companies be more expensive to borrow money from?

Why can some banks make loans for buying a car and others cannot? Ask a banker or obtain the regulations of a particular bank.

Have a representative of a bank speak to the class on automobile financing.
- . Finance companies will lend money more readily than most other agencies. Because they are willing to take a greater risk, they charge a higher interest rate.
- . New York State Department of Banking and Insurance, Albany, New York, 12223.
- . Some banks have a speakers bureau. All banks are usually willing to give whatever aid they can to such an educational program. Ask your local bank.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
3. Credit union loans are limited to members of the credit union. Their interest rates are usually the lowest that most people can obtain.	. Have a representative of a credit union speak to your class. He can speak on many advantages of credit union membership other than just car loans.	. Credit unions are becoming more common. For information as to what they are and how we can use them, write Public Relations Department, Credit Union National Association, Madison, Wisconsin.
4. Most insurance companies have stopped making short term or individual loans. However, sometimes small local companies still do have such lending divisions.	. Have students contact local insurance companies and discover what their practices are.	
5. Your own life insurance policy might be a good source of money at a low interest rate.	. Ask an insurance agent how you borrow money on an insurance policy. Obtain a sample copy of such a policy for class use.	. An insurance policy which develops a cash value during the policy's life may be borrowed against. The policyholder in effect is simply borrowing his own money. The policy coverage is not affected during a loan. Death of the insured before the loan is completed will result in the remainder of the loan being deducted from the face value of the policy at time of settlement.
. Money to purchase a car should be shopped for just as one shops for a car. The place where you can obtain the best deal on your loan is the place to borrow your money.	. Ask students who have borrowed money to relate their experience to the class. It might be worthwhile to summarize the experiences of students and publish a short guide for would-be student borrowers to help them make wise decisions about borrowing.	. The teacher may be the best source for this information because of personal experience. . A Federal Trade Commission guide on financing is available free of charge. "Money Savings Offer," Consumer Product Information, Pueblo, Colo., 81009

INSTALMENT LOAN NOTE

No _____

Date _____ 19 ____

I/We for value received, jointly and severally promise to pay to the order of

THE FIRST NATIONAL BANK OF GLENS FALLS, Glens Falls, New York

(hereinafter called the "Bank")

the sum of _____ Dollars (\$ _____) in _____ equal monthly instalments of \$ _____ each, and a (first or final) instalment of \$ _____ the first of such instalments to be due and payable on the _____ day of _____, 19 _____ and on the same day of each succeeding month until paid in full

(If collateral is listed in the following paragraph, the provisions of such paragraph shall be a part hereof. If none is listed such provisions shall not be a part hereof.)

I/We hereby deposit and pledge with the Bank as collateral security for the payment of this note and any renewal or extension hereof, and any other liability or obligation of any of the undersigned to the Bank, herein called indebtedness, now existing or hereafter arising, created directly or acquired by assignment or arising from any endorsement, guaranty, mortgage or otherwise, whether primary, secondary or contingent, whether due or not due, or whether otherwise secured or unsecured, and whether such liability or obligation is from time to time reduced and thereafter increased or entirely extinguished and thereafter incurred, the following property and/or securities (namely)

If a charge is made on lines 2 and/or 3 and Borrower signs below and checks coverage requested in box indicated, Borrower requests Bank to secure group credit life insurance and/or group credit accident and health insurance on the Borrower signing below in accordance with a certificate of group insurance to be mailed to Borrower. The charge shall be the amounts stated on line 2a and/or 3a. SUCH INSURANCE IS NOT REQUIRED BY BANK. Borrower hereby requests the group insurance indicated below

Group Credit Life Ins (2a) \$ _____ Proposed Charge

Group Credit Accident & Health Insurance (3a) \$ _____ Proposed Charge

Date _____

Borrower to be insured

No group insurance will be provided if Borrower has not checked coverage requested, signed above where indicated and a charge is made on lines 2 and/or 3

Loan Proceeds	
\$ _____ 1	Group Life Insurance
\$ _____ 2	Group A & H Insurance
\$ _____ 3	Official Fees
\$ _____ 4	Other Charges
\$ _____ 5	Amount Financed
\$ _____ 6	FINANCE CHARGE
\$ _____ 7	Total of Payments
\$ _____ 8	

ANNUAL PERCENTAGE RATE _____ %

and all additions thereto and substitutes therefor and proceeds thereof, and here by expressly authorize the Bank without any notice or without in any way affecting our liability hereunder to transfer any or all of such collateral to, and hold the same in the name of the Bank or the name of its nominee, without reference to the pledge agreement to receive any dividend or income thereon and hold the same or apply it hereon at any time to exchange, release or surrender or otherwise deal with any or all of such collateral and upon any default here under of any of the undersigned to the Bank or under any other obligation, to sell any or all of such collateral in any order and at any exchange or broker's board or at public or private sale without any demand or notice or advertisement, and to become the purchaser thereof without any right of redemption, which right is hereby expressly waived and after deducting all expenses connected therewith, to apply any and all sums received by the Bank as a result of the exercise of any of the foregoing powers after reduction therefrom of all expenses of sale herein called "proceeds" to the payment in whole or in part, of any item or items of such indebtedness applying or distributing the same as the Bank may elect, whether due or not due, making proper rebate of interest or discount in case of any item not due) or otherwise secured or not. If such proceeds are not sufficient to satisfy the liabilities or obligations hereby secured, I/We will pay any deficiency.

A security interest is granted to Bank in the collateral specified, if any, in the blank space on the left side of this note to secure this note and any other indebtedness of any of the undersigned to the Bank, now existing or hereafter acquired. It will also be secured by any other collateral which has previously been given, or which may hereafter be given to Bank by any of the undersigned. The Bank also has a right of set off with respect to any deposit accounts with any of the undersigned.

In the event of default, Borrower is required to pay a late charge of 5% of any instalment past due for more than 10 days or \$5.00, whichever is less or pay interest at 1 1/2% per month on unpaid balance, together with attorney's fees of 20% of the unpaid balance plus \$10.00 suit cost if referred to an attorney for collection.

In the event of prepayment the finance charge shall be prorated pursuant to the Rule of JB's method and the unearned portion refunded less any minimum charges authorized by law.

In case of default in the payment of any instalment of this note, the Bank may charge, and I/we, jointly and severally promise to pay either (1) interest at the rate of one per centum (1%) per month on delinquent principal payments or (2) a fine in an amount not to exceed five cents per dollar on any principal payment which has become due and remained unpaid for a period in excess of ten days, the amount of such fine being further limited by the provisions of the Banking Law relating thereto and (3) the actual expenditures including an attorney's fee of 20% of the unpaid balance plus ten dollars for suit, if referred to an attorney for collection.

Upon any default hereunder or upon any bankruptcy proceeding or other legal action being taken by or against the undersigned, or any of them, or upon the death or legal incapacity of the undersigned, or any of them, or in the event of the occurrence of any event of default specified in any mortgage, security agreement or other instrument or agreement executed by any of the undersigned in favor of the Bank, or in the event the Bank shall at any time deem itself unsafe or insecure, this note less any unearned interest paid in advance, shall at the option of the Bank, become due and payable forthwith, without notice or demand to the undersigned or any of them, and the amount thereby becoming due and with respect to which no fine shall have been paid, shall bear interest at the rate of one per centum (1%) per month until paid, which amount, I/we jointly and severally hereby agree to pay to the Bank, and agree that the Bank may apply any balance of any deposit account which the undersigned, or any of them, may at any time have with the Bank, or on which any of the undersigned is authorized to withdraw funds on deposit, to any payment due hereunder, and I/we do hereby waive demand of payment and presentment, whether required by law or otherwise without regard to time which may elapse, protest and notice of non payment or protest or notice of any exchange, sale or other disposition of collateral.

Each of the undersigned other than the Borrower hereby acknowledges that he has executed this note in consideration of the payment by the Bank of the proceeds of this note to the undersigned, whose signature follows the designation "Borrower". Borrower acknowledges receipt of a copy of this note

SIGNATURES:

Borrower _____ Address _____
Wife or Husband _____ Co-Maker _____
Co-Maker _____ Co-Maker _____

Bank Form No 2-0 Rev 771

NOTICE ALL SHADED AREA IS FEDERAL TRUTH IN LENDING DISCLOSURE

Copyright 1969

Courtesy of The First National Bank of Glens Falls, Glens Falls, N.Y. 12801

ORIGINAL

Permission Granted



1 Seller has retained title to and shall have a security interest in and a lien upon the vehicle until all amounts payable by Buyer hereunder are fully paid to Seller. Any and all accessories, tires, parts and equipment placed on the vehicle shall become a part thereof and a security interest therein shall immediately vest in Seller. The term "vehicle" as used shall mean the vehicle described on the front page hereof and such accessories, tires, parts and equipment.

2 Buyer agrees in respect to the vehicle (a) to keep it in good condition and repair, (b) not to remove it from the address of which it is presently kept without the prior written consent of Seller, (c) not to sell, transfer, create another security interest in or encumber the vehicle, or suffer the same to be encumbered, or permit the vehicle to be registered in a name other than Buyer's, (d) not to use the vehicle for hire or illegally or permit its use in any illegal undertakings, (e) to pay all taxes upon the vehicle and for its use or operation, (f) to give Seller immediate written notice of loss or damage to the vehicle.

3 Buyer assumes the entire risk of loss, injury to or destruction of the vehicle and no such occurrence shall release Buyer's obligations hereunder. Buyer agrees to at all times keep the vehicle insured with a minimum coverage of \$100.00 deductible collision, comprehensive, fire and theft, endorsed to protect Seller to the extent of the unpaid balance under this contract and against such other risks and for such amounts as Seller may require with a company or companies acceptable to Seller. Buyer agrees to furnish satisfactory evidence of such insurance to Seller upon demand and upon any failure of Buyer to do so Seller may, but need not, insure the vehicle. To the extent expenditures of Seller for such insurance are not included in Cost of Insurance on the front page hereof, Buyer agrees to pay to Seller upon demand, the amount of such expenditures together with interest thereon at the highest lawful rate. In the event of default by Buyer hereunder, Seller may cancel any insurance on the vehicle. In no event shall Seller be under any obligation to notify or advise Buyer with regard to such insurance, its cancellation or otherwise, even though such insurance be procured by Seller, it being the sole obligation of Buyer to insure continuous insurance protection on the vehicle during the term of this contract, and any extension or renewals thereof for the benefit and protection of Seller. Buyer hereby assigns to Seller any moneys which may become payable under or on account of any such insurance, including returned or unearned premiums and directs any insurance company to make payment directly and solely to Seller, to be applied to such of the indebtedness of Buyer hereunder as Seller may elect. Buyer hereby appoints Seller as his Agent and Attorney in Fact for making, adjusting and settling claims under and cancelling such insurance and endorsing Buyer's name on any drafts drawn by insurers of the vehicle.

4 Buyer acknowledges notice of the intended assignment of this contract to the Bank named herein and agrees that upon such assignment this contract shall be free of any defense or counterclaim by Buyer as against an assignee who acquires the contract in good faith and for value and who has received no notice of any facts giving rise to any claim or defense arising out of the sale within ten (10) days after such assignee mails to the Buyer at his address shown on the contract written notice of the assignment identifying the contract and containing the written notice required by Section 302 of the Personal Property Law. The foregoing shall not affect the rights of the Buyer to pursue any remedies he may have against the Seller. Seller shall not be deemed to act as Agent of any assignee in the making of this contract or the collection of any moneys due hereunder, or for any other purpose.

5 If Buyer shall fail to pay any installment within ten (10) days following the date when such installment is due, Buyer agrees that Seller may collect from Buyer a delinquency and collection charge of five per cent (5%) of such installment or five dollars (\$5.00) whichever is less.

6 Time is of the essence of this contract. In the event of default in the performance of any obligation of Buyer hereunder, or if any statement, representation or warranty in any application in connection with the transaction evidenced by this contract is untrue in any respect, or in the event of the death, incompetency, bankruptcy, or insolvency of Buyer, or if Seller's lien shall not have been duly recorded or appear as other than the first and only lien on any certificate of title now or hereafter issued for vehicle, or if Seller with reasonable cause shall deem itself insecure or its collateral impaired, or in the event of the loss or destruction of the collateral, the entire unpaid balance shall, at the option of Seller, without demand or notice of any kind, become immediately due and payable together with attorney's fees of 15% of the unpaid balance and costs and expenses if this contract is placed with an attorney for collection who is not a salaried employee of the Seller. In any such event Seller may, subject to any restrictions imposed by applicable law then or at any time or from time to time thereafter, without demand or notice of any kind, enter upon any premises where the vehicle may be found or may be supposed to be and take possession of and remove the vehicle without process of law. Upon demand by Seller, Buyer shall make the vehicle available to Seller at a place designated by Seller reasonably convenient to Buyer and Seller. Buyer agrees to send notice by registered mail to Seller within 24 hours after repossession if Buyer claims any articles not constituting part of the vehicle were contained in the vehicle at the time of repossession, and agrees that failure to do so shall be a waiver of and bar to any subsequent claim therefor. Buyer's failure to take possession of any such articles at the time and place reasonably specified by Seller shall constitute an abandonment of such property.

7. In the event of repossession of the vehicle Seller shall have the remedies of a secured party under the Uniform Commercial Code. Subject to any restrictions imposed by law, Seller may in the event of such repossession (a) terminate this contract and retain all payments made by Buyer, whereupon all rights, interests and claims of Buyer hereunder in and to the vehicle and proceeds thereof shall cease and determine or (b) in lieu thereof, sell the vehicle, with or without notice, at public sale (at which Seller may purchase) or private sale with or without the vehicle being physically present at the place of sale and upon such terms and in such manner as Seller determines. The proceeds of sale shall be applied in the following order to the reasonable expenses of retaking, holding, preparing for sale (including any repairs or reconditioning necessary to place the vehicle in ordinary operating condition and appearance), selling and the attorney's fee of 15% of the amount due and payable under this contract in the event it has been referred to an attorney for collection plus the court costs, the satisfaction of the indebtedness under this contract, the expenses of liquidating any lien or claim against the vehicle, and the satisfaction of the indebtedness secured by any subordinate security interest, all in the manner and to the extent provided by law. Buyer shall pay upon demand any remaining indebtedness hereunder and shall receive any surplus remaining after such application.

8 Buyer warrants the truth of all statements made herein and in any credit application in connection with the transaction evidenced by this contract, and further warrants and represents that the vehicle traded in if any is free from any lien security interest, encumbrance or other charge, and that no other extension of credit exists or is to be made in connection with this contract or the purchase transaction represented hereby. The breach of any of said warranties shall be a default hereunder.

9. If the vehicle is already titled or to be titled, Buyer warrants that Seller's security interest shall appear as the first lien and only security interest on any certificate of title now or hereafter issued. Buyer hereby appoints Seller as his attorney in fact, with full power of substitution, to apply for certificates of title or amended certificates of title on the vehicle.

10 Any requirement of notice to the Buyer shall be met if written notice is mailed postage prepaid, to the address of Buyer shown at the beginning of this contract or such other address as Buyer may specify in writing to Seller at least five (5) days before the time of the sale or disposition or other happening requiring notice.

11 Failure or delay by Seller to exercise any right hereunder or acceptance by Seller of any payment due hereunder after the same has become due or after notice of any other default shall not constitute a waiver of such default or of the right of Seller to exercise any right or remedy hereunder. No waiver of any default shall be deemed to be a waiver of any other or subsequent default and all remedies hereunder are cumulative, not alternative. This contract may not be changed or terminated orally. Seller is authorized to correct any and all patent errors herein. Buyer hereby authorizes Seller to file such financing statement or statements as Seller shall deem necessary or desirable under the Uniform Commercial Code, signed only by Seller. Buyer further agrees that if at any time any certificate of title is issued or outstanding with respect to the vehicle, Buyer will cause the interest of Seller to be properly noted thereon and will forthwith deliver any such certificate to Seller.

12 As used herein, the term Seller, unless otherwise required by context, includes assignees of Seller and subsequent holders of this contract. The term Buyer, if more than one Buyer has executed this contract, shall be read in the plural and all obligations of Buyer if more than one are joint and several. If any Buyer is or is hereafter determined to be an accommodation party, such Buyer or Buyers hereby waive (a) presentment, demand, protest and notice of protest on any sums due hereunder, also notice of acceptance hereof, notice of any extensions of time in payment, modification of terms or of any sale of collateral release or substitution of parties or collateral and all other notices required by law. The obligation of any such accommodation party shall be that of a primary obligor upon a negotiable instrument.

13 This contract shall bind the heirs, personal representatives, successors and assigns of the parties hereto, upon assignment by Seller, the assignee shall have all rights of the Seller hereunder. This contract shall be governed by and construed and interpreted in accordance with the law of the State of New York. Wherever possible each provision hereof shall be interpreted in such manner as to be effective and valid under applicable law but if any provision of this contract shall be prohibited by or invalid under such law, such provision shall be ineffective to the extent of such prohibition or invalidity without invalidating the remainder of such provision or the remaining provisions hereof. This contract constitutes the entire agreement between the parties hereto, there are no oral representations, understandings or warranties UNLESS OTHERWISE AGREED BETWEEN THE PARTIES HERETO IN WRITING. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, SPECIFICALLY THERE IS NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

ASSIGNMENT - For Value Received the undersigned hereinafter called Seller hereby sells, assigns and transfers to THE BANK NAMED ON THE FACE HEREOF hereinafter called Bank as assignee all right title and interest of Seller in and to the above contract and to the vehicle therein described and all moneys due and to become due thereunder and all rights and remedies thereunder and authorizes Bank to do every act and thing necessary to collect and discharge said contract. Seller hereby warrants to Bank that: (1) the contract has arisen from a bona fide sale of the vehicle therein described; (2) the vehicle has been delivered to and accepted by Buyer on the date indicated; (3) Seller has good title to the contract and a valid security interest in the vehicle; (4) the vehicle is free of all liens and security interests except for the said contract; (5) the contract and the guarantee if any thereof is genuine and valid in all respects which it purports to be and is a valid and existing obligation according to its terms and Buyer and each party executing any guarantee of Buyer's obligation under the contract has legal capacity to contract; (6) an accurate copy of the contract was delivered to Buyer and if applicable a copy of the guarantee was delivered to the guarantor upon or immediately after the execution and delivery of the original guarantee by the guarantor; (7) the vehicle described in the contract is new and unused, unless otherwise stated therein; and the description of the vehicle contained in the contract is true and complete. That the vehicle described herein has been registered in the name of the Buyer named on the contract; (8) Seller has no knowledge of any fact which might impeach the validity of the contract or any guarantee thereof; (9) all statements contained in the contract and to the best of Seller's knowledge, all statements respecting Buyer and others contained in or accompanying Buyer's application for credit in connection with the contract are true; (10) the down payment, if any shown on the contract was made in full and no portion of such down payment has been advanced by Seller or to the best of Seller's knowledge by any other party or is owing by separate note or open account; (11) the security interest in the vehicle vested in Bank by this assignment is free and clear of all other interests, liens or encumbrances whatsoever, except the interest of Buyer under the contract; (12) the vehicle is presently titled in the name of Buyer and Assignee's name is recorded as the first and only lien on the presently issued certificate of title; (13) the sale of the vehicle upon the terms set forth in the contract complies with all Federal and State laws, regulations and orders; (14) and no set off, counterclaim or defense upon the part of Buyer or any other obligor to any claim under the contract, and no claim against Bank exists or will exist or will be established against Bank on account of the failure of Seller to perform any of his obligations under the contract or to comply with any requirements of applicable law or any other action or failure to act of Seller. The liability of Seller under this assignment shall be set forth in the endorsement executed by Seller provided that Seller shall in any event be liable for breach of any of the foregoing representations and warranties which are made to induce Bank to accept this assignment and further provided that if a dealer's agreement between Seller and Bank shall be in force at the time hereof this assignment shall be subject to the terms and conditions of such agreement. In the event of breach of any one or more of the foregoing warranties or assignments of Seller, Seller agrees upon demand by Bank to reimburse Bank for a reasonable price in cash equal to the full unpaid balance of the contract as of the date of such repurchase, less any then unearned finance charge computed in accordance with the Rule of 78, and Seller further agrees to indemnify and hold harmless Bank from and against any liability for claim incurred in connection with the matters involved in any such breach. Upon payment in full of such repurchase price Bank shall release the contract to Seller, but such assignment as well as any assignment of the contract and the vehicle or either, whether pursuant to this paragraph or any of the succeeding endorsements or otherwise, shall be without recourse upon Bank and without reimbursement of any kind. Seller also agrees to reimburse Bank for its costs and expenses, including reasonable attorney's fees, incurred by the Bank in enforcing the obligations of Seller under this paragraph and under any applicable endorsement below. Notice of the acceptance of this paragraph or any applicable endorsement below, notice of any default by Buyer or any other obligor, and prosecution of any other remedies available to Bank are hereby waived by Seller and Seller consents that Bank may without notice to Seller and without affecting Seller's obligations under this paragraph or any applicable endorsement below, compound or release any rights against and grant any extension of time of payment to Buyer or any other obligor on the contract. The obligations of Seller under this assignment and under any applicable endorsement shall be absolute and shall not be impaired by any failure of notice, discharge, extension of time, delay, forbearance, omission to file or filing of the return contract or this assignment under any law or other act or omission by Bank whether in relation to Seller, Buyer, any guarantor or any other party. Seller by executing any of the below endorsements recognized WITHOUT RECOURSE, FULL RECOURSE, REPURCHASE or LIMITED GUARANTEE, adopts the provisions of and agrees with Bank as set forth in such endorsement and also the provisions of the paragraph entitled Assignments.

WITHOUT RECOURSE - Seller's assignment shall accept for the provisions of the paragraph above entitled assignment, be without recourse.
FULL RECOURSE - Seller agrees that in the event of any default by Buyer which shall entitle Bank to repurchase the vehicle, Seller shall, if the vehicle repurchased by Bank and delivered to Seller, and without regard to the then condition of the vehicle, forthwith reimburse the contract and the vehicle from Bank for a repurchase price in cash equal to the full unpaid balance of the contract as of the date of such repurchase, less any then unearned finance charge computed on the basis of the Rule of 78, or if the following bank is completed, all pay to the Bank.
LIMITED GUARANTEE - Seller warrants and guarantees that he or she is not liable for any claim or other action or failure to act of Seller. Seller will, upon demand by Bank, forthwith pay to Bank the then unpaid balance of the contract up to the sum of \$ provided that the following bank is completed, that such default occurs and such sum is in compliance with the first months of the term of the contract.
ALL RECOURSE - Seller agrees that in the event of default by Buyer in the full payment on the due date thereof of any installment payable under the contract or in the prompt performance of any other obligation to be performed under the contract by Buyer, Seller will, upon demand by Bank, forthwith reimburse the contract from Bank for a repurchase price in cash equal to the full unpaid balance of the contract as of the date of such repurchase, less any then unearned finance charge computed in accordance with the Rule of 78.

Courtesy of The First National Bank of Glens Falls

Permission Granted



RETAIL INSTALMENT CONTRACT

Date _____

BUYER _____
NAME STREET CITY OR TOWN COUNTY STATE ZIP
 (If vehicle is bought for use primarily for personal, family or household use or for farming operations give residence address, if bought primarily for business or professional use, give address of principal place of business.)

SELLER _____
NAME PLACE OF BUSINESS
 Buyer has purchased from Seller and acknowledges delivery examination and acceptance of the following described vehicle in its present condition, subject to the terms and conditions of this contract. Buyer hereby warrants and covenants that the vehicle is bought for use primarily for Personal family or household use Business or professional use Farming operation use. Buyer agrees that the vehicle shall at all times be deemed personal property and shall not be affixed to real property in such a manner as to become a fixture.

N.U.	Yr	Make	Trade Name	Model	Cyl	Serial Number	Equipment	Cash Price incl Sales Tax
							<input type="checkbox"/> A T <input type="checkbox"/> P B <input type="checkbox"/> P W <input type="checkbox"/> A C <input type="checkbox"/> P S	1.
Vehicle Insurance \$ _____ deductible Collision Fire & Theft <input type="checkbox"/> Comprehensive <input type="checkbox"/> Trade In _____								Total Down Payment
Name of Agent providing vehicle insurance _____								Unpaid Balance of Cash Price
If charge is made on line 6 Bank is requested to disburse premiums to agent named above. If no charge is made on line 6 Buyer warrants required insurance coverage obtained from agent named above. BUYER SHALL CHOOSE PERSON THROUGH WHOM INSURANCE IS TO BE OBTAINED								3.
If a charge is made on lines 4 and or 5 and Buyer signs below and checks coverage requested in box indicated. Buyer requests Seller to secure group credit life insurance and or group credit accident and health insurance on the Buyer signing below in accordance with the notice of proposed group insurance on the back of Buyer's copy. The charge shall be the amounts stated on lines 4a and/or 5a as proposed charges. SUCH INSURANCE IS NOT REQUIRED BY SELLER Buyer hereby requests the group insurance indicated below.								4.
<input type="checkbox"/> (4a) Group Credit Life Insurance \$ _____ Proposed Charge Group Insurance Carrier: Federal Life and Casualty Company, Battle Creek, Michigan Maximum Life Insurance \$15,000.00								5.
<input type="checkbox"/> (5a) Group Credit Accident & Health Insurance \$ _____ Proposed Charge								6.
Buyer to be Insured _____ Date _____ No group insurance will be provided if Buyer has not checked coverage requested, signed where indicated and a charge is made on lines 4 and or 5								7.
A security interest is granted to Seller on the vehicle described above. In the event of a default in payments Buyer is required to pay a late payment charge of 5% of any installment past due for 10 days or \$5.00 whichever is less and also attorneys fees of 15% of the unpaid balance if referred to an attorney for collection. In the event of prepayment, the FINANCE CHARGE will be prorated pursuant to the Rules of 78's method and the unearned portion refunded less any minimum charges authorized by law.								8.
Buyer agrees to pay the Total of Payments (9) Seller or its assignee in _____ equal monthly installments of \$ _____ each, and the (first or final) installment of \$ _____ commencing _____, 19____ and on the same day of each succeeding month until paid in full.								9.
ALL PAYMENTS ARE TO BE MADE AT ANY OFFICE OF THE FIRST NATIONAL BANK OF GLENS FALLS Glens Falls, New York								10.
THIRD PARTY GUARANTEE --- FOR VALUE RECEIVED and in consideration of credit given to the Buyer(s) named in this contract the undersigned jointly and severally if more than one hereby guarantees to the Seller and assigns of said contract the amount owing hereon in the event of any default thereunder including all costs of collection legal expenses and attorney's fees incurred or paid by the holder of the said contract and in the collection and enforcement of said contract and the enforcement of this Guarantee. The undersigned hereby expressly waives its presentment demand protest and notice of protest on any of such indebtedness and also notice of acceptance of this Guarantee notice of any extensions of time in payment modification of terms or of any sale of collateral and all other notices required by law. No renewal or extension of payment of any moneys due under said contract, no release or surrender of any collateral or security therefor or of any collateral or security for this Guarantee no release of any person primarily or secondarily liable on said contract including any maker endorser or guarantor no delay in the enforcement of payment of said contract or of this Guarantee no act or omission resulting in the failure of Seller's or Assignee's security interest to appear as the first lien and only security on any certificate of title now or hereafter issued for vehicle or failure to file Seller's lien where required and no delay or omission in exercising any right or power under said contract or this Guarantee shall affect the liability of any of the undersigned hereunder any and all of said occurrences being hereby consented to without notice. This Guarantee is absolute. The undersigned agrees to pay any indebtedness owing under said contract whether or not any proceeding is taken against the Buyer for collection of said indebtedness and whether or not any realization is made upon the collateral therefor. Undersigned agrees that failure to file notice of a copy of this agreement as required by law or failure to secure insurance on the vehicle shall not affect the undersigned's liability hereunder. Acceptance of this Guarantee by Seller and assigns is conclusively presumed by delivery of same to it. The undersigned by signing below acknowledges receipt of a completely filled-in copy of the contract signed by Buyer and of this Guarantee.								ANNUAL PERCENTAGE RATE %

BY _____
 SELLER

BY _____
 BUYER'S SIGNATURE

BY _____
 BUYER'S SIGNATURE

BY _____
 BUYER'S SIGNATURE

Buyer agrees that the provisions on the back are part of this contract.

Liability Insurance Coverage for Bodily Injury and Property Damage is Not Included or Provided For in This Contract.

NOTICE TO THE BUYER: (1) Do not sign this contract before you read it or if it contains any blank space. (2) You are entitled to a completely filled in copy of this contract when you sign it. (3) Under the law, you have the following rights, among others: (a) To pay off in advance the full amount due and to obtain a partial refund of the finance charge; (b) To redeem the property if repossessed for a default; (c) To require, under certain conditions, a resale of the property if repossessed; (4) According to the law you have the privilege of purchasing the insurance on the motor vehicle provided for in this contract from an agent or broker of your own selection.

Seller agrees to this contract including the back and assigns it to the Bank named above pursuant to the assignment paragraph on the reverse hereof and the type of assignment checked below. If no box is checked it shall be pursuant to the without recourse assignment on the reverse side hereof.

FULL RECOURSE REPURCHASE LIMITED GUARANTEE
 (Check and initials if applicable)

Buyer, by signing below, acknowledges receipt of a completely filled in Buyer's copy of this Contract signed by the Seller.

BY _____
 SELLER

BY _____
 BUYER'S SIGNATURE

BY _____
 BUYER'S SIGNATURE



57

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
WHAT SHOULD YOU KNOW ABOUT BUYING A USED CAR?		
. A late model used car might not be the best buy.	. Discuss the reasons why a previous owner might be getting rid of a late model car before the two or three years of average use are over: - Trouble with the car - High mileage - A leased car or rental fleet car - Other student suggestions of reasons.	. Jackson, Charles R., "How To Buy a Used Car," Chilton Book Company, 1967 . Consumer Education Series, "How To Buy a Used Car," McGraw-Hill Films, 1221 Avenue of the Americas, New York, New York 10020
. When buying a used car, it is important to do a very careful job of comparison shopping to determine where the best buy may be obtained.	. Have students list sources of used cars and indicate what considerations they would feel would be important in making the comparison. Have students check their "Checklist" against the next part of this study to determine what they missed or what they feel should be added to this material.	. Many students are really quite skilled at buying used cars. They have learned from practical experience and they can add much to this study. Let the students lead the way in this section.
. Sometimes better deals can be obtained buying used cars from private individuals than from dealers.	. What have been the experiences of students and their families or friends in buying used cars at private sales?	. Try to relate personal experiences of students, other teachers, or yourself into this study. Personal experiences provide the most meaningful illustrations for learning.

UNDERSTANDINGS

- Much care should be taken in determining the quality of a caveat private sale. Remember privately sold cars are being sold "as is" or "without fault." Caveat Emptor applies particularly in this type of sale.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Have the students list and compare the advantages and disadvantages of private sales. Discuss these points and try to place a value position on each item to help determine how good a deal the private sale might be. (A list of possible advantages is provided for the teacher under sources. Remember, let the students lead discussion in this section of study.)
- In the purchase of a car from a friend, consider possible damage to friendship if the car does not perform as expected.

SOURCE

- Advantages of private sale:
 - Possible lower cost
 - May be able to find an unusual deal such as an older car with low mileage, an estate settlement, someone moving or giving up driving.
 - You may know the previous owner and how the car was cared for.
 - The car may be what you want and you haven't found it anywhere else.
- Disadvantages of a private sale:
 - No warranty or guarantee is provided unless there is some of the initial warranty left that may be transferred.
 - Financing may be more difficult.
 - The seller has no further interest after the deal is completed. A dealer will hope to have you return for service or a later deal.
 - The individual might be "fronting" for a used car dealer for the purpose of selling poor cars on which no warranty service has to be provided.
 - Note that all caveats apply whether the car is purchased from a friend, acquaintance, or stranger.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> When buying from a private individual, a check of the person's reputation or character can be helpful in deciding whether you wish to do business with him. 	<ul style="list-style-type: none"> Where might good information about the individual be obtained? (The individual should be informed of your desire to check his reputation and if he is of good character he will possibly suggest where you can check.) Is it true that when it comes to money "There is a little larceny in the best of us"? 	<ul style="list-style-type: none"> Sources of information: <ul style="list-style-type: none"> - Place of business - Police - Position he holds in community - Neighbors - Bank
<ul style="list-style-type: none"> Most used cars are bought from either used car dealers or new car dealers who also sell used cars. 	<ul style="list-style-type: none"> What is the difference between a used car dealer and a new car dealer selling used cars? What might be the advantages or disadvantages of buying from either? 	<ul style="list-style-type: none"> Have the students get the answer to these questions by visiting a used car dealer and a new car dealer and asking what the difference is and what the advantages or disadvantages are.
<ul style="list-style-type: none"> Check the reliability and reputation of the dealer. Some of the biggest problems concerning deception and fraud occur in large metropolitan areas where dealers operate in a large marketplace and the importance of the individual and the individual deal is not very great. The attitude may be that there are many other fish in the pond and whether you return is unimportant. 	<ul style="list-style-type: none"> What are the best sources of information to use for checking a dealer's reputation or reliability? Make a list of what sources might be used: <ul style="list-style-type: none"> - Family - Friends - Previous customers - Present customers - bank - Better Business Bureau - Bureau of Consumer Fraud and Protection. 	<ul style="list-style-type: none"> The students should continuously be referring back to "General Principles of Consumer Purchasing" which was studied at the beginning of this course. Contact the Better Business Bureau for your area or the Bureau of Consumer Fraud and Protection of the Attorney General's Office. "Used-car Dealers - See How They Operate," Changing Times, September 1972, p. 7

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<p>. After deciding where to buy the car, important checks must be made of the condition of the car.</p> <p>- Do not let the first impression of appearance decide your choice.</p>	<p>. Use a check list such as that provided by Consumers' Union (on-the-lot tests, driving tests, shop testing) to determine the condition of the car.</p> <p>. What are ways a car can be doctored up to make it appear like a real "cream puff"? Students in the automotive course, a shop teacher, or mechanic can be of help in indicating how a car can be altered to appear almost new.</p> <p>. To be sure that substitutions are not made, place chalk marks on different items on the car, i.e., plugs, tires, etc., to be sure they are on the car when you finally get it. This simple act can prevent "bushing."</p>	<p>Students should be reminded about the practice of "bushing" in the sale of used cars.</p> <p>- "Bushing" is the practice of raising the price of the car. This may be done after the sale is completed by pointing out the need for new points, plugs, condenser, tires, etc.</p> <p>- Bushing may also be accomplished by removing items on the car at the time of sale, thus lowering the value of the car purchased.</p>
<p>. There are tests all individuals can make to check the car for its value.</p>	<p>. Have students make lists for themselves of items to be checked.</p> <p>. A "Consumer Education Bulletin Board" can be made of these check lists for the school.</p> <p>. Students might make their own filmstrip or movie to illustrate these checklists, if facilities are available. These visual materials should illustrate the items on the checklists.</p>	<p>. Contact the audiovisual person in your school for help. Anyone with a 35-mm. camera can take the pictures for a filmstrip. An 8-mm. movie camera can be used to make a movie.</p>

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> Have students give the suggested tests to cars of other teachers, students, or actual used cars on a car lot. 	<ul style="list-style-type: none"> Students should be encouraged to actively engage in a careful inspection. Students and adults are often afraid to thoroughly inspect a car because they feel they know too little to make an intelligent decision. Try to make students realize that anything that they find wrong with the car being inspected is important to them because they are spending their own money and deserve to get the best car for the money spent. 	<ul style="list-style-type: none"> The New York State Automobile Inspection Handbook from the Department of Motor Vehicles can be helpful in giving details of some of these test features. "Car Buying Made Easier," Ford Motor Company "Consumer Guide to Tire Care and Safety," Rubber Manufacturers Association, 444 Madison Avenue, New York, N. Y. 10022
<ul style="list-style-type: none"> Every used car should be road tested before buying. There are certain tests any driver can make. 	<ul style="list-style-type: none"> The teacher may feel uncomfortable about teaching this section due to limited knowledge in this area. Ask the driver education teacher or any other teacher with knowledge or background of cars to help. Often a mechanic or service station owner will be willing to help. You may have some students with good experience or knowledge in the area of buying automobiles. Allow them to teach as much of this material as they are capable of covering. 	

BACKGROUND INFORMATION

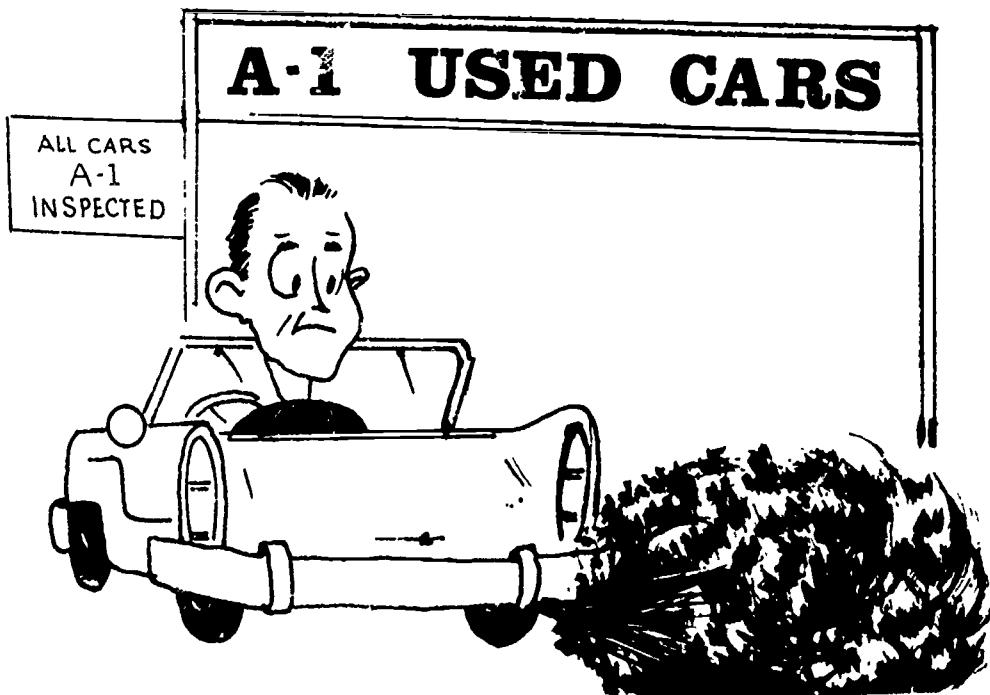
On-the-Lot Tests - Keyword B-E-L-T-S

1. Brakes - push brake pedal down hard and hold for a few seconds. If the pedal slowly continues to go down, trouble exists in the braking system.
2. Exhaust - with motor running, check the color and smell of the exhaust fumes for oil. This can indicate whether the engine is using oil or not. Also make a visual check of the entire exhaust system for rusted parts.
3. Lights - turn on lights and check to make sure all lights work properly. Have someone step on brakes to make sure brake lights work. Turn on directional lights and check for proper operation. Check proper operation of parking, tail, and high and low beam running lights. If additional lights exist, check their proper operation.
4. Tires - Using a penny or a tire tread gauge, check for legal depth of tread. New York law requires that tire tread be a minimum of 2/32 of an inch. Place a penny in the main grooves with Lincoln's head against the tire. If the top of Lincoln's head shows, there is less than 2/32 of an inch of tread and use of the tire is illegal. On newer tires made since 1971 tread depth indicators are built into the tread. These are horizontal bars of rubber in the tread. When they are exposed the tread has worn to the point where the tire is illegal.
5. Steering - Check the steering wheel for excessive play. Open the driver's window. Standing alongside the car, grip the steering wheel and turn the wheel, watching the left front wheel. If you have to turn the steering wheel more than 2 to 3 inches before the tire moves, this may indicate excessive play in the steering which must be corrected. If the car is equipped with power steering, the car must be started before this test can be used. Power steering may be checked by someone turning the steering wheel, with engine running, from extreme left to extreme right and back. Check for pressure leaks and for signs of power-steering pump failure.

Additional tests on the lot should also be given.

1. Shocks - Bounce all four corners of the car several times and then stop. If the car does not come to a stop after the first bounce, the shocks are worn or broken and need replacing.
2. Body - Check the body for signs of body work, which may indicate the car was in an accident. Go to the back of the car and look down the length to check for ripples in the sheet metal. Check around the trunk and inside doors and hood for a different color paint which indicates a repaint job. Look for excessive rust spots. Check for holes which may have been used for mounting taxi signs; these could indicate high mileage or abuse to the car. Check for indications of extra radio antennas or signs that extra lights had been mounted, thus indicating the car might have been a police patrol car.

3. Doors, hood, trunk, interior - Check to make sure that all doors close properly and solidly. Improper operation may indicate frame and/or body posts have been damaged.
Check inside of hood for bent sheet metal and for proper opening and closing. Improper operation may indicate sprung hinges and bent latches.
Open trunk and look for signs of excessive wear to mat, dirt, dents, or scratches which can indicate heavy use as compared to mileage. Check interior for wear to accelerator pedal or floormat on driver's seat. If new items appear, they may have replaced excessively worn items which could indicate high mileage. Very stiff seats covered with vinyl or nylon fabric may indicate a former taxi or police car.
4. Horn, gauges and warning lights - Push horn button or horn rim to check whether horn works properly.
Start engine and check temperature, oil pressure, and gas gauge for proper operation. If car is equipped with warning lights, make sure they light up as car is being started, but go off as soon as engine is running.
For cars built after January 1970, check for proper operation of warning buzzer for key in ignition with driver's door open. On 1972 and newer cars, check for proper operation of warning buzzers and lights on seat belts, locked transmission, and interlock system.
5. Excessive options - Avoid used cars with excessive automatic and power equipment such as power seats, power windows, power aerials. Such equipment may fail and is costly to repair. To repair or replace such automatic devices can make the used car much more expensive than the equipment is worth. Extra power equipment also requires extra fuel consumption.
6. Excessive mileage - Check the odometer reading and ask the salesman to see the transfer stub, to make sure the mileage noted at the time the used car was sold to the dealer is the same or near the same as when you are looking at it.



A rose by
any other
name still
smells...

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

- | | |
|--|---|
| <ul style="list-style-type: none"> . If possible have the students visit an alignment center at a garage or service station which does this work. If you have a BOCES Vocational Center with an Auto Mechanics section, a visit to this center can show students what you are talking about and how such problems can be corrected. | <ul style="list-style-type: none"> . Contact any business or local BOCES Center which does alignment work. . "Your automobile - How To Understand It," Mobil Oil Corporation, Products Department, 150 East 42nd Street, New York, N. Y. 10017 <p>See especially illustrations 63, 64, and 65, pp. 75 and 76.</p> |
| <ul style="list-style-type: none"> . Here would be a good chance to speak about fuel shortages and the unnecessary waste of gasoline due to fast starts. Attempt to get the students to realize that "peeling out" costs unnecessary money both in gas and automobile wear. | <ul style="list-style-type: none"> . "Money Saving Tips From Mobil," Mobil Oil Corporation, 150 East 42nd Street, New York, N. Y. 10017 . "Clean Air Caravan Results," Atlantic Richfield Co., Public Relations Division, Los Angeles, Calif. 90051 |
| <ul style="list-style-type: none"> . The performance of an engine and the transmission should be explained by a mechanic or someone skilled in the operation of an engine. This individual can cover in detail some of the items which should be looked for in testing a car for engine and transmission performance. | <ul style="list-style-type: none"> . "Your Automobile - How To Understand It," The Engine, p. 7, and The Power Train, p. 49 . "Your Automobile - How To Understand It," pp. 79-81 . "Your Automobile - How To Understand It," pp. 83-85 |

BACKGROUND INFORMATION

On-the-Road Tests - Keyword H-A-R-B

1. Handling - Beware if the steering wheel shakes, shows looseness and lack of alignment.
You have checked the steering wheel for excessive play on the lot, now you must check for looseness while driving. Is there obvious looseness or a chucking action when driving over rough roads? If you have to constantly keep turning the steering wheel to keep the car on the road, there are probably problems with the tierods or steering adjustment. This "oversteering" can be easily corrected if nothing is badly worn or broken.
 - (a) Check for a constant shake or excessive vibration in the steering wheel. This may indicate wheels that are out of balance or have wheel bearing troubles.
 - (b) Check the car for proper wheel alignment. Check for excessive wear of the tires on the lot. When driving on a straight, level section of highway, with little or no traffic, remove hands from the steering wheel or loosely grip steering wheel for no more than 2 or 3 seconds. Keep speed steady at about 30-35 miles per hour. If the car veers to either the left or the right and will not hold a straight course the alignment of the front wheels should be checked. (Have the wheels checked for toe-in, toe-out, caster and camber.)

2. Acceleration - The time to accelerate will depend on the size of the engine in the car and whether the transmission is automatic or standard.
From a standstill accelerate moderately but steadily. If the car does not stall or die back, pick speed up to 40-45 mph. Take your foot off the accelerator and allow speed to drop to 30-35 mph. Now accelerate more rapidly than before to about 45 mph. and then accelerate hard for a few seconds. This test will tell you the following: Smoothness of acceleration under strain when first obtaining speed, ability to regain speed reasonably quickly after losing momentum, such as in traffic, and ability to quickly pick up speed when passing on the open road.
A further test should be made on a fair size hill. Stop at the bottom of the hill and then accelerate so as to test the ability of the car to climb the hill. Do not push your accelerator all the way down, but shift your car down for better operation and to save gas. This test will indicate the engine's operation under heavy strain. Listen for engine noise and noise from the transmission. Note the smoothness that both show under this strain. An automatic transmission should shift smoothly and a standard transmission should work easily when shifting. When road testing for acceleration, you should listen for noise and be aware of performance of the transmission to discover any trouble that may be evident.

3. Ride - How comfortable riding is will be determined by the size and weight of the vehicle, the size of tires, the amount of air in the tires, the type of seat cushions, and the condition of the suspension of the car. The latter is the most important. You can make a simple road test of the ride. Drive over a fairly rough section of road and observe whether the car bounces over the road and becomes hard to control. If the car bounces excessively and keeps "bottoming," hitting hard on the frame, the chances are good that the shock absorbers need replacing. From a fair speed, brake the car hard; if the car nose-dives excessively this also can indicate weak or broken shocks. Upon return to the garage, check the rear leaf springs and shackles or the coil springs and control arms. At this time check for leaking shocks, as indicated by a wetness of the shock casing.
4. Braking - Brakes that jerk, cause the car to pull either to the left or the right, or fade to no brake at all, indicate problems that must be corrected. To test the brakes, accelerate the car to 40-45 mph. and grip the wheel loosely. Apply brakes gradually, but firmly, until car comes to a stop. If the brake pedal went to the floor so that you could not slide your foot under the pedal, adjustments are needed. If the car continued on as if the brakes were not being applied - faded - you will need new brakes. Accelerate again to 20-25 mph., grip the steering wheel firmly, apply the brake hard as in a "panic stop." If the car jerks to either side or seems to "bunny hop" - grab and fade, grab and fade - you have brake problems that should be corrected immediately.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> . The tests which have been explained either for on-the-lot or on-the-road are tests which the average knowledgable person can conduct. . Unless you are an expert, have all used cars carefully checked by a mechanic whom you can trust. You will have to pay the mechanic for this service, but his fee may save you money. 	<ul style="list-style-type: none"> . How valuable are the different advertised ratings of used cars such as "A-1 Used Cars," "Quality Used Cars," "Safe Buy Used Cars," etc.? . See "Checklist for Buying a Used Car," on following page. Have students criticize the list. Should any items be deleted? Should any items be added? 	<ul style="list-style-type: none"> . Use the car advertisement section of a paper to see if such ratings indicate anything of value for a judgment to be based upon.

CHECKLIST FOR BUYING A USED CAR

Yr. _____ Make _____ Model _____ Previous owner _____
 Dealer _____ Salesman _____
 Asking price _____ Repair costs _____ Book price _____

Directions: Carefully look over the car and note the condition of each of the following items.

	OK or None	Repairs Needed		OK or None	Repairs Needed
Outside the Car			Inside the Car (Con.)		
Paint	—	—	Upholstery	—	—
Dents	—	—	Operation of horn	—	—
Rust	—	—	lights	—	—
Glass	—	—	signals	—	—
Leaks	—	—	wipers	—	—
Tire tread	—	—	heater	—	—
Tire wear	—	—	radio	—	—
Fit of hood	—	—	doors	—	—
doors	—	—	windows	—	—
trunk	—	—	locks	—	—
Springs	—	—	seat	—	—
Shock absorbers	—	—	Engine starting	—	—
Trunk condition	—	—	Engine sounds	—	—
Accident damage	—	—	Shifting	—	—
			Warning lights	—	—
Under the Hood			Gauges	—	—
Radiator water	—	—			
Condition of belts	—	—	Road test		
hoses	—	—	Engine acceleration	—	—
battery	—	—	Engine performance	—	—
Engine block	—	—	Transmission fluid		
Oil leaks	—	—	level and	—	—
Oil level and	—	—	odor	—	—
odor	—	—	Shifting	—	—
			Clutch	—	—
Inside the Car			Service brakes	—	—
Condition of			Parking brake	—	—
driver's seat	—	—	Steering and	—	—
Steering wheel play	—	—	wheels	—	—
Brake pedal travel	—	—	Exhaust color	—	—
Foot pedal wear	—	—	Cooling system	—	—
Clutch free play	—	—	Rattles and squeaks	—	—
Floor covering	—	—	Accident damage	—	—

Mechanic's Report

Opinion _____ Cost of needed repairs _____
 Mileage reading _____ Estimated mileage _____

Everybody Likes To

SAVE

We've lowered our prices so you can get what you want for less!!!

71 CHEVROLET 4-dr
WAS \$2495 NOW \$2345

71 FORD TORINO
WAS \$2495 NOW \$2295

70 FORD LTD wag.
WAS \$2595 NOW \$2395

70 CAD Eldorado
Full power, air cond.
WAS \$4795 NOW \$4495

72 VEGA 2 dr
WAS \$2095 NOW \$1945

70 MAVERICK 2-dr.
WAS \$1495 NOW \$1195

69 CHRYSLER wagon
WAS \$2495 NOW \$2345

'68 PLYMOUTH wagon
WAS \$1495 NOW \$1295

'67 DODGE Polara
WAS \$795 NOW \$745

As-Is Specials

68 MAVERICK H top	\$895
68 TORINO Conv.	\$795
68 RAMBLER sedan	\$795
68 VW sedan	\$595
68 KARMAN GHIA	\$295
63 JEEP wag 4x4	\$495

Illustration A

"SOMETHING FOR EVERYONE"

'71 PLYM. DUSTER Twister

'70 FIAT 850 CONV.

'69 MERC. MONTEREY Wag.

'69 PLYM. FURY 4-dr. H'top

'69 CHRYS. NEWPORT Sedan

'68 MUSTANG Fastback

'68 DODGE DART GTS 4 spd.

'68 CHEV. IMPALA 4-dr.

'67 VW WINDOW VAN

'67 DODGE POLARA Sedan

USED CARS

Our specialty!!! 60 - 90 used cars in stock at all times. Must makes and models. Some at ridiculously low-low prices. Check our stock before you buy. Our stock normally includes a complete cross-section of all sizes and price used cars. All units priced \$200 - \$300 below average retail.



WE CAN'T PROVE OUR DEAL IS BEST WITHOUT YOU!!

'72 Plym \$3395 Custom Suburban Blue V 8 automatic power steering 16000 miles No K 636	'71 Dodge \$2295 Charger 2 dr hardtop Tan V 8 automatic power steering air conditioning No K 463	'71 Dodge \$2025 Coronet Suburban Tan V 8 automatic power steering No K 573	'68 Dodge \$1095 Charger 2-dr hardtop, Tan V 8 automatic power steering No L 501
'71 Ford \$3250 LTD wagon Light Green Air conditioning Loaded No K 400	'71 Dodge \$2275 Coronet Brougham 4-dr sedan V 8 automatic, power steering Dark Gold vinyl roof No. P 599	'70 Chrysler . . \$1995 300 4-dr hardtop, Gold vinyl roof V 8 automatic, power steering No K 570	'68 Opel \$1095 Station Wagon Blue 4 cylinder 4 speed No K 512
'70 Pontiac . . . \$2475 LeMans Safari Wagon, V 8 automatic, power steering air conditioning No K 533	'70 Ford \$2195 Torino Brougham 2-dr hardtop Gold vinyl roof V 8 automatic power steering air No K 467	'69 Ford \$1450 Mustang 2 dr hardtop White vinyl roof Six, automatic, power steering No K 462	'68 Pontiac \$995 Grand Prix 4 dr hardtop V 8 automatic, power steering Very clean Maroon black vinyl roof No L 535
'70 Dodge \$2350 Monaco 3 seat suburban V 8 automatic power steering White No K 552	'71 Dodge \$2195 Charger 2 dr hardtop Blue 8 White Six cylinder, automatic power steering No K 646	'69 Ford \$1350 LTD 4-dr hardtop Red, vinyl roof V 8, automatic, power steering No L 482	'65 Olds \$475 98 4 dr sedan Blue Full power No L 475

UNDERSTANDINGS

- . Some areas have automobile analysis clinics where a car can be hooked up to a diagnostic analyzer and a printed report can be obtained as to the total performance of the car. These clinics charge a reasonable fee for diagnosis.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . What would be the value of taking a car to a diagnostic center instead of to a mechanic?
 - Less time will be spent.
 - A total written report is available.
 - More tests can be made under the same conditions than a mechanic can make.

SOURCE

- . The Mobil Oil Corporation has built a few diagnostic automobile clinics and has material about them available. Some larger garages have analysis systems which are not as large as the clinics, but do some of the same things.

IS ADVERTISING MORE THAN A LIMITED HELP IN BUYING A USED CAR?

- . Newspaper advertisements may give you a starting point to look for a used car. Few ads will give important information.
- . What should be in an advertisement for a used car? How much information should be given? Do ads that say little mean that the car is a poor buy? Do ads that tell a great deal indicate a car that is being overly "pushed"?
- . See comparison of ads — page 41.

WHAT INFORMATION SHOULD BE OBTAINED FROM A DEALER?

- . How long has the dealer had the car?
- . Ask a used car manager or salesman from a local dealer to describe what his company does to a used car that comes into the firm's possession. Do they:
 - Recondition the car?
 - Repair minor mechanical and body problems?
 - Change oil and lubricate?
 - Replace tires as needed?
 - Repair major defects?
- . The dealer has to keep a record of when each car came into his possession. Cars that have been on the lot a long time should give you reason to look for problems which do not make them salable.
- . Most car dealers are willing to have a representative come to your class to speak to your group. Make sure

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

- that the person can relate to the students.
- . Better car dealers will not keep a car very long. If it does not move in about five weeks, they will take the car to the regional car auction and wholesale it.
 - . Most used car dealers will give some kind of a guarantee on the used car. This guarantee is usually for 30 days, but may be as long as 90 days. Different dealers will state the guarantee differently such as all labor and parts on a 50-50 basis, or you pay for parts and he pays for labor, or the reverse. Make sure that the guarantee is in writing and that it is printed on paper that has the company's or dealer's letter head on it. Make sure that it is also signed by a properly authorized person.
 - . Many areas have an automobile dealers' association from which representatives will be sent to your classroom on request.
- . What does the guarantee consist of?
 - . Have students check with different used automobile dealers to discover how each dealer handles used car guarantees.
 - . Ask a used car manager or salesman to explain his company's policy on guarantees and why they selected that policy.

UNDERSTANDINGS

- . What does the term "as is" mean?

- . Why should you try to find out who the previous owner was?

- . See what financing terms the dealer offers.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . Why do dealers sell some used cars as "as-is specials"? What risks does the buyer assume? What are the advantages of buying a car "as is"?

- . Are there any local or State regulations which give you any special protection when buying a used car? Ex., New York State requires that the mileage of the odometer be recorded on the transfer stub at the time the previous owner sold his car.

- . Ask a representative of a local bank to speak to the students regarding loans to young people to buy cars.

SOURCE

- . Cars that are advertised as "as-is specials" have no guarantee with them and have had nothing done to them by the dealer.

- . Before the final decision to buy a particular used car is made, two more very important steps should be taken:
 - Check with the previous owner of the car to find out why he got rid of it. Check with him regarding the maintenance record. The automobile dealer has a record of the previous owner and should willingly give you that person's name.

- . Ask a local office of the Better Business Bureau or contact the nearest office of the State Consumer Protection Agency or the Attorney General's Bureau of Consumer Frauds and Protection.

- . Financing a used car is not always easy, and it is usually more expensive than for a new car.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
	<ul style="list-style-type: none"> . Check with different banks and with other lending institutions for financing terms. . Ask students to relate their own experiences when obtaining money to buy a car. . As a teacher you may be able to obtain a copy of the National Automobile Dealers Association Official Used Car Guide. Have students discover the difference between the average retail and wholesale price and what the average loan value of their cars is. 	<ul style="list-style-type: none"> . Local bankers' associations oftentimes have a speakers bureau that can be contacted. The bank where your school has its deposits usually is glad to help out. . A bank will usually not loan more than the average loan value quoted. . National Automobile Dealers Used Car Guide Company, 2000 K. Street, N.W., Washington, D.C. 20006

HOW MIGHT YOU ESTIMATE THE COST OF PUTTING A USED CAR IN SATISFACTORY OPERATING CONDITION?

- | | |
|--|--|
| <ul style="list-style-type: none"> . If you feel that you are incapable of making the judgment yourself, you should obtain the help of a person with knowledge of cars or an auto mechanic. | <ul style="list-style-type: none"> . This is no time to pretend you know more than you do. Hire some knowledgeable person to check the car. |
| <ul style="list-style-type: none"> . You should learn to make reasonable estimates, not guesses on needed repairs. This is an important skill both for determining what needs to be done and for determining what the dealer claims has been done. There are books which give this information without paying for someone's services. | <ul style="list-style-type: none"> . Obtain copies of "Motor's Crash Estimating Guide" and "Motor's Auto Repair Manual" and show students how they can use these books to determine what needs to be done, what the estimated cost for parts is, and what estimated labor costs are. . "Motor's Crash Estimating Guide," P.O. Box 181, Radio City Post Office, New York, N. Y. 10019 . "Motor's Auto Repair Manual," Motor, 250 West 55th Street, New York, N. Y. 10019 |

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

If the teacher does not understand the books, perhaps a student or shop teacher can make explanations.

. "Motor's Crash Estimating Guide" and "Motor's Auto Repair Manual" may be borrowed from a local garage or auto repair shop.

WHAT IS THE IMPORTANCE OF
A WARRANTY OR GUARANTEE?

- . Warranty and guarantee mean basically the same thing. The Federal Trade Commission makes no distinction between warranty and guarantee and considers them synonymous.
- . Warranties and guarantees are promises of performance or quality of goods or services. "Consumer Education - Materials for an Elective Course," 1967 syllabus, p. 23
- . In practice, a guarantee generally covers certain parts and related costs, while a warranty covers only the parts.
- . The value of a warranty to an automobile or cycle buyer is of major importance provided that it offers him protection in the event of failure of his machine to perform as it is supposed to.
- . Have students obtain copies of automobile warranties and study these in order to discover what the manufacturer and dealer will do and what the obligations of the owner are.
- . A warranty binds the seller to the extent of statements of fact he makes about the goods he sells, provided that all such statements or promises made by the seller are in written form.
- . The buyer should carefully read a warranty and be certain he understands exactly what it contains. He should make sure that what he was told is what is written in the warranty.
- . What is a "puff"? Do opinions such as "best in town" or "treated like a baby" mean anything?
- . A "puff" is a statement by a salesman that means absolutely nothing; it is only a verbal claim.

UNDERSTANDINGS

- . Time is an important element in a warranty. Too short a time coverage may mean that the car will not have sufficient usage for potential troubles to develop.

- . There are several different kinds of warranty that should be considered when buying a car

- . - Warranty of title. This warranty should be expressed (written).

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . Why have the major car manufacturers dropped the extended warranty coverage and gone basically back to the 12 months/12,000 miles warranty?
- . Hold an assembly at which a representative of a major automobile manufacturer explains his company policy regarding warranties and what, if any, major changes have taken place in recent years. Allow students to question the speaker regarding their experiences with warranties and their suggestions for improvements.
- . Compare the warranties of domestic and foreign car manufacturers. See American Motors more extensive warranty.

- . Review material covered in "What Are Warranties and Guarantees" in "Consumer Education - Materials for an Elective Course" p. 23 and material on p. 50.

- . Ask students to find out what this warranty is. Why is it important? Do they know of problems that have developed because this warranty did not exist? Why did the trouble develop? Under what conditions might this warranty apply when buying a car?

SOURCE

- . With the exception of American Motors Corporation's Buyer Protection Plan, and Chrysler Motor's 5 year/50,000 mile warranty on the drive train, the manufacturers dropped their extended coverage due to cost. Ford Motor Company has instituted, as of 1973, a new guarantee for service work performed by its dealers. This provides a 90 day/4,000 mile guarantee on all work performed on your car.

- . A copy of a good business law text book or a copy of the Uniform Commercial Code will be most helpful when teaching this material.

- . Warranty of title means that the seller has title to the item for sale and has the right to sell the item and pass the title on to the buyer.
- . New York State has a law which requires proof of title to register an automobile. This law requires proof beyond

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> - Warranty of fitness for purpose. This warranty will be implied (not stated). 	<ul style="list-style-type: none"> . What does the very title of the warranty mean to the students? How can a person determine whether an item is fit for its purpose? Under what conditions might this warranty apply when buying a car? 	<p>a bill of sale. It is a certificate issued by the manufacturer and passed on to succeeding buyers.</p> <ul style="list-style-type: none"> . Warranty of fitness means that the item sold will fit the purpose for which the buyer bought the item. When a consumer purchases an item for a specific purpose and states that purpose to the seller, there is an implied warranty that the item will serve the purpose for which it was bought. This warranty does not apply if the buyer did not state the purpose for which he was buying the item. This warranty is only between the buyer and the seller and does not apply to the manufacturer.
<ul style="list-style-type: none"> - Warranty of merchantability. This warranty is implied (not stated). 	<ul style="list-style-type: none"> . When might the warranty of merchantability be important to the consumer? Under what conditions might this warranty apply when buying a car? 	<ul style="list-style-type: none"> . This warranty implies that the goods being sold meet minimum standards, are of suitable quality, and are capable of being sold. The warranty does not exist when the consumer has an opportunity to examine the goods and fails to notice any damages or defects that are obvious and can be easily seen. This warranty is one that is being increasingly used in regard to new cars, where defects only appear after cars are operated for a period of time.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> - Warranty against encumbrances. (Usually part of warranty of title.) 	<ul style="list-style-type: none"> . What is an encumbrance? How may it apply to the purchase of a car? 	<ul style="list-style-type: none"> . This warranty means that the seller does not pass liabilities, claims against property, etc. off to the buyer of the property. Ex., a buyer who owes money on a loan which used a car as security, may not sell that car without notifying the lender. This is to protect the lender's security, but also to prevent the seller from passing his liability of debt off, along with the car. Under some circumstances a buyer of a car, used as security for a loan, could end up having to pay off the debt of the seller or lose title to the car.
<ul style="list-style-type: none"> . The consumer should be alert as to how implied warranties apply to his purchase of an automobile. 	<ul style="list-style-type: none"> . Discuss the warranty relationship between the buyer and seller again, to reemphasize the importance to the student. 	<ul style="list-style-type: none"> . Discussion of these warranties with the retailer will illustrate the buyer's knowledge of his rights and warranty laws and may prevent an attempt, on the part of the seller to take advantage of the buyer.

OF HOW MUCH VALUE IS A
GUARANTEE OR WARRANTY?

<ul style="list-style-type: none"> . As a buyer, you expect a warranty or guarantee to compensate you in the event a product so covered fails to operate properly. 	<ul style="list-style-type: none"> . Gather examples of both good and bad experiences with warranties and guarantees. It is easy to find cases in which: <ul style="list-style-type: none"> - dealers or manufacturers have gone far beyond any legal obligation to correct defects 	<ul style="list-style-type: none"> . A Federal Trade Commission Study found that in some warranties "the exclusions, disclaimers, and exceptions so diminished the obligations of the manufacturer that it was deceptive to designate the document as a warranty, because the remaining obligations were lacking in substance."
---	--	--

UNDERSTANDINGS

- . In practice the value of such statements has depended largely on the willingness of the seller to provide satisfaction.
- . Even though, technically, you could take a seller to court to have him make good on his promises, in practice you are most unlikely to spend the time or money required for legal action to correct the fault.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- other examples in which dealers have hidden behind technicalities to escape responsibility.
- . Make a list of ways in which dealers can escape responsibility if they wish to do so.
 - "Subject's warranted, but its up to the manufacturer."
 - "We'll replace the parts but it's up to you to pay for the labor."
 - "The guarantee was for 10,000 miles or 30 days. You are over the days allowed even if you have only gone 500 miles."
 - "It's a 50-50 guarantee. You pay half and we pay half but there was a lot of labor on this job so you still owe us \$200."

SOURCE

- . "How Much Good Is a Guarantee?" *Changina Times*, July 1969

HOW MUCH WILL IT COST TO OPERATE AND MAINTAIN A CAR?

- . Several different factors need to be taken into account when considering this cost.

- Initial cost of the car

- Insurance rates, which depend on:
 - . Age of driver
 - . Engine size
 - . Use of the car

- . Again discuss the issue of a new or used car, because this will make a difference as to what the initial cost is.

- . Discuss the different rates of insurance for youth and adults. The kind of car insured, location where

- . Ask a local insurance agent to speak to the class on rates.

- . See "The Consumer Looks at His Automobile Insurance."

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> . Year and model of car . Location of car (point of principle garage) . Efficiency of insurance company (rates vary) 	<p>the car is principally garaged, and how it is used will make a difference in insurance rates.</p>	<ul style="list-style-type: none"> . "Automobile Insurance," Filmstrip, Education Division, Insurance Information Institute, 110 William Street, New York, New York 10038 . Obtain pamphlets from the Insurance Information Institute. . If a car is driven for business or more than 10 miles one way to work, the insurance rate classification is different, resulting in a higher premium cost.
<p>- Cost of gasoline and oil</p>	<ul style="list-style-type: none"> . Ask students to find out why gasoline and oil will cost different prices depending on the area. . How many miles per gallon do students get with their cars? 	<ul style="list-style-type: none"> . Gasoline companies have zoned the state and nation for pricing purposes. These zones are based on delivery costs and other distribution factors. The result is that gas oftentimes will vary several cents per gallon within short distances of another retail outlet.
<p>- Location where driver lives</p> <ul style="list-style-type: none"> . Labor costs in large cities are generally more than in rural areas. 	<ul style="list-style-type: none"> . With the energy crisis and gas shortage, what are things that drivers can do to cut down on the use of gas and cut down on operation costs? . What is the going hourly labor charge in your area for car mechanics? 	<ul style="list-style-type: none"> . "Money Saving Tips From Mobil," Mobil Oil Corporation, 150 East 42nd Street, New York, New York 10017 . Other gas companies have published tips for saving fuel. . Ask a garage owner or consult statistical information printed by the New York State Employment Service.



ON THE LOOKOUT FOR GASOLINE ECONOMY?

How many miles can you get on a gallon in a 1974 car? How far can you travel on a tankful on a week-end, when gas stations may be closed? A sampling of '74s, based on estimates by the Environmental Protection Agency—primarily below 50 miles per hour in city and suburbs—

CAR (engine size in cubic inches)	Miles Per Gallon	Miles Per Tankful
Toyota Corolla Coupe (71)	27.1	320
Volkswagen Beetle (97)	21.0	223
Datsun 710 (108)	20.0	233
Opel Manta Rallye (116)	19.8	236
Ford Capri (122)	19.8	218
Chevrolet Vega Hatchback (140)	24.6	394
Ford Pinto (122)	22.8	296
AMC Gremlin (258)	15.6	328
Ford Mustang (140)	16.9	220
Volvo 144 (121)	16.1	254
Plymouth Valiant (225)	16.7	267
Dodge Dart (198)	16.0	256
Ford Torino (250)	14.0	371
Plymouth Satellite (318)	11.6	226
Pontiac Ventura (350)	9.9	203
Chevrolet Impala Coupe (350)	10.1	261
Oldsmobile Cutlass (350)	9.5	209
Buick Regal (350)	8.8	194
Mercury Montego Wagon (302)	11.4	242
Ford Galaxie (400)	10.0	220
Cadillac Eldorado (500)	10.4	261

1974 EPA fuel economy estimates are based on city and highway driving. Actual mileage may vary. For more information on car models and engine sizes available.

U. S. News and World Report
December 10, 1973

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> . Where you live will determine to some extent what accessories you buy for the car; i.e., air conditioning, snow tires, etc. 	<ul style="list-style-type: none"> . Why and how would the climate of your area affect the accessories you would buy for your car? 	<ul style="list-style-type: none"> . Ask a new car dealer what are the most popular accessories bought by residents of your area.
<ul style="list-style-type: none"> . Costs should be grouped into either Fixed or Variable (flexible) costs when making estimates of operating expenses. 	<ul style="list-style-type: none"> . After discussion with the students, list the Fixed expenses that occur on a regular basis. . List the Variable (flexible) expenses the same way as the Fixed expenses were listed. 	<ul style="list-style-type: none"> . Fixed expenses <ol style="list-style-type: none"> 1. Storage costs 2. Insurance 3. All licenses and fees 4. Depreciation 5. Loan payments . Variable expenses <ol style="list-style-type: none"> 1. Gasoline and oil 2. Repairs and parts replacements 3. Tires 4. Added accessories by the owner 5. Other expenses <ol style="list-style-type: none"> a. parking b. tolls c. car wash
<ul style="list-style-type: none"> . To determine the cost per mile of operation you must take the totals of Fixed and Variable expenses, add them together, and divide by the number of miles driven a year. 	<ul style="list-style-type: none"> . Have students determine the costs of car operation of their own or family-owned cars. Try to account for differences in cost. <ul style="list-style-type: none"> - To what extent does the size of the car affect costs? - What is the effect of start and stop driving (short hauls)? - To what extent do varying costs of insurance influence costs of driving? 	<ul style="list-style-type: none"> . "Cost of Operating an Automobile," Superintendent of Documents, Government Printing Office, Washington, D. C. 20402 (\$.15) . "Are Big Cars Doomed?" U.S. News and World Report, December 31, 1973

UNDERSTANDINGS

- . All car owners must be on the lookout for auto repair rackets.
- . Some auto accidents are caused because the car was "repaired" by a mechanic who did not know what he was doing or who made no repairs, but charged anyway.
- . Many of the new sub-compact cars are advertised to be capable of repair by the owner. Repair manuals and tool kits are available. The manuals explain step by step, with pictures, how to make many repairs and correct problems.
- . There is a growing concern over the quality of automobile repair work.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . Why is it possible for the auto repair racket to be as extensive and as costly as it is without anything being done to prevent it?
- . What can the consumer do to prevent being "taken" by an automobile repair shop? Are laws necessary to protect the consumer in this instance? Is licensing mechanics the answer to this problem?
- . Do the students feel that the average consumer is capable of fixing his own car? Is it safe for the consumer to make automobile repairs? Is a car that is repaired by the "home handyman mechanic" a greater danger to other cars on the road than is a car repaired by a garage mechanic?
- . Conduct a discussion of the quality of auto repair work. Have a mechanic, or auto shop student, present the views of those who make repairs, as well as hearing from those whose experience has been unsatisfactory. To what extent are owners culpable in that they fail to have

SOURCE

- . Most drivers today are not aware of the times they have been "taken." Many people are at the mercy of the auto mechanic and do not know enough about a car to argue with the mechanic.
- . "Hoods of the Auto Repair Racket," Moneysworth, Volume 4 number 7, January 7, 1974, 251 West 57 Street, New York, New York 10019
- . Time-Life Books has published a book on how to make simple repairs on your car, "The Time-Life Book of the Family Car," Time & Life Bldg., Chicago, Illinois 60611 (\$12.95 plus shipping and handling).

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
	<p>periodic maintenance work done, shop always for the lowest price, expect instant service or the impossible?</p>	
<p>WHAT IS THE COST TO THE CONSUMER FOR POLLUTION CONTROLS?</p>		
<p>. Regardless of what the dollar and cents costs are to reduce automobile emissions, the cost to the environment would be greater without such controls.</p>	<p>. Discuss this entire issue of environmental costs. -Is the added social cost too much? -Do we really have anything to worry about concerning pollution? -Is this environmental pollution controversy the work of "ecology nuts"? -How do students feel about this pollution controversy? -Do the students' parents feel the same about the controversy as do the students?</p>	<p>. "Can the U. S. Win the War Against Pollution?" U. S. News and World Report, March 20, 1972, (p. 84) . Obtain a copy of the "Clean Air Act of 1970," Environmental Protection Agency, Washington, D.C. . "American motorists may have to pay as much as \$70.8 billion over ten years' time for the air pollution controls needed to meet ultimate Federal clean-air standards," "The Car Buyer's Dilemma," Money, August, 1973, p. 18</p>
	<p>. Ask the Ecology teacher or a teacher of a related subject to speak to the students about this controversy over pollution.</p>	<p>. "Six Myths About Air Pollution and Your Automobile," Ford Motor Company</p>
	<p>. See "Coping with the Products of a Technological Age," Parts I & II, Publications Distribution Unit, State Education Department, Albany, N. Y. 12224 for a full discussion of the problems of automobile emission and mechanical repairs.</p>	<p>. Mobil Oil Corporation, 150 East 42nd Street, New York, New York 10017 Request reprints of "Breathe Easier - Keep Your Car in Shape" and "A Primer on Air Pollution." . Obtain a copy of the hearings on regulation enforcement of the Clean Air Act of 1970 from The Environmental Protection Agency.</p>
<p>. The cost of cleaning our air of engine emission pollutants is measured in several ways:</p>		

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
- New emission standards require equipment that reduces gas mileage greatly.	. What are some of the operation and maintenance problems which new car owners are having with 1974 and later cars? List some of these problems. What can be done to solve these problems?	. "Emission Impossible," National Observer, June 18, 1973, p. 1 . "Can the U. S. Win The War Against Pollution," U. S. News and World Report, March 20, 1972, p. 87
- The emission equipment is adding significant cost to the automobile, both in initial cost and in maintenance cost.	. What has been the experience of students' families or friends with the new pollution equipment? Do exhaust systems or ventilation systems last as long? Is the overall performance of the car as good?	. Contact a representative of an auto dealer to document these costs and explain what is involved. . "Automobile Emission Control," Ford Motor Company, The American Road, Dearborn, Michigan 48121
- The cars are harder starting, run rougher, pose definite performance problems, and use much more gasoline.		. "Emission Impossible," National Observer, June 18, 1973, p. 1 . See "Coping With the Problems of a Technological Age."
. The environmental pollution issue is much greater than just that of auto emissions:		
- Highways take valuable land and may be considered visual pollution.	. Discuss some of the issues raised in "The Consumer and Transportation" module concerning this matter.	. "The Consumer and Transportation," p. 89. . Contact the New York State Department of Transportation, State Campus, Albany, New York 12226 for further information.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> - The depletion of our raw materials poses a problem about our ability to produce needed materials in years to come. 	<ul style="list-style-type: none"> . Most of the "junk" or garbage which we dispose of can be reused in one form or another. Ask the students to describe recycling programs that exist in your area. <ul style="list-style-type: none"> - What are the details of such recycling programs? - What is your community's method of disposing of waste? - What can be done to improve the process now used? - What can students do to bring about this change? 	<ul style="list-style-type: none"> . "New Drive To Get Rid of Trash," U. S. News and World Report, June 7, 1971 . "Man Builds - Man Destroys," a television videotape series for environmental understanding, Bureau of Mass Communications, State Education Department, Albany 12224. . "Coping With the Problems of a Technological Age."
<ul style="list-style-type: none"> - The disposal of junk automobiles and trucks is a constantly increasing problem for all municipalities. 	<ul style="list-style-type: none"> . Try to take a field trip to your community's solid waste disposal facility. <ul style="list-style-type: none"> - What do you find going on? - What could be done to stop the wasting of valuable materials? . How are most junk vehicles disposed of in your community? . Ask your local government for a copy of the junk vehicle ordinance for your community. <ul style="list-style-type: none"> - What does this ordinance provide for? 	<ul style="list-style-type: none"> . Contact a local engineering firm to obtain the latest information on different solid waste disposal methods. . New York State Department of Environmental Conservation, 50 Wolf Road, Albany, New York has information available on solid waste disposal methods. . "New Drive To Get Rid of Trash," U. S. News and World Report, June 7, 1971 . New York State Department of Environmental Conservation and the Adirondack Park Authority have prepared guidelines for junk yards throughout New York State.

Section II RENTING AND LEASING CARS

Growth of Car Rental and Leasing Plans

There are a number of reasons why car rental and car leasing plans are growing in popularity. Perhaps the most important reason is that for a very modest investment (compared to the purchase price of a new or even used car) a person can have almost instant use of any model or make of car. For those who cannot afford the purchase price of a car, or who do not need a car full time, renting an auto makes sense. For example, with the growing trend toward air transportation, it is cheaper for a person to fly to his destination and then rent a car for vacation or business purposes than it is to drive a personally-owned car a long distance. Thus both for economy and convenience the rental or lease arrangement has much merit. For business men who lease fleets of cars or trucks there are tax advantages as well.

Difference Between Renting and Leasing

In both rental and lease arrangements a car or truck becomes available for the user. The major difference is in the period of time for which the car or truck is used - and of course the cost per day. Usually lease arrangements are for periods of 6 months up to 24 months while rental arrangements may be for shorter periods - as little as a few hours, or a day, a week, or month.

Requirements To Rent a Car

A valid operator's license is required to rent a car. Usually some proof of financial responsibility is also required. This might take the form of a credit card or a cash deposit. The cash deposit represents a sum sufficient to cover the estimated time and mileage charges. Usually a minor (under the age of 21) may not rent a car although there are exceptions to this rule.

Costs of Renting a Car

There are a number of different plans for rental - each with a different method of calculating cost. The most common plan is based upon the length of time the car is used, and the number of miles the car is driven. For example, a car may rent for \$10 a day and 14¢ a mile. Thus a car used for one day and driven for 100 miles would cost $\$10 + 100 \times .14 = \24 . Sometimes the gasoline is provided and sometimes it is not. In figuring estimated costs, the cost of gasoline if not provided must be added to the rental costs. A figure of 3-4¢ per mile may be used to estimate gasoline costs per mile for a small car.

Another factor in costs is convenience. The larger rental companies have offices at all major airports and in convenient places in cities. For the convenience of having a car immediately available

or delivered to the place of residence the costs are higher than they would be from an economy rental agency that does not have central offices or provide this service. Additional services provided by the major companies include furnishing only newer models, wiring ahead so that a car is immediately available, and door-to-door delivery and pickup of rental cars. Further the major car rental agencies tend to keep their offices open longer hours for the convenience of customers. The larger companies provide that a car may be left at another city without returning it to the place where it was rented. Often there is no charge or only a nominal charge for this convenience. Often the larger companies provide travel information and assistance.

Thus in figuring rental charges a number of factors enter in: the make, model, and equipment of the car, the service rendered, whether gasoline is furnished or not, whether the car must be returned to the point where it was rented. Finally there is the factor of special rates.

Special Rates

In order to keep their cars on the road and earning a maximum return, companies offer special rates - particularly for non-business hours. Some of the special plans are these:

- . Special weekend rates
- . Business day plans or "business men's specials"
- . Overnight special rates
- . Fly-and-drive arrangements
- . "Drive all you want for \$99"
- . Summer vacation deals
- . Special airport weekend rates

Price Ranges

Depending on the factors mentioned, prices may range somewhat as follows:

Daily - \$4-\$17 plus 10¢-14¢ per mile
Weekend - \$5-\$8 per day plus 7¢-13¢ per mile
Weekly - \$35-\$75 plus 10¢-14¢ per mile
Monthly - \$100-\$275

Remember, however, that the model and make of car can make a big difference. A Volkswagen may be rented for as little as \$1 per day plus 11¢ per mile, while a Cadillac may cost \$17 a day and 17¢ per mile. An intermediate size car might average \$10-\$11 per day.

Cost of Leasing

The costs of leasing a car for a period of six months or more also vary greatly depending upon the kind of car leased, how the car is equipped, how long the lease runs, and the locality. A recent advertisement in the New York City papers gives some indication of prices

per month for leases ranging from 6 months to 27 months duration:

Ford LTD - \$195
Oldsmobile Delta - \$195
Plymouth - \$74.95
Pontiac - \$99.50
Volkswagen - \$66.56

Summary

Costs of renting or leasing cars vary widely. Shop for the best buys. Figure the costs of gasoline, if not included. Using the economy rental agencies may save money. Consider the cost of service and convenience of the better known companies and decide whether these costs are warranted. Inquire about special deals that may save money. Consider whether the extra cost of a big, specially equipped car is worth the difference.

Watch out for mechanical condition as received! In dealing with a local "economy" renter, the Motor Vehicle Department often found defects that wouldn't have passed State inspection and sometimes were downright dangerous (like stalling). It appeared that the autos were simply borrowed from a dealer's used - auto lot.

UNDERSTANDINGS

SUGGESTED PUPIL AND TEACHER ACTIVITIES

SOURCE

WHY MIGHT A PERSON BE INTERESTED IN RENTING AN AUTOMOBILE?

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> . Convenience - sometimes it is convenient to have an auto available instantly, where and when you need it. You are relieved of the problems of registration, maintenance, inspection, and storage of the car when not in use. | <ul style="list-style-type: none"> . Have any of the student's parents ever rented an automobile? What were the circumstances? Why did they choose to rent an automobile? | <ul style="list-style-type: none"> . Contact the major car rental companies for materials on car renting. <ul style="list-style-type: none"> - Avis Rent A Car System, Inc., 900 Old Country Road, Garden City, New York 11530. - The Hertz Corporation Car Leasing Division, 660 Madison Ave., New York, New York 10021. - National Car Rental, P. O. Box 13586, Normandale Branch, Minneapolis, Minnesota. |
| <ul style="list-style-type: none"> . Economy - by renting you pay for a car only when you need it. You are not buying a car and paying for it and its maintenance as long as you own it. | <ul style="list-style-type: none"> . Why might a person living in a city like New York prefer to rent a car instead of owning one? | <ul style="list-style-type: none"> . People who live in large cities often do not own cars because of the expense of storage and the danger of damage or theft. Instead they use public transit on a daily basis and rent a car whenever they want personal, private transportation. |
| <ul style="list-style-type: none"> . Emergencies - People rent cars to get back home if their own car breaks down or is damaged when traveling. | <ul style="list-style-type: none"> . Plan a skit in which the family car, loaded for a vacation, breaks down near a city some distance from home. What is to be done about the camping gear, play things and clothing? Can the vacation plans be followed? | <ul style="list-style-type: none"> . Some automobile insurance and automobile travel clubs provide for rental of cars in emergency situations. |
| <ul style="list-style-type: none"> . Connections - Many people use other means of transportation such as airplane, train, or bus | | <ul style="list-style-type: none"> . Many business people fly to the various cities of their business and rent a car |

UNDERSTANDINGS

to reach the general area of their travel and then rent a car to reach the specific location where they are going, or to travel in that area.

- . To create favorable impressions - Many people rent cars to impress those with whom they will be dealing.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . Plan a skit in which a young man rents an expensive car in the hope of making a favorable impression on a girl. How might the conversation go when she gets into the car? What problems might this action cause the young man?

SOURCE

to get around while they are there. This method saves time and is convenient.

- . Most rental companies rent different models of automobiles from the sub-compacts to the large, luxurious models.

WHERE CAN YOU RENT A CAR?

- . There are many auto rental companies. Some are offices of major coast-to-coast concerns whose networks include locations directly within airports and in most major cities. Others may be local, neighborhood firms with single locations, or still others may be connected with auto dealerships or service stations.

- . What auto rental facilities are found in your community? How many major nationwide companies are there in your community? What are the other rental companies such as local or auto dealership?

- . Look in the yellow pages of the telephone directory under Automobile Renting and Leasing.

- . Different companies provide different services.
 - Some companies let you rent in one location and leave the car in another.
 - Some companies rent only for local usage and you must return the car where you rented it.

- . Why would you be wise to match your motoring requirements to the concern that best provides what you need?

- . Many times you will end up paying for services which do not fulfill your needs or you have to pay extra for increased services.

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

WHAT DOES IT COST TO RENT
A CAR?

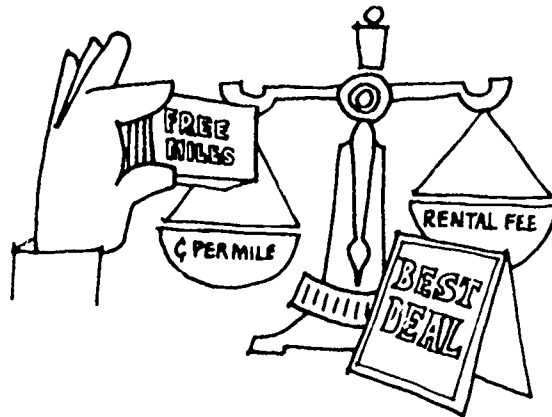
- . Rent-a-car rates are based on a series of variable factors:
 - Type and size of car
 - How long you plan to keep the car
 - Whether gas and oil are included
 - Mileage charges
 - Insurance coverage
 - Drop-off privileges
 - Time of week or season
- . Have students try to obtain the information about rental charges from car rental agencies in your community. Which agencies cost less? Why? What are "extra" charges not included in quoted price? What are the different methods of arriving at the quoted rates?
- . Generally speaking smaller cars rent at lower rates.
- . Usually rentals in the middle of the week are cheaper than weekends, although sometimes the opposite is true.
- . Car rental companies usually rent cars for either so much per mile, or they set a price per day that includes a given number of so called "free" miles.
- . Different companies offer different plans. Each has its advantages and disadvantages.
- . To find out which plan is most advantageous for you, consider how long you will want the car and the approximate number of miles you plan to drive. Then add up the costs of both methods and find out which saves you money.
- . Plan a vacation trip, using a rented car. Assuming you will be using the car for a week and driving 400 miles, which rental plan will be the least expensive?
- . See the example given on page 64.

WHO PAYS FOR INSURANCE
ON A RENTED CAR?

- . Most companies include insurance as a part of the cost of rental. This usually includes standard liability, comprehensive, and collision. Check to see how extensive the
- . U. S. News and World Report, Sept. 24, 1973, reports that a test car crashed into a barrier at 17 1/2 miles per hour sustained damages of \$1,853. How do students feel about
- . The insurance usually covers the renter and other authorized operators. The limits are usually \$100,000/\$300,000 liability for bodily injury and \$25,000 liability for

(Continued on Page 65)

Rental Costs



Company X offers a rate of \$11.99 a day and 10 cents per mile. Company Y offers a plan for \$20.50 per day including 100 free miles with additional miles costing only 5 cents. This is how your comparison might look if you were to drive 300 miles in one day under the two different plans:

Company X

\$11.99
30.00 (300 miles @ 10¢)
<u>\$41.99</u>

Company Y

\$20.50 (100 miles included)
10.00 (200 miles @ 5¢)
<u>\$30.50</u>

As you can see in this case you could save money by electing Plan B. However, you must pay for your gas under most unlimited mileage plans.

A rental company may offer you a car for four days at a cost of \$71 which includes unlimited mileage or you can rent a car for \$16 a day and 16¢ per mile. Here again, under an unlimited mileage plan you pay for the gasoline. If you were to rent a car for four days and drive 500 miles the following would be your cost:

Plan A

\$71.00 (plus gasoline)

Plan B

\$ 64.00 (\$16 per day/4 days)
80.00 (500 miles @ .16¢ per mile)
<u>\$144.00</u>

There would be a great savings if you were to rent under Plan A in this particular case even though you have to pay for your own gas.

UNDERSTANDINGS

coverage is and what you are responsible for.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

driving a rental car with a deductible collision clause of \$200 when a minor collision may involve costs such as these?

SOURCE

property damage. Generally full fire and theft protection is included. There is usually a deductible clause on collision of \$100 or \$200. The renter is liable for this amount unless he pays an additional amount to provide full coverage. (See waiver statement or rental agreement, following page.)

WHO CAN RENT A CAR?

- . Generally anyone over 21 years of age, with a valid driver's license and adequate credit identification can rent a car. Under special conditions people under 21 can rent a car.
- . Why would the rental company be specially interested in a person's credit position? Why might a credit card be especially important in such a case?
- . Most rental companies require an acceptable credit card. Often times individuals without acceptable credit cards cannot rent a car.
- . See Sample Rental Agreement on page 5.

WHY MIGHT A PERSON DECIDE TO LEASE AN AUTOMOBILE?

- . There are several reasons why people lease automobiles.
 - They may desire new, up-to-date cars replaced on a regular basis.
 - People cannot get good service on their cars after the warranty is used up.
 - Salesmen, doctors, lawyers, and others in business can deduct the cost of a leased car on their income tax.
 - Some companies find it easier and more convenient to lease without having to be bothered with maintenance and service.
- . Ask students if they know anyone who leases an automobile. Why do they lease?
- . "Car Leasing May Ease Repair Headaches," National Observer, August 4, 1973

RENTAL AGREEMENT

RENT-A-CAR

NO _____

LESSEE PRINT NAME _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP _____

DRIVER'S LICENSE NO.	STATE	EXP DATE
AGE	HOME PHONE	
LOCAL CONTACT OR ADDRESS		PHONE
EMPLOYER'S NAME		
EMPLOYER'S ADDRESS		PHONE
CITY STATE		
CREDIT REFERENCE		
CREDIT CARD CO.	CARD NO.	
OTHER		

THE LESSEE MAY PERMIT ANY OF THE FOLLOWING PERSONS TO DRIVE IF THEY ARE QUALIFIED LICENSED DRIVERS AND 21 YEARS OF AGE OR OLDER.

NAME	AGE	REASON
NAME	AGE	REASON

This Vehicle covered with Full Coverage Collision Protection, for which the Lessee agrees to pay the sum of \$ _____ per day or \$ _____ per week over and above the rental charge.

The Lessee DOES NOT want Full Coverage Collision Protection and accepts full responsibility for all damage to rented vehicle up to \$100.00 if a car or light duty truck, and \$250 if a larger series truck, per collision or other incident.

BY _____ LEASER BY _____ LESSEE

VEHICLE CONDITION	OUT	IN	VEHICLE CONDITION	OUT	IN
FENDERS			WHEEL COVERS		
GAS AT RENTERS EXPENSE			RADIO		
CLASS			TOOLS		
WHEEL			WARRANTY MANUAL		
SP AL 17H					
BUMPERS			CK'D OUT BY		CK'D IN BY

VEHICLE NO		LICENSE NO
YEAR - MAKE		MODEL AND COLOR
SPEEDOMETER IN		DATE DUE AND EXPIRATION OF CONTRACT
SPEEDOMETER OUT		DATE AND TIME IN
MILES DRIVEN		DATE AND TIME OUT

RENTAL RATES		CHARGES	
HOURS @	PER HOUR \$		
DAY @	\$	\$	
WEEK @	\$	\$	
MONTH @	\$	\$	
MILES @	¢ PER MILE \$		
TOTAL MILEAGE AND RENTAL CHARGE		\$	
SALES TAX		\$	
COLLISION PROTECTION		\$	
TOTAL CHARGES		\$	
LESS CREDITS		\$	
TOTAL CHARGES		\$	
LESS DEPOSIT		\$	
BALANCE DUE		\$	
CASH REFUND		\$	

THE OPERATION OF THIS VEHICLE BY ANY DRIVER UNDER 21 YEARS OF AGE IS PROHIBITED UNDER PARAGRAPHS 1 AND 5 ON PAGE 1 OF THIS AGREEMENT. LIABILITY INSURANCE DOES NOT PROTECT LESSEE OR DRIVER IF DRIVER IS UNDER 21 "

Lessee agrees to rent the above vehicle subject to the terms and conditions stated above and on the reverse side.

RENTAL AGREEMENT PREPARED BY _____
 FORM FD-22-1 REV. 14 701

Courtesy of Glen Ford Inc., South Glens Falls, New York. Permission Granted.



UNDERSTANDINGS

- . The lessee has the option at the end of the contract to buy the car at the wholesale price if he wishes.
- . The average individual probably would not lease an automobile.
 - Most individuals keep a car past the length of time needed to finance the vehicle.
 - Most individuals cannot deduct the expense of the car as a business expense.

WHERE CAN AUTOMOBILES BE LEASED?

- . Many automobile dealers have leasing agencies connected with them, either as a subsidiary business or as a connected business owned by the manufacturing company, a franchised operation.
- . Fleet leasing agencies such as Avis, Hertz, and National Car Rental offer leasing for the individual as well as the fleet owner.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . Where can a car be leased in your community? Where do business people of your community lease their automobiles?

SOURCE

- . Most lessees do not wish to buy the car because they prefer not to be bothered with car ownership and they prefer a new car.
- . See "Car Leasing May Ease Repair Headaches."
- . There are exceptions that must be figured. If a person is financing the whole amount of the car, with no downpayment, and is in the habit of trading cars every two to three years, a leased automobile may be cheaper or no more expensive.
- . Contact your local automobile dealer or his automobile leasing agency.
- . Check the telephone directory yellow pages.
- . Most fleet leasing companies have counters at airports, train terminals, etc. for car rental. You can make lease arrangements at these same places. Most long term leases for these companies are handled by salesmen who either come to your home or receive you in their offices.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> - Large companies may lease a fleet of cars instead of tying up operating capital in automobiles. 	<ul style="list-style-type: none"> . Contact a local company to find out how they obtain their cars. Why do they obtain them the way they do? 	<ul style="list-style-type: none"> . The Hertz Corporation, Hertz Car Leasing Division Regional Office, 660 Madison Ave., New York, New York 10021 . Avis Car Leasing, 1 DuPont Street, Plainview, New York 11803
<ul style="list-style-type: none"> . Comparison of total costs is absolutely necessary in automobile leasing. <ul style="list-style-type: none"> - Lease contract details vary widely. - Quoted prices vary greatly. 	<ul style="list-style-type: none"> . Contact local leasing agents and discover what different lease provisions are available. 	<ul style="list-style-type: none"> . A local automobile dealer who also has a leasing agency connected with it . Any local leasing agency
<p>WHAT PRECAUTIONS SHOULD A PROSPECTIVE LESSEE OBSERVE?</p>		
<ul style="list-style-type: none"> . There are four different types of lease contracts. Some are to the lessee's advantage and some definitely to his disadvantage. <ul style="list-style-type: none"> - Finance Lease 	<ul style="list-style-type: none"> . Have a leasing agent from a local agency explain the different forms of leases to the class. 	<ul style="list-style-type: none"> . The Finance Lease is mainly used by large corporations where the entire cost of the lease is written off as a business expense. At the end of the lease the lessee usually buys the automobile for a nominal amount. This method is used most often for fleet purchase without tying up a large amount of money at one time. An individual would not use this method.

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

- Open End Lease

. Are there indications that the trend is more and more toward renting or leasing objects? Leasing of apartments is common. Is there a trend in your community toward renting furniture or tools? Do families rent furnishings for parties? Do homeowners rent or lease cement mixers, saws, and other expensive tools instead of tying up money for a long term? Is it likely that increasingly drivers will want to rent or lease cars to avoid the problems of accumulating sufficient capital to purchase a car, or tying up the purchase price for a period of years?

. Under the Open End lease the lessee assumes the full responsibility for the car at the end of the contract. The lessee agrees at the time of the commencement of the contract to guarantee the lessor a predetermined amount for the depreciated car at the contract termination. The lessee then owns the car, sells the car, or has the lessor sell the car. If the car is sold for more than the predetermined price the lessee gets the excess. If the car sells for less, the lessee must make up the difference to the lessor. This contract is the safest for the lessor because he is guaranteed his money. This type of contract is usually used to advertise a ridiculously low price as a leasing come-on.

- The Closed End Lease and the Net Lease are basically the same thing and can be treated as such.

. Closed End and Net Leases are usually used for individuals. They will be more expensive than the Open End lease on a monthly basis, but will usually cost the same or less over the full contract. These leases have all contracted costs included in the monthly payment except an excess mileage cost. This means that all costs of

UNDERSTANDINGS

SUGGESTED PUPIL AND TEACHER ACTIVITIES

SOURCE

- . The Closed End Lease may have many other services included in it such as:
 - Licenses and fees
 - Maintenance
 - Service
 - Insurance

- . Conduct a discussion of real-life experiences of those in the community who have rented or leased cars. Did any of them have unfortunate experiences because they did not understand the contract? If so, what were those experiences and how could they have been avoided?

the lease are paid through monthly payments with no additional amounts due at the end, except a charge for driving the car over the estimated number of miles per year upon which the monthly charge is computed.

- . Each Closed End Lease can be tailored to the needs and desires of the lessee.

- . Read the contract which follows and analyze what the contract says.
- . Ask the Business Law teacher to go over the contract with the class. What are the lessee's obligations?

- . See the illustration on page 71. This is an example of a basic Closed End or Net Lease. It is reprinted here with permission of the company to illustrate what is involved in such a contract.

SHOULD AN INDIVIDUAL CONSIDER LEASING A CAR INSTEAD OF BUYING A CAR?

- . Several facts must be determined before you can decide whether to lease or not. Factors to remember:
 - The cost of the lease is tax deductible.
 - If you wish or need a new car every two or three years, leasing may be sensible.

- . Ask a leasing agent to explain why an individual may decide to lease the car instead of buying the car.

- . Some business people can use as a tax deduction the full or partial cost of the leased car.
- . Leasing of the car will probably not be cheaper than buying, but it may eliminate some of the problems related to trading and buying the car.

Illustration

LEASE AGREEMENT

THIS AGREEMENT entered into as of the _____ day of _____, 19_____, by and between GLEN LEASING, a principal place of business at 116 Saratoga Avenue, South Glens Falls, Saratoga County, New York, hereinafter called "Glen," and _____, hereinafter called "Lessee,"

WITNESSETH THAT:

The parties hereto intending to be legally bound hereby agree as follows:

LEASE OF
VEHICLES

Article 1. Glen shall lease to lessee new vehicles of such make, model and equipment as may be agreed upon and ordered by Lessee. The vehicles leased hereunder shall be owned by and titled and/or registered in the name of Glen. The lease term for each vehicle leased hereunder shall be for a period mutually agreed upon, and as set forth on Exhibit 1, commencing on the date the such vehicle is delivered by Glen to Lessee.

INDIVIDUAL LEASE
AGREEMENT & ACCOUNTING
FORM

Article 2. Upon delivery of each vehicle to Lessee, Lessee and Glen shall execute a Lease Agreement in the form attached hereto and marked Exhibit 1. This Exhibit 1 shall identify the vehicle, set forth the monthly rental payments to be made with respect hereto, the date delivered, and other appropriate information as provided for in said form of Lease Agreement. Each such Lease Agreement shall expressly be made subject to the terms and provisions hereof.

AGREEMENT

Article 3. This agreement is one of lease only and Lessee has not and will not acquire any other right, title, or interest in or to the vehicle covered by this Agreement.

RENTAL
PAYMENTS

Article 4. Lessee agrees to pay Glen, at South Glens Falls, New York, a monthly rental for the use of each vehicle leased hereunder during the period of lease. With respect to each vehicle all rental payments are due as of the first of the month and payments should be received no later than the 15th of the month. Time is of the essence. Lessor may collect a delinquency and collection charge on each payment in default after 15th of month due of an amount not exceeding 5% of each installment or \$5.00 whichever is the lesser. A full months payment is due at the time of delivery of vehicle, plus a \$100.00 assurance deposit. At contract termination, the assurance deposit will be

returned to the lessee after the lessee's contract obligations have been satisfied in full. A rental payment shall be made for the month in which a leased vehicle is removed from service. Should the Prime Rate of interest be increased over % the Finance & Administrative fee shall be increased by .5% of the stated monthly lease payment for each 1/4% interest change.

INSURANCE PL &
PD, FIRE, THEFT
& COLLISION

Article 5. Insurance shall be procured for each vehicle and shall be maintained during the term of the lease with companies satisfactory to Lessor. Prior to delivery of any vehicle, proof of insurance will be provided as required by Lessee and/or Lessor.

If lessee provides insurance, such insurance shall be endorsed to provide that Insurer will notify Lessor immediately in the event the insurance should be materially altered or cancelled and Lessor may (but shall not be obligated to) secure necessary insurance protection at Lessee's expense.

Lessor's charges for insurance are subject to escalation to reflect changes in the cost of insurance to Lessor. If such charges increase, Lessee shall have the option of providing his own insurance.

If Lessor has agreed to provide insurance, Lessor may nevertheless require that such insurance be provided by Lessee if Lessor deems the vehicle to be exposed to extraordinary risk or if Lessor's Insurer cancels its policies covering such vehicle. Lessor will make an appropriate adjustment in the monthly rental charges in event Lessee is required to provide insurance.

Lessee and Lessor, their agents or employees, shall comply with all the terms and conditions of said insurance policy, including the immediate reporting of all accidents to Lessor and Insurer, and do all things necessary or proper to protect or preserve the other party's rights as a named insured in said insurance policies.

All insurance policies covering the vehicle shall be endorsed to protect as their interest may appear, Lessee, Lessor, and any other person having an interest in the vehicle.

HOLD
HARMLESS

Article 6. Lessee shall hold Glen harmless for any loss to Lessee or others due to failure or delay in delivering any vehicle, or the failure of any vehicle to operate properly, or the time consumed in servicing, repairing, adjusting, recovering, or replacing any vehicle. Under no circumstances shall Glen be liable for loss of or damage to property carried or left in any vehicle.

COSTS REIMBURSED
BY LESSEE

Article 7. Fees paid by Glen for initial state and local license tags, plates and any certificates of title, registration and similar compliances required by law, and for any federal, state, or local taxes, not included in the cost of such motor vehicle, shall be separately billed to Lessee by Glen at time of delivery, or as subsequently assessed.

RESPONSIBILITY FOR
MAINTENANCE

Article 8. Lessee shall furnish full maintenance of the motor vehicle covered by this lease during the lease term. The maintenance shall constitute all parts, materials, accessories, motor oil, tires, anti-freeze, washing, gasoline, and labor necessary for the operation of the vehicle. Lessee agrees to return each vehicle to Glen in good mechanical condition, fair wear and tear excepted, free of unrepaired damage or broken glass.

USE OF LEASED
VEHICLES

Article 9. Lessee shall use and operate and permit use and operation of each vehicle in compliance with all requirements of any governmental authority including, without limitation, requirements of age and licensing of drivers. In no event shall any vehicle be used or operated by a person under the influence of alcohol or narcotics, for transportation of goods or persons for hire; to push or tow another vehicle or trailer; nor in any race, speed test, or contest, nor recklessly as to speed or otherwise.

Lessee shall make no adjustments or changes in any vehicle nor place any signs or markings on any vehicle without Glen's permission. In event such permission is granted, Lessee shall bear the cost of repairing any damages or removal of such signs and markings upon termination of the lease.

Lessee agrees to reimburse Glen for any and all loss or damages resulting from confiscation of any vehicle except where such loss is compensated for by insurance payable to Glen. If any driver employed by Lessee to drive said vehicle shall be reasonably objectionable to Glen, Lessee shall not require Glen to supply a vehicle for said driver's use.

Lessee shall not permit any lien to be placed upon any vehicle without consent of Glen.

DEFAULT

Article 10. In the event the Lessee shall default in any of the payments due Glen under this agreement, or in performance of any covenant or condition hereunder, and such default remains uncorrected within 30 days, all rights of Lessee hereunder shall terminate and Glen may take possession of the vehicle. Such possession on the part of Glen shall not be deemed an act of termination of this agreement, nor prejudice any other remedies that Glen may have in connection with this agreement. In addition to being liable for the immediate payment of the

entire fixed rental charge for the balance of t term of this agreement, Lessee agrees to pay any and all attorney's fees if placed in the hands of any attorney for collection.

BANKRUPTCY

Article 11. This lease shall terminate automatically and without notice, if, in either a state or federal court, a receiver in equity is appointed for the Lessee, or if a petition in bankruptcy or for reorganization shall be filed by or against the Lessee, or if Lessee shall fail to give immediate notice to Glen of any distress or levy or execution purported to be made or laid against the property hereby leased or any part of it.

LEGAL PROHIBITIONS

Article 12. All provisions of this Agreement prohibited by the law of any state shall, as to said state, be ineffective to the extent of such prohibition without invalidating any other provisions.

AGREEMENT BINDING

Article 13. This Agreement shall be binding upon the parties hereto, their heirs, executors, successors, legal representatives and assigns; and Lessee shall not have the right to assign this Agreement or any interest therein without the written consent of Glen.

Article 14. This Agreement shall be governed by and shall be construed according to the laws of the State of New York.

Article 15. This document together with exhibits attached hereto constitute and will constitute the full, complete, absolute and entire agreement between Glen and Lessee. There are no oral agreements or understandings affecting this instrument. Any future understanding, agreement or waiver to be binding upon the parties hereto must be reduced to writing and attached hereto, and Glen's failure to enforce any provision of this Agreement shall not be construed as a waiver thereof or as excusing Lessee of future performance.

IN WITNESS WHEREOF, Glen and Lessee have caused these presents to be duly executed the day and year first above written.

(Lessee)

GLEN LEASING

(Lessor)

By: _____
Authorized Signature

By: _____
Authorized Signature

(Individual)

(Witness)

(Witness)

(Date)

(Date)

GLEN LEASING

EXHIBIT 1

YEAR: LEASE VEHICLE #:
MAKE: DATE IN SERVICE:
MODEL: MONTHLY RENTAL CHARGE:
SERIAL #: NUMBER OF MONTHS:
COLOR: FIRST PAYMENT DUE: ON DELIVERY

BY MUTUAL AGREEMENT BETWEEN THE PARTIES HERETO ENTERED INTO THIS _____
DAY OF _____, 19_____, IT IS AGREED THAT
THIS EXHIBIT 1 IS HEREBY MADE A PART OF THAT CERTAIN LEASE AGREEMENT
BETWEEN THE PARTIES HERETO DATED THE _____ DAY OF _____,
19_____.

GLEN LEASING

BY: _____
Authorized Signature

By: _____
Authorized Signature

Witness

Witness

Permission Granted
Courtesy of Glen Ford, Inc., South Glens Falls, New York.

Section III CARS AND THE ENERGY CRISIS

HOW IS AUTOMOBILE USE AFFECTED BY THE ENERGY CRISIS?

- . A nation that for decades has been urged to take to the roads... is starting to hear strange words: "Don't drive too much."
- . The gasoline shortage, which first really hit the U. S. in the summer of 1973, began to cause the nation to reevaluate the importance of the automobile.
- . A top gasoline industry official believes that it will take 20 years before the U.S. can completely solve the energy crisis.
- . In the decade since 1962 gas consumption in the U. S. has increased 54.9 percent.
- . How many people do you know who have found some other source of transportation? What have the alternate transportation sources been? Why were these alternate sources selected? Do you think that once the gasoline shortage has been solved, consumers will go back to former practices in the use of gasoline?
- . "Gas Shortage — Fact or Fiction," U.S. News and World Report, January 14, 1974, p. 16
- . "Ways To Beat the Gas Shortage," U.S. News and World Report, June 4, 1973, p. 24
- . "Ways To Break the Traffic Jam," U.S. News and World Report, July 23, 1973, p. 37
- . "People Crowd Trains Again; Find Problems — and Pleasures," U.S. News and World Report, July 2, 1973, p. 59
- . Because of increased cost of gas, the scarcity of gas, the decrease of miles per gallon, and the rising cost of the automobile, many people have turned to riding bicycles as an alternative source of transportation. The result has been a tremendous increase in bicycle sales.
- . "The Gasoline Shortage — When Will It End?," U.S. News and World Report, July 2, 1973, p. 29
- . U. S. motorists are using enormous quantities of gasoline. There are close to 115 million vehicles on the road and new car sales are predicted to increase the number about 15 million more, within 2 years.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
. The energy crisis has tended to cause Americans to become more interested in smaller cars.	. Ask an automobile dealer how his small car sales have compared with his full-size car sales.	. Richard Gerstenberg, chairman of General Motors Corp., reports that compact cars presently account for 50 percent of GM's total sales and predicts that this will increase to 70 percent in the near future.
. As the energy crisis has developed, the Environmental Protection Agency has also been trying to set standards to implement the Clean Air Act. If some of the recommendations of the EPA were to be instituted, much energy could be saved.	. What could be done in your locality to save on gas and at the same time cut down on pollution? - Improve public transit - Establish car pools - Ration gas - Eliminate cars from the inner city - Other ideas of students	. Obtain copies of Environmental Protection Agency recommendations for implementing the Clean Air Act. Environmental Protection Agency, Washington, D. C.
. Because of the gas shortage many of the gasoline companies have dropped their hard sell advertising.	. Ask students to select ads of major gasoline marketers and see what the new ads say. What is the major message which the gas companies are trying to convey?	. "Oil Companies Shave Their Product Ads," Business Week, June 2, 1973, p. 23
. As the energy crisis has compounded, the National government has taken action to make the available product meet the nation's needs.	. What role should the government play in meeting the energy needs of the nation?	. The President has created the Federal Oil Policy Committee as part of the Office of Emergency Preparedness. . "The Gas Shortage - How Real Is It?," U. S. News and World Report, June 25, 1973, p. 34
. The President established an Energy Policy Office in the White House and suggested a new cabinet Department		. "Fresh White House Moves To Cope With Energy Crisis," U. S. News and World Report, July 9, 1973, p. 21

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

Of Energy and
Natural Resources to
replace the Interior
Department.

- . New York State's former Governor Nelson Rockefeller proposed that the speed on all interstate highways be reduced to 55 miles per hour. Speed on all New York State highways was reduced to 50 miles per hour. Governor Malcolm Wilson raised the highway speed limit to 55 miles per hour in January 1974.
- . Others have proposed that a special tax be placed on large or powerful cars which use larger quantities of gas. Still others have proposed that a special tax be placed on automobiles that carry only one person.
- . Gas shortages caused serious hardships in various sections of the nation during the first quarter of 1974.
- . What do students think about a reduced speed on our highways? Was it adequately enforced? Did the motoring public support such a plan? Why do the students feel that the reduced speed plan was a success or failure?
- . Would such plans be fair? Would the students support a special tax on gas used at race tracks and drag strips? Would they support a special fine for using excessive gas for overly fast starts and for excessive speed?
- . How would students suggest that the motoring public be persuaded to reduce gasoline consumption?
- . Do students feel that further actions should be taken to make problems of gas shortage more acceptable? What do they feel could be done that has not been done?
- . On December 4, 1973, President Nixon established the Federal Energy Office.
- . "As Gasoline Shortages Grow," U.S. News and World Report, June 18, 1973
- . Former Governor Rockefeller reported that his proposed speed reduction plan would save 1.5 percent of the gasoline consumed.
- . See "Gasoline Economy Test," page 80.
- . See Final Report of the Ad Hoc Committee on Energy Efficiency in Transportation from the Interdepartmental Fuel and Energy Committee, Public Service Commission, Albany, N.Y.
- . The gas shortage caused serious traffic problems in large urban areas. There, long lines of gasoline consumers developed and serious threats to the social structure became daily problems.

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

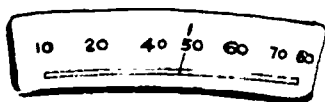
- | | | |
|--|--|---|
| <ul style="list-style-type: none"> . The energy crisis has caused many to rethink their position on mass transit. - There is a slow increase in passenger traffic on both intrastate and interstate trains. - Many cities are developing systems of express buses running from suburbs, on express lanes of highways, to reduce traffic congestion in the cities. This also reduces energy consumption because buses carry many more people than do cars for the same amount of fuel. | <ul style="list-style-type: none"> . Invite a speaker from the New York State Department of Transportation or write Donn Fichter of that Department, 50 Wolf Road, Albany, N.Y., to learn of minibus systems. Is it true that many regular, fixed-route, scheduled, local transit operations no longer meet the needs of autoless persons? If so will mini-buses provide the answer? What are the economies of mini-bus operation? With fixed wages for the driver (the main expense), will mini-buses continue to constitute high cost operations due to fixed wages, shorter effective life of buses, and higher maintenance costs? (The total expense per ride on a mini-bus in Ann Arbor, Michigan, is about \$1.50 although the fare is only about 50¢. The balance must be subsidized.) | <ul style="list-style-type: none"> . "Energy—How Much Worse?" U.S. News and World Report, February 11, 1974, p. 20 . President Nixon's message on "Mass Transportation," broadcast to the nation via radio, on February 9, 1974 . "People Crowd Trains Again, Find Problems - and Pleasures," U.S. News and World Report, July 2, 1973, p. 60 . Contact the Transportation Administrator for the District of Columbia, Washington, D.C. . "Ways To Break the Traffic Jams," U.S. News and World Report, July 23, 1973, p. 37 . Contact the Metropolitan Transportation Authority, 1700 Broadway, New York, New York 10019 concerning their reestablishment of double deck buses. . See "The Consumer and Transportation," p. 59. . "Getting More Mileage From Your Gas Dollar," Moneysworth, February 4, 1974, 251 West 57 Street, New York, N.Y. 10019 |
| <ul style="list-style-type: none"> . Other cities have set aside special lanes or streets for bicycles and have made special arrangements for parking bicycles. | <ul style="list-style-type: none"> . To what extent are bicycles increasing in popularity in your area? What could be done to increase the use of bicycles and the reduction in the use of cars? | <ul style="list-style-type: none"> . "A Toy Finds a Place in Traffic - Bicycles Are Back and Booming," National Geographic, May 1973 |

ILLUSTRATION C

GASOLINE ECONOMY TEST

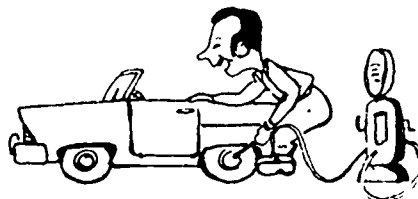
1. You know that you use more gasoline at high speeds, but how much more gasoline do you use at 10 mph than at 50 mph?

A. 2% B. 5% C. 10%



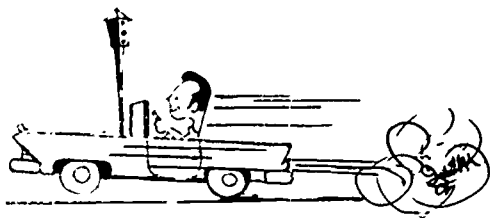
2. Gas is wasted if the tires are not properly inflated. Which causes poorer mileage?

A. Overinflated Tires
B. Underinflated Tires



3. Jackrabbit starts ("peeling out") use up a greater amount of gas than normal starts. How many miles per gallon do jack-rabbit starts cost you on the average?

A. 1 mpg B. 2 mpg
C. 4 mpg



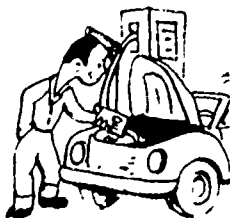
4. Cars equipped with standard transmission use less gasoline. Shifting into high as quickly as possible saves gas. How much more gas do you think is used racing along in 2nd as compared to driving in high?

A. Up to 30% B. Up to 45%
C. Up to 60%



5. The kind of oil used can affect engine performance. The better performance, the less gas used. Under what conditions should premium oil be used?

A. High-speed Driving
B. Hot-weather Driving
C. Stop-and-go Driving



6. A car not properly tuned uses gas inefficiently. About how much gas do you think is wasted by an improperly tuned car?

A. Up to 4% B. Up to 8%
C. Up to 12%



Answers

1. C; 2. B; 3. B; 4. B; 5. A, B & C; 6. B

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
WHAT CAN CONSUMERS EXPECT AS A RESULT OF THE ENERGY CRISIS?		
. It is expected that a number of improvements will come as a result of the gasoline shortage:	. Ask pupils, the science or automotive teacher, an engineer, or other knowledgeable person what changes can be expected that might benefit the driving public.	. "Cars That Will Gulp Less Gas - What Detroit Is Doing," U. S. News and World Report, December 17, 1973
- safety	. Have pupils determine from the Motor Vehicle Department whether the energy crisis has resulted in fewer accidents.	. Authorities estimate that "lower speed limits and less driving should save 14,000 lives a year." Ibid.
	. Do pupils practice safer driving habits as a result of the shortage of gas and the limitations of speed? Do they notice that other drivers are demonstrating better driving practices?	. "The National Safety Council estimates that fatalities will drop as much as 25%." Ibid.
- related savings	. What concomitant benefits will result from safer driving at lower speeds?	. "If these projections hold true, the fringe benefits would be innumerable. It would take the strain off a lot of overworked policemen, rescue squads and hospitals, for example. The amount of our resources wasted on traffic accidents is enormous." Ibid.
- shift to small cars	. Have pupils survey the school or shopping center parking lots. What percentage of cars are: - minis (Gremlin, Vega, Pinto, etc.) - compacts (Hornet, Apollo, Nova, Dart, Maverick, Comet, Omega, Valiant, Ventura, etc.)	. "Automobile manufacturers are giving top priority to -- major reductions in the size of American cars and, eventually, alternate sources of power. Weight is the number 1 enemy of fuel economy. For each extra 400 pounds, the driver loses one mile per gallon of gas." Ibid.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
	<ul style="list-style-type: none"> - intermediates (Mata-dor, Ambassador, Century, Chevelle, Coronet, Torino, Montego, Cutlass, Satellite, Le Mans, etc.) - standards (Chevrolet, Ford, Plymouth, Buick, Chrysler, Dodge, Mercury, Oldsmobile, Pontiac, Cadillac, Imperial, Lincoln, etc.) 	
	<p>What conclusions do students draw from the survey regarding car size?</p>	
<ul style="list-style-type: none"> - mileage improvement devices 	<ul style="list-style-type: none"> . Survey the literature in Changing Times, Consumer Bulletin, Consumer Reports, and other sources to determine what engineering changes are being made to give better mileage. 	<ul style="list-style-type: none"> . "The 1974 Cars - A Roundup," Changing Times, December 1973
<ul style="list-style-type: none"> - <u>Overdrive</u> 	<ul style="list-style-type: none"> . Ask the automotive teacher to describe how <u>overdrive</u> works. Ask parents who owned a 1940 car equipped with overdrive to describe their impressions of this device. 	<ul style="list-style-type: none"> . <u>Overdrive</u> is a device adding an extra gear that lets the engine maintain cruising speed with minimum effort.
<ul style="list-style-type: none"> - gas-minder devices 	<ul style="list-style-type: none"> . Investigate the gas-minder gauge, an instrument that keeps the driver informed at all times whether he is operating his car at the most efficient speed. 	<ul style="list-style-type: none"> . Most farm tractors are equipped with a gauge so that the operator knows when his machine is operating at the optimum engine speed for the load it is carrying.
<ul style="list-style-type: none"> - optional-axle ratios 	<ul style="list-style-type: none"> . Investigate the savings possible in changing the rear-axle ratio. Ask the owner of a ten-speed bicycle to demonstrate how changing the gears can change the 	<ul style="list-style-type: none"> . Chrysler Corporation is experimenting with different rear-axle ratios to determine which will provide the optimum mileage.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
- use of radial tires	<p>speed of wheel rotation while pedal speed remains the same. Relate this to rear-axle ratios on cars.</p> <p>. Have a tire dealer explain the difference between a radial and a conventional tire. Why might economies be effected by the use of radial tires?</p>	. Tire manufacturers claim that radial tires can save as much as 10 percent in gasoline consumption.
- newer types of engines	<p>. Investigate possibilities for more efficient or less polluting types of engines. Inquire of General Motors what their plans are to introduce the Wankel rotary engine in next year's Chevrolet Vega. What benefits are claimed for the Wankel engine?</p>	. Engines of a different design will undoubtedly be introduced — some within a year. . Ask the automotive shop teacher to explain the design of the Wankel engine.
- expanded use of diesel engines	<p>. Inquire of Ford Motor Co. and Chrysler Corporation about their plans for a stratified-charge engine.</p> <p>. Ask automotive pupils to describe how a diesel engine operates and what its advantages are (less expensive fuel than gasoline, good mileage). What are its disadvantages? (weight, more costly to build, fuel is in limited supply).</p>	. The stratified-charge engine operates on the principle that combustion begins just outside the cylinder in a small chamber and quickly spreads inside. In the cylinder there is more air and less gasoline than usual. The double burning reduces pollutants and promotes efficiency. . The diesel engine is not new. It is widely used in tractors and in the Mercedes-Benz passenger car.

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

ARE THERE OTHER TYPES
OF FUELS THAT MIGHT
REPLACE GASOLINE?

- steam

- . Invite the science teacher to discuss the possibilities of using other types of fuel for automobile power plants.
- . Older members of the community may remember the Stanley and the White cars which operated on steam. How well did these cars work? How was the steam generated? Why did these cars fail to gain wide popularity? (weight, time for steam to generate, cost.)
- . Engineers are engaged in a feverish search for automotive fuels other than gasoline. They are reexamining the possibilities of the steam and electric engine as well as the use of gas turbines and hydrogen as a fuel. Another possibility is the use of wood alcohol.

- electricity

- . Are there any electrically powered cars or trucks in your community? Are electrically powered hand trucks or fork-lift trucks used in industry? Why might a fork-lift truck be practical but not an electrically powered delivery truck? What are the advantages of electric power? (quietness, freedom from dependence on gasoline) What are the disadvantages? (short operating time, weight of batteries, limited speed, need for frequent re-charging)
- . Electric cars operating on storage batteries were once fairly popular among wealthy people. Recently some engineers have been building modern models of such cars.
- . General Electric produces the Elec-Trac Tractor as a garden tractor. It comes in 10, 12 & 15 horsepower models with attachments.
- . Golf carts have been run on electricity for several years. The speed is minimal, but the power source is efficient.

- other types of gas

- . If there are farm students in the class, they may be aware of
- . Theoretically any type of combustible gas could be used to

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

- hydrogen

tractors that use propane, methane, butane, or other types of gas as a fuel. Why are such fuels not more widely used?

operate an engine. In practice the cost of producing, the scarcity, pollution problems, and other factors limit the use of most gases.

. One gas under active consideration is hydrogen. Ask the science teacher to demonstrate how this gas is easily made from water. Have him demonstrate the explosive property of the gas. With unlimited amounts of water available in the oceans, and with a known process to extract hydrogen, why is not more use made of this fuel, especially in view of the fact that burning it would not pollute the environment? (Prodigious amounts of energy from other sources would be needed for the conversion process. The gas tank to store the hydrogen would need to be as big as the car.)

. There is considerable research being done by environmental and organic farming groups using methane gas made from manure. The gas can be used to run internal combustion engines and the compost is excellent for the garden.

. "Cars That Will Gulp Less Gas - What Detroit Is Doing," U.S. News and World Report, December 17, 1973

Section IV CARS AND CONSUMER SAFETY

WHAT IS BEING DONE BY PUBLIC AGENCIES TO ASSIST THE PUBLIC IN MAINTAINING SAFER CARS?

- . The National Traffic and Motor Vehicle Safety Act of 1966 requires automobile manufacturers to notify owners by certified mail whenever it is determined that their automobile may contain a defect that could impair its safe operation.
- . Ask students if any of their family vehicles have been recalled.
 - Why was the vehicle recalled?
 - What did the family do about the recall?
 - What did the auto dealer do to correct the problem?
 - Did the student feel the recall campaign was worth the effort?
- . "Making It Safer To Drive - What's Happened, What's Ahead," U. S. News and World Report, July 24, 1972, p. 72
- . National Highway Traffic Safety Administration, Department of Transportation, Washington, D. C. (Request the "Motor Vehicle Safety Defect Recall Campaigns" for the most recent year.)
- . Owners are notified by the auto company to take the vehicles in question to a nearby dealer for inspection. Dealers are furnished service bulletins telling them what to look for and how to repair the part. The company furnishes the repair part.
- . The cost of the recall is carried by the manufacturers. The law does not presently require manufacturers to bear the cost, but most notices state, "this service will be performed at no charge to you."
- . Although recall services are performed at "no cost to the owner," in the final analysis who pays these costs?
- . Labor cost to the dealer is reimbursed at the local dealer's going rate.
- . The effectiveness of the recall campaign
- . Why do the students feel that such a
- . U. S. automobile manufacturers claim that

UNDERSTANDINGS

varies with the seriousness of the defect and the age of the car.

- . Under pressure from the public and the Government, auto manufacturers are making greater efforts to make safer cars.

WHAT IS BEING DONE BY PRIVATE AGENCIES TO PROVIDE ASSISTANCE TO THE CONSUMER IN AUTO SAFETY?

- . Much of the work of private agencies is accomplished by lobbying in the national and state legislatures for greater automobile safety.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

variation of effectiveness exists with the recalls? What do the students feel would improve the effectiveness of recall campaigns?

- . Request that a representative of an auto dealer speak to the class on the recall program, its value, its effectiveness, and how the dealer feels about the recall program.

SOURCE

about 90 percent of all new car owners respond to the recall notices. However, only about 50 percent of the owners with cars 4 to 5 years old respond to the recall. The manufacturers claim that the biggest problem is finding the cars, many of which have changed ownership.

- . Write the Ford Motor Company, The American Road, Dearborn, Michigan 48121; ask for publications "Quality Control" and "Safety."
- . "Ways To Break the Traffic Jams," H. S. News and World Report, July 23, 1973, p. 37

- . This subject would be a good area for students to investigate as a project. The private agencies are mainly made up of interested citizens, working together to achieve a common goal. The student's project should include as many different groups as they can obtain,

- . Ralph Nader and his "Nader's Raiders" were influential in getting The National Traffic and Motor Vehicle Safety Act of 1966 passed. Since that time Mr. Nader has formed "watchdog" groups to encourage compliance with the safety legislation.

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> . Several of the private agencies have worked to inform the consumer about new safety developments and to encourage the consumer to become safety conscious. | <ul style="list-style-type: none"> something about what each group does, and how they have worked to achieve their goals. . What publications can the students name that have worked for new and improved automobile safety? <ul style="list-style-type: none"> - "Consumers Bulletin" - Consumer's Research - "Consumer Reports" - Consumers Union - "Motor Trend" - "Popular Mechanics" The last two publications use testing organizations separate from the publication as sources of information. | <ul style="list-style-type: none"> . The American Automobile Association has worked for many years not only to assist the motorist in his travels, but for improved and safer automobiles. Contact your local branch of the American Automobile Association for information. . The work of Consumers Union or Consumers Research has been aimed at testing production automobiles and reporting their findings. . Obtain some of the publications listed and use the various articles as illustrations of consumer information aimed at helping the consumer secure a safer automobile. . "Government Test Center," Motor Trend, July 1973, p. 74 |
| <ul style="list-style-type: none"> . Private testing agencies, working either under government contract or with private funds, have done considerable work in auto safety. | <ul style="list-style-type: none"> . Discuss why private testing agencies might have more reliable information than would the testing information coming from the automobile manufacturers. | <ul style="list-style-type: none"> . Consumers Union of United States, Inc., Orangeburg, New York 10962 . Consumer's Research Inc., Washington, New Jersey 07882 . Dynamic Science, Deer Valley, Arizona |

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCE

WHAT ACTIONS BY THE
DRIVER WILL MAKE FOR
SAFER DRIVING?

- . The key to safe, skilled driving is anticipation. A skilled driver should anticipate something unexpected happening every second that he is behind the wheel.
 - Plan ahead.
 - Be prepared for the unexpected.
 - Watch for indications of something about to happen before it happens.

- . A driver must always drive the car, not just ride in it. The purpose of the steering wheel, the foot pedals and the transmission is so that the driver can control the car, not let it seem to go by itself.

- . Seat belts or passive restraints are essential in keeping the driver and the passengers in their

- . What are things that a good driver should anticipate will happen in the following situations?
 - Children playing ball along the road
 - A cloud of exhaust comes from a parked car as it starts
 - Another car comes to the same corner as you do
 - You are the third car in a line of several cars behind a truck going up a hill.

- . What is the role of Driver Education in the schools? What is the purpose of the 3-hour driver training and highway safety instruction required of all individuals before receiving a license? Have the driver education teacher cover these sections with the class. This material might be discussed at the same time as the material on Driver Responsibility earlier in this syllabus.

- . Make a survey of how many people use seat-belts and shoulder belts. Ask people why they do or do

- . Safer cars can be built, but safer cars with careless drivers are not safe cars at all.

- . Skilled driving programs by the Ford Motor Company are available from Helm Incorporated, Box 7750, Detroit, Michigan 48207.

- . "Motor Vehicle Accident Data," Automotive Safety Research Office, Engineering Staff, Ford Motor Company, Dearborn, Michigan 48121

- . "Vehicle Safety," Quick Facts, Ford Motor Company, The American Road, Dearborn, Michigan 48207

- . "Driver Education" pamphlet, Ford Motor Company

- . "Driver Responsibility," pamphlet, Ford Motor Company

- . "UFO - Unrestrained Flying Objects," General Motors Film Library, General Motors Building, Detroit,

UNDERSTANDINGS

place in the event of an accident.

- . Seat belts have the advantage of keeping the driver behind the wheel when the dynamics of motion tend to force him away from his driving position.
- . The cost of greater safety is carried by the consumer, whether he wants or uses the devices or not.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

not use the belts. Make a collection of the comments and use these comments for class discussion.

- . To demonstrate the principle of centrifugal force, take a small weighted object attached to a string. Swing the object, suspended on the string, around your head. At a point let go of the string. What happened to the object? Explain that a person would also be forced out of his position in the same fashion because of centrifugal force. What would be the advantage of the driver being restrained behind the steering wheel?
- . Is it fair for the consumer to have to pay for what he may not want or use? Why or why not?

SOURCE

Michigan 48202

- . "Passive restraints" is the term usually used when referring to air bags.
- . Write the Ford Motor Company; ask for Quick Facts, "Safety Belts and You" and for News Release, "Why Seat Belts?"
- . "Automobile Facts and Figures," Automobile Manufacturers Association, Inc., 366 Madison Avenue, New York, New York 10017, gives statistics on safety.
- . A study, analyzing data on more than 17,500 cars involved in North Carolina accidents, showed that drivers using seat belts in subcompact cars had 31 percent fewer serious injuries than the average for all drivers in more than 1 million cars involved in accidents. Drivers using seat belts in standard-sized cars had 62 percent fewer serious injuries than the average for all drivers in these accidents.
- . See Illustration B, page 91.

PRICE TAG ON GREATER SAFETY: \$615 PER CAR BY '76

Since federal safety requirements were first imposed on 1968 models—

Safety Features

1968 A score of items including seat belts, shoulder harnesses, energy-absorbing steering column, padded dash, dual braking system.

1969 Hazard-warning signals, side marking lights, double hood latches, improved defrosters, head restraints.

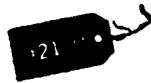
1970 Locks on steering columns, stronger windshield mountings.

1971 No new requirements.

1972 Combined seat-shoulder belts—with buzzers and warning lights.

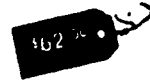
PLUS: Companies have added safety items in advance of dates required by law—such as steel beams in doors, stronger roofs.

Average Retail Cost Per U.S. Car



AND STILL TO COME...

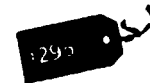
1973 Stronger front bumpers, slightly stronger rear bumpers, fire retardant interiors.



1974 Stronger rear bumpers, special device that prevents starting of cars until seat belts are fastened.



1976 Complete "passive" protection — air bags, for example—to keep passengers alive in 30 mph front-end crash.



Source: 1968-72, U.S. Dept. of Labor; 1973-76, estimates by U.S. Dept. of Transportation



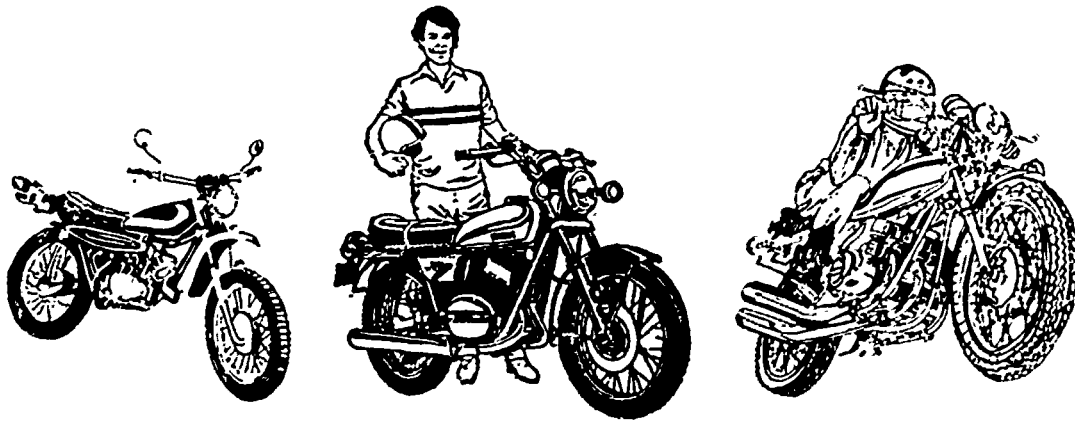
Better than life insurance, for it may save your life instead of just paying for it.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE	
WHAT IS A DRIVER'S RESPONSIBILITY WHEN DRIVING A CAR?	<ul style="list-style-type: none"> . An automobile is potentially dangerous both for the driver and others he may encounter. 	<ul style="list-style-type: none"> . Discuss with students the seriousness of a driver's responsibility. Many students consider driving a right and not a privilege and thus they believe that responsibility is somewhat lessened because they always have the right to be where they want and do what they want. The failure of a driver to seriously accept his responsibility is a major contributor to automobile accidents. 	<ul style="list-style-type: none"> . Sometime on July 10, 1973, an American had an auto accident in which the two millionth American was killed. More than twice as many have been killed in auto crashes as in all the foreign wars that the U.S. has been involved in.
<ul style="list-style-type: none"> . Being a good driver is more a matter of attitude than skill. 	<ul style="list-style-type: none"> . Enter into a discussion with students about attitudes of people when driving. 	<ul style="list-style-type: none"> . Ask the Driver Education teacher to take part in this discussion. Perhaps the school psychologist will be able to discuss personal attitudes with the students. Sometimes representatives of the county mental health clinic are available to be used in the classroom. 	
<ul style="list-style-type: none"> - A driver's ability to do "everything" with a car is useless unless a person is alert, considerate, flexible, and consistent. 	<ul style="list-style-type: none"> . Discuss the following topics, and any other topics that relate, and how they affect our driving. 	<ul style="list-style-type: none"> . Kilpatrick, William, "Straight Talk for the Woman Driver," Gulf Oil Company, Gulf Building, Houston, Texas 	
<ul style="list-style-type: none"> - We tend to drive the way we are. If we are erratic, foolish, foolhardy, impulsive, timid, etc., our driving tends to reflect these qualities. 	<ul style="list-style-type: none"> - A fight with my girl (boy) friend - Mad at my parents - Who does that cop think he is? - No teacher is going to speak that way to me! - It is my life, I will do as I please. 		

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> • Our driving personality may make us more of a potential menace on the highway than we realize. 	<ul style="list-style-type: none"> • Are you a driver who: <ul style="list-style-type: none"> - combs your hair looking in the rearview mirror as you drive? - waves to all friends as you drive by? - puts the last touches of lipstick on before you get to where you are going? - makes sure that all "important" friends see you driving down the road? - must be the first to "take-off" from the stop light? <p>If you answer yes to these and other questions of this nature, your driving personality makes you a highway menace.</p>	<ul style="list-style-type: none"> • Material obtained from a driver education textbook or from the American Automobile Association is helpful when discussing this subject. • The Safety Education Unit of the State Education Department has a variety of material on driver safety.
<ul style="list-style-type: none"> • A person should recognize that a car is not human; it does only what humans want it to do. <ul style="list-style-type: none"> - The auto really becomes an extension of the person driving. The steering wheel is an extension of one's hands and arms; the accelerator and brake pedal an extension of one's legs. - People who drive after drinking do not have the ability to control the automobile as well as before they were drinking. 	<ul style="list-style-type: none"> • The influence of drugs and alcohol upon driving is an important topic to introduce. <p>Discuss: Is there a right of:</p> <ul style="list-style-type: none"> - social drinking and driving? - The driver smoking marijuana? - A drug addict to have a driver's license? - Other topics of similar nature that students bring up. 	<ul style="list-style-type: none"> • The New York State Police are more than willing to have troopers visit a classroom to discuss driver attitudes. Inform the local sub-station of the topic and class time in advance and they will have well-qualified personnel to meet with the class. • Review the law covering "Driving While Intoxicated" in the Vehicle and Traffic Law, The Department of Motor Vehicles, Empire State Plaza, Albany, New York 12228.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCE
<ul style="list-style-type: none"> . Your driving manner is not what <u>you</u> think it is, but what it really turns out to be. 	<ul style="list-style-type: none"> . There are certain physical requirements which must be met to obtain and maintain a driver's license. 	<ul style="list-style-type: none"> . See New York State Vehicle and Traffic Law.
<ul style="list-style-type: none"> - Each driver has physical limitations of one nature or another. You can only do so many things at the same time. 	<ul style="list-style-type: none"> . Ask students to list the various things that they have observed drivers doing as they are driving. This list and description of actions can be most humorous. 	<ul style="list-style-type: none"> . Have the driver training teacher explain the requirements for a license.
<ul style="list-style-type: none"> - You can't drive a car properly and: <ul style="list-style-type: none"> . neck with the opposite sex . search under the seat for something . reach for something in the backseat . swat flies or shoo bees. 	<ul style="list-style-type: none"> . Ask students to try an experiment. If your school is equipped with a driving simulator, obtain permission for a couple of students to test their driving reactions to programmed occurrences at the beginning of the day and then again at the end of the school day. What differences were observed, if any? Why were these differences obvious? Do the students feel that fatigue affected their driving ability? How? 	<ul style="list-style-type: none"> . Stress the fact that if any activity other than driving is to be carried out, a good driver pulls off the road and stops.
<ul style="list-style-type: none"> - We cannot do a full day's work and not be physically and mentally tired at the end of the day. 		<ul style="list-style-type: none"> . The Driver Education teacher can be of great help in this area. If the experiment cannot be performed, have the Driver Education teacher work with the class on this topic.
<ul style="list-style-type: none"> - Recognizing our fatigue and thus mustering every bit of energy when driving does not give much room to relax. Fatigue flashes red alerts to be much more cautious when driving. 		

POSSIBLE PROBLEMS FOR CYCLIST

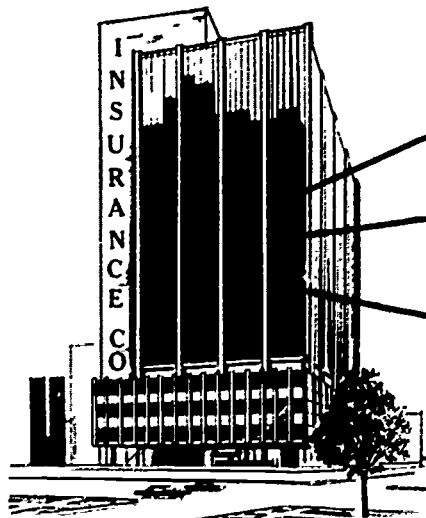


Motorcycles come in a variety of sizes, from small to large, from light to heavy, with a range of power plants from 150 – 2000 C.C. or more

"Sorry, we don't accept motorcycles as collateral"

"Sorry, we don't loan money to purchase motorcycles to those under 21"

"11 percent is the best rate we can give you on a loan"



"Sorry, we offer insurance only to the those already insured under a car loan"

"Sorry, you have a motor vehicle violation on record that you did not report in your application"

"Sorry, we don't rebate on a pro rata basis when you cancel your insurance"

SECTION V CYCLES AND THE CONSUMER

There can be little doubt of the increasing interest and appeal that motorcycles have for Americans. The exhilaration of motorcycling is comparable to that of soaring in a glider, skiing a mountain side, or surf boarding on cresting ocean waves. There is a freedom of motion as the rider leans into turns and the machine follows body motion. No wonder 6 million Americans enjoy the sport.

Yet before purchasing a motorcycle there are certain factors that should be known, including original cost, depreciation, and hazards of operation. The most important of these is the inherent hazard of operation of such vehicles. Anyone who has driven a car over slippery roads knows that it may be difficult to control the vehicle under such circumstances. This is even more apparent with a motorcycle.

According to the National Safety Council, the death rate for all types of vehicles in 1971 was 4.7 per 100 million miles. For motorcycles it was 20 per 100 million miles — more than 4 times as high. Consumer Reports, January 1973, states that even these figures may not give the true picture. "Taking into account the fact that eight out of ten motorcycle accidents result in injury or death, as compared to only about one out of ten automobile accidents, the chances of being injured or killed may be as much as 15 times greater on a motorcycle than in a car."

Why is this so? First, even the most poorly built car has a protective metal shield around the driver, while the cyclist's body is almost unprotected. Second, it is difficult to overturn a four-wheeled vehicle but easy to upset a motorcycle. Third, it is sometimes difficult to see a motorcycle, yet in a collision between a car and a cycle the cycle is bound to come off second best. Fourth, there is a law of physics that force equals mass times acceleration. The large mass of an automobile, in a collision, will have considerably greater inertia than will the cycle, with consequent danger to the cyclist. Another danger to the cyclist is that frequently he travels faster or slower than other vehicles on the road. Anyone who drives at a speed different from the norm of traffic increases his accident possibilities.

It is possible to learn to drive defensively — and this skill is particularly needed by the cyclist. Many of the manufacturers of motorcycles offer training in how to ride cycles properly. Second, state agencies also offer such instruction. Prudent cyclists take advantage of such training.

Further defensive actions of prudent cyclists include these:

- . Purchase a cycle of the appropriate size and power. Machines too heavy to push or maneuver or too powerful present problems.
- . Secure the best instruction available to learn to ride properly and safely.

- . Choose a machine without protruding parts and accessories on which the body might be impaled in a crash. ("Sissy bars," for example, can be very rough on the groin.)
- . Choose a machine that operates without excessive noise or vibration, both of which are tiring and both of which affect driver reaction.
- . Use protective covering — heavy jacket and pants, helmet, preferably with temple protection, gloves, boots, goggles.
- . The importance of a good helmet cannot be over-stressed. Good helmets are not inexpensive and range in cost from \$30 to \$60. Most important is an approved type. Approval is indicated by identification within the helmet that the headgear has SNELL Memorial Foundation approval, or Z 90.1 standard certification. It should be noted that the plastics used in the construction age, and a leading manufacturer recommends replacement every 2 to 4 years. If a helmet is materially damaged in use it should be discarded.
- . Use the safest equipment. Tire tread pattern, for example, is a factor in stability and cornering. High mounted exhaust pipes may pose hazards. "Chopping" a cycle to achieve a distinctive look may adversely affect stability and handling.
- . Above all drive defensively. Assume the worst may happen with other drivers and be prepared to stop or avoid collision. Anticipate hazards — oncoming cars, blind corners, children and dogs on the road or roadside, slick pavement, rough roads, and react in advance by slowing down. If necessary, leave the pavement to avoid a collision.

Original Cost

Since cycles vary in weight, equipment, and power plants from mini-cycles to ponderous "choppers," it is difficult to estimate cost. However a rough price range would be from \$250 - \$4000, with the average between \$800 - \$1700.

Since it is customary to add a variety of special equipment, the basic price does not mean too much. Chromed handlebars, wheels, kickstands, "sissy bars," extra headlights, special horns, seats, and gas tanks make the "average" price of little significance.

Depreciation

It might be assumed that an item such as a motorcycle would depreciate in value rapidly. However, at this time, for various reasons, the price of used motorcycles has held up well. First there is always a market, particularly for lower priced motorcycles, among young people who enjoy re-constructing and refurbishing used bikes. At the moment, there is a demand for some of the older types of cycles produced before the machines were modified to meet ecological requirements. The older bikes without pollution equipment generate greater power than do engines of the same cubic centimeter size with such equipment. Further, inflation has increased the cost of newer motorcycles with comparable increases in value for used machines.

Insurance

The cost of insuring a motorcycle is a major item. In some instances young people have complained that it is difficult to secure the insurance to meet the legal requirements. It has been suggested that the major insurers of automobiles are reluctant to offer insurance for motorcycles unless the insured, or his family, also carries automobile insurance with the same company. Some companies report that this is no problem and that insurance for motorcycles only is readily available from their companies to all applicants.

Some companies specialize in insurance for motorcycles. Insurance is available from them on a 6-month, 9-month, or yearly basis. In some instances, complaints have been made that when insurance is cancelled by the insured only a small rebate is allowed, quite out of proportion for the time period involved. Other companies make full allowance for the time in which coverage is not afforded. Insurance companies have their side of the story too. For example, they say that it is unreasonable to expect that a proportionate rebate for insurance will be given when a policy is cancelled if they have carried the insured throughout the summer months when exposure to risk is high and the insured now wishes to cancel the policy and secure a rebate for the winter months when use of the machine might be minimal.

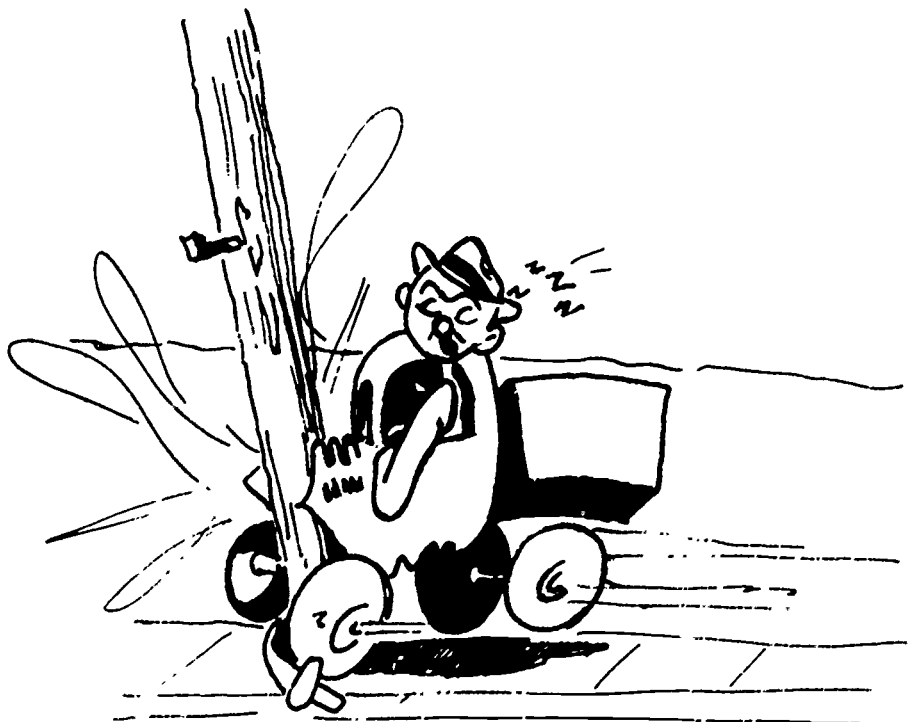
Almost all companies charge a higher rate for heavier motorcycles (over 300 pounds or over 250 c.c. in engine size). Apparently the more powerful machines constitute a greater risk.

One important factor in securing insurance on a motorcycle is the record of the applicant. An accident or ticket, even for operating the family car, may be cause to reject an application for insurance. Since a check is made with the Motor Vehicle Department it is important that the applicant not conceal from the insurer the fact that there is something on the record, even if it was the other driver's fault.

The important point is that it is wise to shop for insurance just as one shops for other consumer needs. Compare coverage, cost, service, and cancellation privilege. Be sure the policy is understood.

Caution: Perhaps a final caution is in order. Before purchasing a motorcycle one should determine whether he has the necessary aptitude. It is not unusual for a person to be carried away with enthusiasm (particularly in the spring of the year) and to have him purchase a motorcycle, only to discover that the needed skills are not present. A sense of balance and rhythm are requisite. Too, there should be a confidence in one's own ability coupled with a healthy respect for the power of the machine and its potential. Prudent potential buyers would be wise to attend a training session conducted by a reputable dealer, or borrow a bike for use in a safe area off the road, under the supervision of a skilled cyclist.

Further, it should be understood that New York State conducts a rigorous program to determine whether a person should be given a motorcycle driver's license. First one must obtain a permit. Requirements regarding age and skill must be met. Parental permission must be provided for those under 18 years of age. A written and road test must be passed. To get a license a further road test is given. In short, to earn a license requires determination, persistence, practice, and skill. The sport is not for everyone.



Both the tired and the drunk driver are menaces.

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCES

WHY ARE MOTORCYCLES SO POPULAR
AS A TRANSPORTATION AND
RECREATION ITEM?

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> . Motorcycles are one of the cheapest forms of individual motor transportation that exists.
 . Motorcycles provide an "escape" mechanism. Their speed and maneuverability permit them to be used to cover miles and to go places inaccessible to motor cars. They have almost the quality of free flight associated with aircraft, perhaps due to the wind effect on the body of the cyclist, and the ease and rapidity of movement.
 . Americans are victims of a motor mania. They seem to desire that everything be powered by motors. | <ul style="list-style-type: none"> . Using the students as the prime source of information have them teach this unit to the class.
 . In this area of motorcycles probably your students are more familiar with this material than you are. Select a couple of students or more and assign them portions of this motorcycle material and have them do the actual classroom teaching.
 . In most classes there are students who have motorcycles. Ask them to explain why they bought a motorcycle instead of a used car <ul style="list-style-type: none"> - What satisfaction of spirit does a motorcycle offer? - Compare the gas mileage of a motorcycle to a car. - Compare the gas mileage of a motorscooter to the gas mileage of a motorcycle.
 . How can Americans adjust our craze for power to our available energy supply? | <ul style="list-style-type: none"> . "Motorcycling, once identified largely with black-jacketed gangs, now is the sport of 5 to 6 million Americans, including many middle-class adults." U.S. News & World Report, August 27, 1973.
 . "Motorcycle Boom," Parent Teacher Magazine, 67:10-15, 39-40, November 1972
 . "Motorcycling Mania," Writers Digest, 51:24-26, March 1971
 . "Reading, Riting, and 'Rithmetic' - Motorcycle Industry Council, Inc., 1001 Connecticut Avenue, Washington, D.C. 20036 - or your local motorcycle distributor
 . "Fuel Savers - Motorcycles, Bikes May Answer Energy Crisis," Times-Union, Albany, N.Y. February 25, 1974
 . "Motorcycle Industry," Business World, January 3, 1973, pp. 39-40 |
|---|--|---|

UNDERSTANDINGS

These motors are of all kinds, shapes, and sizes. with sophisticated motors and gear boxes. The result is that energy of one type or another is in increasing demand and becomes the life pulse of American society and economy.

The motorcycle may become an important form of transportation if the gasoline shortage continues. More people may turn to the cycle as a cheap form of transportation.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Assuming that Americans love for motors will continue, what can be done to conserve energy?

Discuss with the students the extensive use of motorcycles and motorscooters in other countries of the world, particularly in Asia.

- Why would these vehicles be so popular in those lands? What events in America have influenced the growing popularity of motorcycles?
- Can the motorcycle ever become a major form of transportation in America as it has in other countries?
- Would climatic factors have a bearing on this development? Would economic factors be important?
- Is there a way that the motorcycle could be adapted to make it more usable in all climates?

Investigate the cost of a cycle. What is the approximate cost per mile to operate a motorcycle? Does the cost increase for off-road use? Why?

SOURCES

- . "Bikes Get Bigger," *Mechanics Illustrated*, 66:62-4, June 1970
- . "Winter Lay-up for Motorbikes," *Mechanics Illustrated*, 69:132-3, November 1973
- . The Isetta car was made in Italy and found in America in the 1950's and early 1960's. (The Isetta was a three-or four-wheeled cycle with an enclosed cab and a motorcycle engine.)
- . "BMW R 75/5: Is It Really a Car on 2 Wheels?" *Popular Science*, 201:12, October 1972
- . "Why Not the Mini-bike?" *Parks and Recreation*, 7:37-8, September 1972
- . "Family Guide to Minibikes," *Popular Mechanics*, 133:117-21, February 1970

UNDERSTANDINGS

SUGGESTED PUPIL AND
TEACHER ACTIVITIES

SOURCES

WHAT SHOULD BE CONSIDERED
WHEN BUYING A MOTORCYCLE?

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> . A motorcycle is a complex piece of machinery and not a toy or simple plaything.
 . By design, a motorcycle does offer certain advantages over a car. <ul style="list-style-type: none"> - Better visibility - Better maneuverability - Faster braking ability - Economy of purchase - Economy of operation
 . The motorcycle design also offers very distinct disadvantages. <ul style="list-style-type: none"> - The cycle is very vulnerable to adverse weather conditions. - It's not as stable on slippery highways. - It is open to the elements. - The rider is susceptible to greater injury in an accident. - It may be harder to maintain proper control of a cycle than a car when driving on very rough roads. - On snow and ice, the cycle is not a practical form of transportation; except for experienced trail riders, using special equipment and special techniques. | <ul style="list-style-type: none"> . Compare an automobile and a motorcycle in terms of initial cost, maintenance, registration and licensing fees, insurance, expected life, and resale value.
 . Discuss these advantages over a car and look at certain problems that each item suggests. Discuss why under certain conditions these advantages may be disadvantages.
 . Have the students add to the list of disadvantages.
 . Those students who have cycles should be asked to relate what problems exist in owning a cycle. | <ul style="list-style-type: none"> . Many people have bought small minibikes as toys or playthings and have failed to realize that cycles are powerful machines and must be treated as such. Safety is an important consideration.
 . "Motorcycle Engines," Hot Rod, 25:102-3, January 1972
 . "Guide to Safe Motorcycling," American Automobile Association booklet, Consumer Bulletin, 54:4, August 1971
 . There are many good books and magazines about motorcycles on the market. Look on most newsstands and a volume about motorcycles can be found.
 . The best source of information will be your students. They have experienced all sorts of problems with the cycles they own. Let them share their experiences. |
|---|---|---|

UNDERSTANDINGS

- . There are basically four different styles of motorcycles. You should buy the style of motorcycle that is best adapted to the type of riding that you will be doing.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . Invite a motorcycle dealer to demonstrate and discuss the four types of cycles. For what activity is each designed?
- . Have students bring in examples of the four different types of cycles, so that other students can actually see what is being discussed.
- . If school authorities permit, have each type of cycle demonstrated in action.
- . Make a display board of information and pictures of motorcycle advertisements and articles.

SOURCES

- . "Minibikes, Dangerous Toys," Consumer Bulletin, 53:27-30, December 1970
- . "Mini Bikes, Super-Toys or Safety Hazards," Good Housekeeping, 171:159, September 1970
- . "Motorcycles," Consumer Reports, 38:40-4, January 1973
- . The material on types of machines will serve as a good project to be presented by students. Select a couple of students who may be struggling to keep up with the class. Discuss this material with them and have them present the material instead of your doing the teaching.

The following are the types of machines:

- . Street-type machine:
 - Is equipped with a high r.p.m. engine.
 - Is designed to run on a smooth surface with great stability and easy handling.
 - The suspension is designed for a softer ride.
 - It has a large fuel tank for greater mileage with fewer stops.
 - It is equipped with proper lights and muffler to lessen noise.
- . The classification of types of cycles is taken from "The Motorcycle and Trail Bike Handbook," W.R.C. Shedenhelm, Pyramid Books, New York, by permission. Those interested in further information of this nature are referred to this book.
- . A street machine is built to meet the necessary motor vehicle laws, and noise and air pollution laws. Not all machines can legally be run on the highways.

UNDERSTANDINGS

SUGGESTED PUPIL AND TEACHER ACTIVITIES

SOURCES

- . Street/scrambler type machine
 - It is designed to be used both on the highway and on dirt roads and trails.
 - The cycle has greater ground clearance than a regular street bike, but is fully equipped to make it legal for street use.
 - Machines are equipped with a stock tire, which is a combination street and trail tire, but for rougher trail riding the rider should change to a knobby trail tire.
 - . Woods/trail machine
 - This machine is designed to be used as a recreation or sportsman's machine for use in rugged, back-country.
 - The machine can be used for short city jaunts, but it is not designed to be used as a touring or commuting machine.
 - A woods/trail bike has a suspension system built to absorb exaggerated trail shocks and allow for easier handling.
- . Ask one of your students to explain the difference between a street tire, universal, and a knobby trail tire.
 - . What is the difference between a street and a woods/trail motorcycle?
 - . Architects have a saying that "form follows function." To what extent has the form and design of motorcycles been determined by the type of riding for which they are used?
 - . Ask for ideas regarding improvements that might be made. Forward promising suggestions to motorcycle manufacturers for their comments.
 - . If any motorcycle owners have modified their machines, have them explain why this was done. Did the modification work as desired?
- . A street/scrambler is not built for very rough areas. It is not constructed as strongly as a straight trail bike. Some of the lights and other items may be damaged when trail riding.
 - . "All About Owning a Cycle," Better Homes and Gardens, 48:46+, September 1970
 - . The difference between a street and woods/trail machine is that the woods/trail bike is stripped of all nonessentials. It is designed for higher clearance and the fenders are mounted higher above the wheels to prevent clogging with mud. Some machines have fiberglass fenders and gas tanks to make the machine lighter in weight.
 - . "Trail Riding, A Route to Happy Days," Popular Science, 198:96-7, June 1971

UNDERSTANDINGS

- . Competition Trail (Enduro) bike
 - This machine is designed throughout to be used over rough terrain and for back-country travel.
 - The engine and gear design is such that it provides maximum pulling power at all times.
 - The machine is light in weight and is designed to absorb considerable shock to prevent throwing the rider.
 - The steering response is faster than that of the street bike and the gear speeds are widespaced with different steps so that increased or decreased speeds are possible without changing gears.
 - Normally there is no warranty
 - Will tend to wear more rapidly and require more expensive maintenance.
 - May be more fragile and require a skilled rider.
- . A prospective motorcycle buyer should make many comparisons and if possible try out certain cycles that he likes. He should discuss his prospective purchase with a friend who already owns a cycle and get his opinion and the informed judgment of a reputable dealer.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . For what purpose would a trail bike be used?
- . Invite pupils to watch televised moto-cross races and report the events to the class.
- . Have a dealer explain the construction of a competition trail bike. (Chromium-molybdenum frame, magnesium engine parts, and in some cases titanium parts add considerably to cost.)
- . Why could the trail bike not be used on the street or a street bike on the trail?
- . Have students select different makes of machines and make a report on the machine each selected. Have each tell about special features and explain why they considered one brand better or worse than the other.

SOURCES

- . Trail bikes have become an important recreation vehicle. They are to summer what snowmobiles are to winter.
- . Additional pulling power is necessary for rough, uphill climbs, sand, mud.
- . "Go Anywhere Bultaco: Tough and Quiet," Popular Science, 200:34, May 1972
- . When using a bike in the woods, much of the required equipment for the street would get in the way. Thus the trail bike is a stripped-down model designed for a specific type of service. A trail bike cannot have many lights, the low profile, and other features of a street type machine because the trails are too rough and the street type bike design could not take the strain.
- . "Small Price, Big Action, Hodaka's 100 B," Popular Science, 200:77, April 1972
- . "Vrrooom, Skrroww, Braap," Forbes, 105:75-6, June 15, 1970

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCES
<ul style="list-style-type: none"> . Buying a new motorcycle is very similar to buying a new car. You must rely somewhat on the dealer, thus a trustworthy dealer is essential. . Generally competition machines do not have warranties and are sold <u>as is</u> when new. 	<ul style="list-style-type: none"> . What are the terms of a motorcycle warranty? . Ask motorcycle owners to discuss their experiences with warranties. What was warranted? How satisfactory were adjustments made? What advice would such owners have for prospective purchasers? 	<ul style="list-style-type: none"> . "Uneasy Rider in the U.S. Market," Business Week, June 20, 1970, p. 44 . Motorcycle warranties are not for the same length of time as car warranties. The warranty is made principally with the dealer and parts are guaranteed by the factory. Warranties and guarantees vary according to the make.
<p>WHAT SHOULD YOU BE AWARE OF WHEN BUYING A USED MOTORCYCLE?</p>	<ul style="list-style-type: none"> . How can one select a trustworthy dealer? . Why will prices of used cycles be different at different times of the year? . What will the economic concept of supply and demand have to do with the price? 	<ul style="list-style-type: none"> . During late spring and early summer, the demand for motorcycles is great and machines in good shape will command top dollar. A seller's market will exist. The converse is true during the winter months.
<ul style="list-style-type: none"> . Generally speaking you will get your best prices at private sales, but you buy "as is" and can expect no after-sales service. <ul style="list-style-type: none"> - If you know little about motorcycles it is recommended that you buy from a motorcycle dealer. 	<ul style="list-style-type: none"> . Why are private sales made "as is"? . Is there any recourse against the seller in a private sale, if the item sold is not in good working order? . Does the buyer have any protection against being cheated on a private sale? 	<ul style="list-style-type: none"> . Private sales are generally made "as is" so that the buyer does not have recourse against the seller. Most sellers do not have the means to correct or make good on problems that develop. Private sellers are not in a position to issue warranties.

UNDERSTANDINGS

- It is possible to find capable persons who do know cycles and they can check over a bike for you when a private deal is available.
- . Always make a careful check of the motor-cycle before buying it. This check should be made regardless of whether the purchase is a private sale or a dealer sale.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- . Ask for an exchange of experiences of those who have bought or sold machines at private sales. Try to build up a list of suggestions to help prospective buyers and sellers.

SOURCES

- . The only recourse that a buyer has against the seller in an "as is" deal is if the seller did not have clear title to the cycle when sold. In such a situation, the buyer could sue the seller for the value of the cycle.

USED MOTORCYCLE BUYING CHECKLIST

1. First Impression

Check how the machine looks in general appearance. A rough or dirty machine may have had harsh treatment. Check for high mileage or many hours of running time. If the mileage is low and a new paint job has been done, be extremely wary. The machine may have had rough treatment or have been in an accident.

2. Test the Engine

The engine should start easily and sound in good condition — i.e., run smoothly, not rough. If strange noises occur and cannot be easily explained to your satisfaction, choose another machine or have a competent motorcycle mechanic check the machine out.

3. Check the Frame

Look for dents, cracks and bends. Make sure the welds are solid and the paint is in reasonably good condition. If the paint job is new, find out why. Other items that should be checked on the motorcycle for excessive wear and rust are the foot pegs, and the sprocket. Remember, any part or parts which you must replace increase the cost of the cycle. Check for play at steering crown bearings and swing arm pivot.

4. Check the Tires

Tires are a good indicator of age, wear, and care. Does the wear reasonably agree with the odometer reading? Motorcycle tires wear relatively rapidly.

5. Test the Wheel Bearings

Check wheel bearings for play. If the rim can be moved sideways, something is wrong.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCES
6. Check Cables		
Worn, pinched, bent or broken strands of a cable indicate that it must be replaced to assure safety.		
. A regular motorcycle safety check should be made to assure that your cycle will perform properly and safely under normal operating conditions.	. Have students discuss the importance of cycle safety. . Why is the importance of cycle safety more critical than making sure all is safe and working properly on an automobile?	. Refer to the Cycle Safety Checklist.

MOTORCYCLE SAFETY CHECKLIST

(Proper and fanatic maintenance is a must since the consequences of a failure are greater than with a car.)

1. Lights

The law requires at least one headlight and one taillight, and a stop light visible at a distance of 500 feet. Check these each time before riding and replace bulbs as needed. Also check directional lights if the bike is so equipped.

2. Horn

A working horn assures a safe warning capability.

3. Bolts

Check all bolts periodically and tighten as needed. Nuts and bolts work loose and may cause trouble unless kept tight at all times.

4. Tires

Be sure that tires are inflated properly. Check rims and spokes regularly. Check for breaks in the tire side walls or tread. Check wheel bearings.

5. Brakes

A cycle must be able to stop within the same distance required of a car at a given speed. Check for brake skip, fade, or even failure under hard braking conditions. Check the brake cables because most brake trouble stems from improperly adjusted or frayed cables.

6. Chain

The chain should be properly adjusted and lubricated, to prevent excessive wear or breakage. A certain amount of "play" is necessary. Check the owner's manual for the tolerance of play.

UNDERSTANDINGS	SUGGESTED PUPIL AND TEACHER ACTIVITIES	SOURCES
----------------	---	---------

7. Clutch and Transmission

Check the clutch to prevent "creeping" when stopped at a traffic light or driving in stop-and-go traffic. Make sure that there is adequate oil in the engine and transmission. Check the owner's manual for adjustments.

8. Fuel Tank

Be sure that all tank connections are tight and leakproof. Do not fill the tank to the rim, to prevent leakage on a hot engine.

9. Mirrors

Good rear view mirrors are a necessity. Make sure adjustments are correct and that they are used when driving.

10. Steering and Suspension

Be sure that handlebars are not loose or damaged, shock absorbers are not worn, and wheels are not out of alignment.

HOW CAN YOU FINANCE
A MOTORCYCLE?

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> . Motorcycles are financed in the same way that automobiles are financed. Dealers or banks are the most common sources of financing, however finance agencies also provide financing. . In most cases, the requirements for motorcycle financing are the same as those required for cars. . Financing a motorcycle through a bank may be more difficult than financing an automobile. . Most banks will not accept loan applications from those under 21 years of age. | <ul style="list-style-type: none"> . Have a student who has borrowed to buy a motorcycle tell the class of his/her experience. . Have a loan officer of the local bank talk to the students about loans for the purchase of a motorcycle and what the local banking regulations are relating to motorcycle financing. . Check with other local banks to secure information on loan policies for motorcycles. What are the rates? What security is needed for the loan? Will loans be made on motorcycles valued at less than \$500? Must the applicant for a loan be 21 years of age or older? Why? | <ul style="list-style-type: none"> . The students will probably have more experience in this area than the teacher, and should be asked to share their experiences in borrowing. . A check on three banks in the Albany region revealed that due to the unique problems of insurance, risk, etc. banks do not accept collateral loans on motorcycles as they would on autos. Rather if the individual is known and his credit has been established, the bank makes a |
|---|--|--|

UNDERSTANDINGS

- . Some dealers extend credit to those with approved credit cards but apparently most refer purchasers to banks for financing.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

SOURCES

personal loan. Current rates are about 11 percent. A stranger with no established credit might have difficulty securing financing from a bank to purchase a motorcycle.

References:

"Guide to Safe Motorcycling," American Automobile Association, 1712 G Street, Washington, D.C. 20006 (\$.47)

Safety Journal, No. 4, 1973, American Telephone and Telegraph Company, Plant Operations Manager, 195 Broadway, New York, N.Y. 10007, (well-written issue dealing with motorcycle safety)