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ABSTRACT

Suggestions and learning activities to help secondary students learn social studies skills are contained in this document. Social studies skills make it possible for the learner to employ those intellectual processes necessary in obtaining or handling knowledge. Five selected skill development areas are discussed; each area contains a number of learning activities to implement the strategy. The five skill areas include: (1) evaluating sources, discerning between fact and opinion, and understanding the differences between primary and secondary sources; (2) finding information through library skills and oral interviews; (3) classifying data using charts and graphs; (4) developing map skills; and (5) understanding time concepts. (Author/JR)

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## INTRODUCTION

Social studies skills make it possible for the learner to employ those intellectual processes necessary in obtaining or handling knowledge. Most social studies programs have concentrated upon the acquisition of knowledge which students were to memorize. Research has shown that most knowledge memorized is soon forgotten. Social studies teachers are also faced with the "knowledge explosion". Every year social studies teachers are confronted with the problems of what to teach and what is most important. Compounding this problem is the fact that some knowledge becomes obsolete. Many experts now agree that we can better help our students by equipping them with the "tools" of learning-how-to-learn. The basic tools of learning are skills.

Social studies skills have been classified in a variety of ways, but in general they include the following:

1. work-study skills such as reading, outlining, map reading, and interpreting graphs and charts;
2. thinking skills such as critical thinking and problem solving;
3. group-process skills such as those involved in leading or participating in other ways within group undertakings;
4. and social living skills such as acting responsibly, cooperating with others, and in living and working in a group setting.

Funds for this project provided for a working period of two weeks; therefore, it was impossible to cover all those

skills students should possess. This committee identified those skills for which practical lessons could be written that teachers could use in their classrooms. Some skills were too complex for this committee to consider provided the limited time and resources. Hopefully, in the future, additional funding will allow us to expand these social studies skills lessons.

The committee has tried to organize the social studies skills lessons in such a manner that the teacher could easily use them. The student exercises have all been written on a separate page so that the teacher could remove the lesson, thermo-fax the lesson onto a spirit master, and run off copies for classroom use.

The committee does not believe it necessary to teach these skills lessons as a separate unit. Rather, they should be integrated into the regular social studies classroom whenever appropriate. The committee also thinks that these lessons should be used as an introduction only. By using their imagination, teachers should be able to write a variety of similar lessons to fit their particular class. These social studies skills need to be practiced constantly during the year to be mastered by the student.

The Teaching Social Studies Skills Committee

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## EVALUATING SOURCES

To the teacher:

Students of social science are exposed to information every day, either in the course of studying one of the social science disciplines or through exposure to newspapers, magazines, advertisements, television or radio. The students should be able to judge the sources of information presented to them and to make intelligent decisions as to which sources they will believe. It is the responsibility of the social science teacher to present information that will aid the student in making intelligent judgments while evaluating sources of information. Intelligent judgments can be made by students only if they are exposed to more than just a textbook.

Research is a vital part of the social sciences. The textbooks upon which teachers and students rely are the products of research. Term papers, reports, and other projects that students are expected to do must be the products of research also. The students should know that the authors of their textbooks have had to choose between primary and secondary sources, separate fact from opinion, evaluate loaded words and propaganda, and make judgments about eyewitness accounts of the same event.

Evaluating sources, then, is a skill that students should know and practice. The lessons presented are designed to aid you in teaching these skills to your students.

Lesson # 1: The students are given a working definition of primary and secondary sources. Exercises are provided to help the students differentiate between primary and secondary sources.

Lesson # 2: The students become active participants in a historical event. The lessons will show that although there are eyewitness accounts to the same event, these accounts will vary as will secondary accounts. The purpose of the lesson is to make students aware of the choices that must be made by historians and students of the social sciences as to which sources they will use.

Lesson # 3: This lesson is designed to show that everything a student reads is not fact, but contains the opinion or point of view of the author. Perhaps the students can find examples in their own textbook which illustrate how the author uses opinion rather than facts.

Lesson # 4: The students are exposed to material that is designed to influence their attitude on a subject. Exercises are provided to make the students more cognizant of this influence-molding material.

### Evaluating sources: (con't)

Lesson # 5: This lesson provides an excellent opportunity to tie together all of the previous lessons on evaluating sources. The students are given the opportunity to read the accounts. They might then be asked such questions as: Are these primary or secondary sources of information? What do you think are the facts in each account? What do you think is opinion in each account? Do the authors of the accounts use loaded words? If so, what are the loaded words? Which account of slavery would you choose if you were going to write a term paper? Why? Which account (or both) of the start of the Watts riot would you choose if you were going to write a term paper? Why?

Lesson # 6: Activities are provided for group and individual work. The activities are designed to measure the students' abilities to compare and report on sources of information.

### Further suggestions to the teacher:

Not all conflicting accounts are found in primary sources. Often such standard sources as textbooks and even encyclopedias do not always agree on the same subject. As an example of this, have the students complete an exercise on the origins of football.

1. Ask the students to locate three sources on the origins of football.
2. The sources should be primarily from encyclopedias (especially the Encyclopedia Americana, Colliers, World Book, and the Encyclopedia of Sports).
3. Few of these sources will agree as to the precise origin of football. This will give you an opportunity to discuss with them the fact that historical conclusions are often based on conflicting data.
4. Have the students prepare a chart portraying the origin of football as reported in the various sources.

This same exercise could be expanded to include a wide variety of sports. For example, these same encyclopedias give differing origins for the following sports: bowling, soccer, tennis, and baseball.

This exercise could be carried a step further by having students prepare group reports on the various sports. Ask the groups to come to a conclusion as to the "most likely origin". Require that they document their conclusions.

Lesson # 1 - Evaluating Sources - Primary and Secondary Sources

**PRIMARY SOURCE:** A primary source is an account of an event by a person who was there. This includes such items as letters, diaries, official records, newspaper reports, and autobiographies.

**SECONDARY SOURCE:** A secondary source is an account by a person who describes the experiences of others regarding historical events after the event has occurred. The event is being retold, analyzed, or interpreted by someone who was somewhat removed from the event or person being researched.

**Exercise:** Put a P by primary sources and an S by secondary sources in the following blanks.

\_\_\_\_\_ a movie about the Civil War

\_\_\_\_\_ a play about the Civil War

\_\_\_\_\_ a letter from a soldier to his wife about a battle

\_\_\_\_\_ a documentary T.V. program about World War II

\_\_\_\_\_ the novel Gone With the Wind

\_\_\_\_\_ records from the county courthouse

\_\_\_\_\_ a marriage license

\_\_\_\_\_ a taped interview with your grandmother talking about the Depression

\_\_\_\_\_ an interview with the mayor

\_\_\_\_\_ an Indian arrowhead

**Exercise:** If you were writing a research report on the Battle of Gettysburg (Civil War), which of the following sources would you consider to be primary and secondary sources? Put a P by primary sources and an S by secondary sources in the following blanks.

\_\_\_\_\_ diary of a soldier who fought in the battle

\_\_\_\_\_ maps and battle plans used by Robert E. Lee in the battle



## Lesson # 1 - Evaluating Sources - Primary and Secondary Sources (con't)

- \_\_\_\_\_ interview with a lady whose grandfather fought in the battle
- \_\_\_\_\_ a 1865 newspaper article in the Richmond Inquirer about what happened at Gettysburg
- \_\_\_\_\_ a history textbook about the battle
- \_\_\_\_\_ an encyclopedia account about the battle

Which of these sources do you think is the most reliable source of information. Why?

Which of these sources do you think is the most unreliable source of information? Why?

Exercise: There have been many articles written about Thomas Jefferson's attitude toward his slaves. Look at the following sources of information. Put a P by primary sources and an S by secondary sources in the following blanks.

- \_\_\_\_\_ Jefferson's diary
- \_\_\_\_\_ instructions which Jefferson wrote to his overseer about how to treat slaves
- \_\_\_\_\_ Jefferson's will (clauses on what was to become of his slaves)
- \_\_\_\_\_ advertisements in newspapers for runaway slaves written by Jefferson
- \_\_\_\_\_ article in a history textbook on Jefferson's attitude toward slaves
- \_\_\_\_\_ article in an encyclopedia about Jefferson
- 
- \_\_\_\_\_ diary of George Washington (recording conversations with Jefferson about slaves)
- \_\_\_\_\_ a biography of Jefferson
- \_\_\_\_\_ an autobiography by Jefferson

Lesson # 1 - Evaluating Sources - Primary and Secondary Sources (con't)

Which of these sources do you think is the most reliable source of information about Jefferson's attitude toward slaves? Why?

Which of these sources do you think is the most unreliable source of information about Jefferson's attitude toward slaves? Why?

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If you were going to use four of the above sources to write a report about Jefferson's attitude toward slavery, which would you select? Why?

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Where else would you look for information about Jefferson's attitude toward slavery?

## Lesson #. 2 - Evaluating Sources - Primary and Secondary Sources

To the teacher:

You might try an experiment in your class. Have five students leave the room for a short period of time. While the five students are out of the room "stage" an event, possibly an argument with a student(s). When the five students return to the room, their task will be to explain what happened in the room while they were out. Allow them 10-15 minutes to interview various students around the room. The five students should conduct the interviews individually. In the meantime, each person who was in the room during the staged event will write primary or eyewitness accounts. The five students who were out of the room will write a short account of what happened by interviewing students who saw the event.

This experiment will allow you to compare the five secondary accounts and the primary accounts. Have the students answer the following questions:

1. Do the five secondary accounts agree with each other? Explain.
2. Do the primary accounts agree with each other? Explain.
3. How could the primary accounts be made more accurate?
4. How could the secondary accounts be made more accurate?

## Lesson # 3 - Evaluating Sources - Fact and Opinion

**FACT:** A fact is something you can prove to exist or to have happened; an actual occurrence.

**OPINION:** An opinion is a belief, view, or judgment which might be open to dispute.

When doing research it is important to remember that all of your sources might not treat the same subject matter in the same way. If you were doing a study of Arkansas during the Civil War, you would probably find different viewpoints concerning the state's role. A person from the North might be critical of Arkansas' involvement in the conflict, while an Arkansan might be proud. Of course, this is not always the case. Many authors write their opinion of what they think happened. Their opinion is usually based on researching the facts surrounding the event.

**Exercise:** In the following blanks, place an F before a statement of fact, and an O before an opinion.

\_\_\_\_\_ The earth is a sphere located over 90 million miles from the sun.

\_\_\_\_\_ The earth is so dirty and polluted that it is no longer a fit place to live.

\_\_\_\_\_ The price of gas will go up next year.

\_\_\_\_\_ Arkansas should try to attract new industry by permitting them to pay little or no taxes.

\_\_\_\_\_ New industry should pay its fair share of the tax load the same as any other business.

\_\_\_\_\_ The Arkansas Razorbacks will win the Southwest Conference this year.

\_\_\_\_\_ All protestors should be arrested.

\_\_\_\_\_ Peaceful protestors should never be arrested.

\_\_\_\_\_ Columbus discovered America in 1492.

\_\_\_\_\_ John Adams was the second president of the United States.

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### Lesson # 3 - Finding Information - Library Skills (con't)

#### EXERCISE:

Using the information found at the right, answer these questions:

1. Who is the author of an article on Irish Americans?

2. Two articles are listed on the "Irish Republican Army." In which magazines were they printed?

3. In which issue of Christian Century was Paul Irish's article published? (Volume Number?)

4. McPherson's article from Newsweek on the Irish Republican Army (IRA) was published in which issue and on which pages?

5. Of the two articles on the Irish Republican Army, which do you think would probably be the more thorough and detailed?

6. Using the Reader's Guide in your library, list two articles dealing with the following topics (give the title of the article, name of magazine, and date): Watergate, Energy Crisis, Inflation, Middle East Crisis, Motorcycles, and American Indians.

IRELAND  
See also  
Astronomical observatories—Ireland  
Fishing—Ireland  
Northern Ireland  
Police—Ireland  
Industries  
New exodus from Ireland. M. Dammérman. II Forbes 119:69-70 AD 1 '77  
IRELAND, Northern. See Northern Ireland  
IRISH, Paul  
Death in detention in South Africa. Chr Cent 95:104-7 Ja '77  
IRISH Americans  
Golden sign. excerpts. J. Corry. II N Y Times Mag 9:18-19 Mr 13 '77  
IRISH in the United States  
See also  
Irish Americans  
Irish Republican Army  
Buying back Belfast. IRA business activities. M. Hutchinson. II Forbes 119:23-7 Mr 13 '77  
IRA. See Young, Furks. M. MacPherson. Newsweek 99:30 Mr 2 '77  
IRON  
See also  
Wrought iron  
IRON Sponges  
Sponge iron in steel's future. S. Rose. II Fortune 95:104-7 Ja '77  
IRON metallurgy  
See also  
Iron Sponges  
Iron mines and mining  
United States  
Shades of Adirondack iron. Salisbury Iron Mining. D. L. Tuttle. II Conservationist 31:33-5 Mr '77  
IRONWORK  
See also  
Blacksmithing  
Collectors and collecting  
Address book: dealers in iron objects. S. Sunder. II House 119:324 Mr '77  
IRRIGATION  
See also  
Drip irrigation case history. II Sunset 159:292-3  
They irrigate by phone. W. Walther and E. Walther. II Farm 101:NA11 Mr '77  
Water management can offset higher irrigation costs. Suc Farm 75:no538 Mr '77  
Watering of gardens, lawns, etc.  
South Dakota  
McGovern vs. the farmers. South Dakota's water showdown. Case irrigation project. H. Gardner. II Nation 224:438-61 AD 16 '77  
United States  
See also  
United States—Reclamation. Bureau of  
IRRIGATION machinery  
Expanding irrigation. Inder's point of view. Suc Farm 75:no288 F '77  
IRVING, Washington  
RIP Van Winkle: dramatization. See Thane. A.  
IRWIN, Marley R. and Johnson, S. C.  
Information, economy, and public policy. bibli Science 193:1179-4 Mr 18 '77  
IRWIN, Mark  
Frog's advice to a young girl in love: poem. Commonwealth 101:310 AD 1 '77  
ISAAC (biblical character) See Bible—Biography  
ISADORA Duncan sleep with the Russian Navy: drama. See Vanshel, J.  
ISERMAN, Peter A.  
Last of the Bedouin. II Horizon 19:32-9 Mr '77

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## Lesson # 4 - Evaluating Sources - Loaded Words

**LOADED WORDS:** Loaded words, often with an emotional appeal, are a means of influencing the reader in some direction. Many people who write newspaper articles, letters to the editor, advertisements, political speeches, magazine articles, and textbooks choose certain words to try to influence your attitude toward a person, event, or situation. In doing this, the author usually chooses certain words which will affect our opinion. This does not mean that the author is printing false facts or lies. It means that the author may be trying to shape our attitude.

**Exercise:**

Which sounds better? "The Democratic candidate was seen striding into the room."  
"The Democratic candidate was seen walking into the room."

What is the "loaded" word? \_\_\_\_\_ How does it change the meaning of the sentence?

Compare these two headlines (they cover the same story on the same day):

WHITE HOUSE PICKETED BY 12,000 IN PROTEST OF VIET NAM POLICY (Chicago Tribune, November 28, 1965)

PEACENIKS PARADE IN D.C. & NOTHING MUCH HAPPENS (N.Y. Daily News, November 28, 1965)

Which are the "loaded" words? Could they influence your opinion?

Compare these two examples:

"The candidates were Bryan Wilson, president of American Electronics, and Florence Greenwood, a pert, blond, grandmother of five."

"The candidates were Bryan Wilson, president of American Electronics, and Florence Greenwood, a Certified Public Accountant."

Neither statement is false. One of the statements can influence your opinion more than the other. Which statement is more fair to Florence Greenwood? If you were in favor of Bryan Wilson to win the election, which statement would you print in the newspaper?

Lesson # 4 - Evaluating Sources - Loaded Words (con't)

Examine the following headlines from newspapers which were printed just before the Spanish-American War. Circle the loaded words.

ALL CUBA AFLAME

Atrocities are committed every day throughout the island...

HORRORS OF INDIA'S PLAGUE NOW SURPASSED IN CUBA

30,000 non-combatants chiefly women and children have perished within a few weeks. You would sicken at the sight of the thousands of women and children starving to death in Cuba today...Filthy skeletons dying on bare, foul boards...suffering is awful...the poor victims...die by the hundreds under the eyes of soldiers.

200,000 PEOPLE ARE STARVING. GENERAL WEYLER TRYING TO "KILL OFF THE BREED" ...and he (Weyler) travels about the island not as a general at the head of his troops, but as a military despot, visiting well fortified cities that he may gloat over the misery he has wrought.

TRUTHS FROM CUBA THAT WILL SHOCK THE CIVILIZED WORLD

General Weyler's policy of killing women and children by slow starvation under the guns of Spain's forts. A multitude of sick fall dying upon garbage in the streets here, and there they lie until, after having served as...spectacles for nine hours, they are collected and hauled away in oxcarts for garbage...

Rewrite each news account so it would be more objective.

Make up your own headline using loaded words which try to influence people.

## Lesson # 5 - Evaluating Sources - Analyzing Conflicting Accounts

Read the two following accounts of slavery before the Civil War. Which do you consider the most reliable? Why?

A Northern Traveler's Description of Slavery:

I am about to describe the wealthiest Southern plantation I visited. The Negroes appeared to be well taken care of. Most of them lived in well-built cottages. Each family of five or more had two rooms and an attic. Others lived in small huts, but preparations were being made to replace these small huts with large neat cottages. Each family had its own chickens and pigs.

Several times, I saw gangs of field hands eating their noon meal which they had brought to the field. Usually, they had plenty, sometimes more than they could eat. Their meal usually consisted of bacon, cornbread, and molasses. Every week, each family received three pounds of pork, one peck of cornmeal, and, in the winter, one quart of molasses. Once a month, each family received one pound of tobacco and four pints of salt. No drink was ever served except water. All the slaves cooked for themselves in their own cabins after work. Each family also had a garden. They could grow vegetables and sell them, together with their geese and chickens, or keep them for themselves.

Each overseer, the man who looked after the slaves, decided the number of hours the slaves worked. I saw Negroes at work before sunrise and after sunset. At about eight o'clock, they were allowed to stop for breakfast, and about noon for lunch. The overseer also decided how long the breakfast and lunch breaks would be. The slaves usually had from half an hour to an hour to eat.



## Lesson # 5 - Evaluating Sources - Analyzing Conflicting Accounts (con't)

A Former Slave Tells About His Life Under Slavery:

Master Thomas said he would put up with me no longer. He said he would send me out to be broken. For this purpose, he sent me to live with a man named Edward Covey. Mr. Covey had a very high reputation for breaking young slaves. On the first day of January, 1833, I went to live with Mr. Covey. I had been at my new home only a week when Mr. Covey gave me a very bad whipping, cutting my back until the blood ran.

I lived with Mr. Covey for one year. During the first six months of that year, hardly a week passed without his whipping me. I almost always had a sore back. We were worked until we could work no longer. Long before daylight, we were up, feeding the horses, and by daybreak we were off to the field. Mr. Covey gave us enough to eat, but not enough time in which to eat it. We were often given less than five minutes for a meal. We were often in the field from the earliest daylight until we could no longer see at night. Sometimes we worked in the field until midnight. We were worked in all weather, no matter how hot or how cold. It could never rain, blow, hail, or snow too hard to keep us from working in the field.

I was somewhat hard to control when I first went to Mr. Covey, but a few months of his discipline tamed me. Mr. Covey succeeded in breaking me. I was broken in body, soul, and spirit. The cheerful spark that was about my eyes died. The dark night of slavery closed in upon me.

1. On the back of this sheet, list all of the ways in which these two accounts differ.
2. Which of the accounts do you believe to be the most accurate? Why?
3. If you wanted to find out more about slavery in America, where would you look?

\*From: The Americans, Edwin Fenton, Editor (Holt, Rinehart and Winston, 1975), pp. 166-169.

## Lesson # 5 - Evaluating Sources - Analyzing Conflicting Accounts (con't)

On August 11, 1965, Marquette Frye was arrested for speeding as he drove along Avalon Boulevard in the Watts District of Los Angeles. Frye was driving his mother's automobile. With him in the car was his half-brother Ronald Frye. What followed triggered one of the most destructive riots in modern American history. Before it was over, a week later, 34 people had been killed and more than 1,000 injured. More than 200 buildings had been totally destroyed by fire, and the total property loss was estimated at \$40 million. What was it that touched off so devastating a riot?

Read the following versions\* of the start of the Watts Riot. Which do you consider the most reliable? Why?

The Police Version:

Suddenly, Marquette Frye started screaming obscenities, pushed his mother aside, yelled that he refused to be arrested and that the officers would have to kill him to take him to jail. The patrolman concluded Marquette Frye should be taken into physical custody.

Patrolman Minikus attempted to take physical custody of Marquette Frye by taking hold of his arm. Marquette Frye pulled away and swung his fist at Patrolman Minikus who deflected the blow with his arm. The gathering spectators began to mill around.

Patrolman Wilson went to the aid of Patrolman Minikus, who was being hindered by Ronald Frye, and jabbed Ronald Frye in the stomach with a baton once or twice in an attempt to deter him. When he attempted to subdue Marquette Frye, Marquette grabbed the baton. Patrolman Wilson wrenched his baton from the grasp of Marquette Frye and swung it, trying to hit him across the shoulders. Marquette Frye moved and the blow hit him on the forehead, breaking the skin. Patrolmen Lewis and Bennett were occupied in controlling the crowd.

\*From: What Happened on Lexington Green?, Peter S. Bennett (Addison-Wesley, 1970), pp. 1-3.

## Lesson # 5 - Evaluating Sources - Analyzing Conflicting Accounts (con't)

The Police Version (con't):

While Marquette Frye was the object of the arresting patrolmen, Ronald Frye and Mrs. Rena Frye, although warned by the patrolmen not to interfere, attempted to pull the patrolmen away from Marquette Frye. Mrs. Frye jumped on the back of first one and then another patrolman during the struggle and Ronald tried to strike Patrolman Lewis. The uniform shirt of Patrolman Minikus was torn from his back. Mrs. Frye and Ronald Frye were then placed under physical arrest, as was Marquette Frye. (Source: Transcripts, Depositions, Consultant Reports and Selected Documents of the Governor's Commission on the Los Angeles Riots, 1965, pp. 9-12.)

The Frye's Version:

The Fryes are in agreement, that nothing physical happened until the lawmen accosted Mrs. Frye. "The officer grabbed her and twisted her hands behind her back," claims Ronald. "I said, 'Officer, why don't you leave her alone? She hasn't done anything.'" The lawmen responded, say the Fryes, by twisting Ronald's arms behind his back and jabbing him in the stomach with nightsticks.

At that time, according to Marquette, he was twice pushed against an auto and then hit with a club. "After they hit me with the stick it stunned me," he says, "and I just started swinging."

"I was begging them not to hit him (Marquette) or not to shoot him," Mrs. Frye recalls. "They were holding a shotgun right to his head. After they had handcuffed Marquette, they kicked and beat him in the front seat. (Source: Louie Robinson, "...If They Hadn't Kicked that Man," Ebony; October, 1965, p. 117.)

What did happen? When eyewitnesses to an event disagree, can we ever reconstruct that event or know what happened at any given point in time? Why is it that different human beings see things differently when they happen? If this case went to court, and you were on the jury, how would you decide who started the Watts riot?

## Lesson # 6 - Evaluating Sources - Analyzing the News

Evaluating Newspapers, Magazines, Articles, and Television:

One way to evaluate newspapers, magazine articles, or television programs is to determine if they favor one side or another. There are several ways a class could evaluate these sources. Select one (or more) of the following activities and answer the questions which apply.

- A. Read accounts of the same controversy in a newspaper or popular weekly newsmagazine (Time or Newsweek). Follow the controversy over the period of one week.
- B. Divide into groups of four or five. Let each group select a current topic (such as the Arab-Israeli crisis, energy crisis, environmental problems, school desegregation, drug problems, etc.) and follow the topic for two weeks using several sources.
- C. Divide into three groups and have each group watch the evening national news on a different network. Record each topic covered. How did the coverage differ on each network?
- D. Read and compare two different newspapers such as the Arkansas Gazette, Commercial Appeal, or Tulsa World.
- E. Read the letters to the editor from one daily newspaper for one week.

For each activity selected (or combination of activities) answer the following questions that apply:

1. Did the article or news show tend to favor one side or the other?
2. Give specific examples that show that the articles or news show tended to favor one side of the issue.

## Lesson # 6 - Evaluating Sources - Analyzing the News (con't)

3. Were there any editorials on the issue that you selected?  
If so, which side did the editorial take?
4. List their reasons for taking that side.
5. In your opinion, was the topic fairly treated? Why?
6. Did the writers (or reporter) have first-hand knowledge of the issue which they were reporting? Give examples.
7. What was the writer's or reporter's intention in reporting this issue?
8. Did the writer (or reporter) give sources of information?  
If so, list them.
9. Were the sources of information primary or secondary sources?
10. Did the writer (or reporter) distinguish facts from opinions?
11. Locate and list any loaded words used in the articles or news shows.

## FINDING INFORMATION

To the teacher:

One mark of an educated person is the ability to find information on subjects being discussed or studied. Teaching this skill to students is not easy, yet it is central to their future educational development. To assist you in teaching the skill of information finding, three lessons have been included:

Lesson # 1: When teaching about the library card catalog it is imperative that the student realize the catalog is arranged in several different ways. The same book may be catalogued under four or five subjects. This lesson might be more meaningful if the class could visit the school library and use the card catalog as a group.

When discussing the catalog card, be sure to emphasize the importance of the researcher knowing if a book has a bibliography.

Lesson # 2: It is expected that some students will have trouble with this assignment. Small libraries probably will not have three books on each of these six topics. Therefore, this assignment will serve as a good introduction to the next lesson--the Reader's Guide.

Lesson # 3: The Reader's Guide to Periodical Literature can be very confusing to students. They particularly need direction in reading the names of the magazines which are often abbreviated. (The names may be found in the front of the Guide.)

Lesson # 4: The correct answers to these questions are: (1.) A (2.) C (3.) B (4.) B.

The homework assignment in lesson # 4 would perhaps be most successful if all the interviews were on the same subject. This would provide opportunities for making comparisons and noting similarities and contrasts. (Good subjects might be the Assassination of President Kennedy, the Little Rock Integration Crisis, the Great Depression, or World War II.)

Lesson # 1 - Finding Information - Library Skills

The Library Card Catalog: A basic skill necessary to the proper use of a library is the ability to read a library catalog card. It is this card which tells about the book or source being studied.

There are two types of catalog cards: the author card and the subject card. The author card is filed in the catalog alphabetically by the author's last name. The subject card is also filed in the catalog but alphabetically by subject. Examples of these two cards are given below:

**THE CALL NUMBER:** This number tells where the source is located in the library.

**THE AUTHOR:** The author's name is listed in full, usually last name first.

**THE TITLE:** The title is usually given in full.

**YEAR OF PUBLICATION:** This date is the year in which the source was published. Additional dates are usually included if the source has gone through more than one printing.

**MISC. DATA:** These items are very important. Usually the reader is informed of how many pages the source contains, if it contains maps, footnotes, etc.

274.15 B581	Bieler, Ludwig. Ireland, harbinger of the Middle Ages. 1st English ed.; London, New York, Oxford University Press, 1963. viii, 148 p. illus. (part col., part mounted) maps, facsim. 30 cm. "First published in German." Bibliography: p. 145.
BR794.B513 1963	274.15 63-6010
Library of Congress	(5J2)

**SUBJECT HEADINGS:** For additional information on the same or a related subject, look in the catalog under these subject headings.

274.15 B581	Ireland, harbinger of the Middle Ages Bieler, Ludwig. Ireland, harbinger of the Middle Ages. 1st English ed.; London, New York, Oxford University Press, 1963. viii, 148 p. illus. (part col., part mounted) maps, facsim. 30 cm. "First published in German." Bibliography: p. 145.
BR794.B513 1963	274.15 63-6010
Library of Congress	(5J2)

**SUBJECT CARD:** Note that subject cards are identical with author cards except for the addition of a subject heading line at the top of the card.

## Lesson # 1 - Finding Information - Library (t)

Using the card at the right, answer the following questions.

914.031 Rl.9d		
Rice, David Talbot, 1903- <i>cd.</i> The dawn of European civilization: the Dark Ages. Texts by David Oates (and others), New York, McGraw-Hill, 1965, 360 p. illus., facsimis, general tables, maps, plans, plates (part col.) 36 cm. Includes bibliographical references.		
1. Europe—Civilization—Hist. 2. Near East—Civilization—Hist. 3. Middle Ages. 4. Art, Medieval. I. Oates, David. II. Title.		
CB351.R46	914.031	65-22062
Library of Congress	6614	

## EXERCISE:

1. Who is the author(s)?
2. Does this book contain any maps?
3. Why is it important to know that a source contains maps?
4. Does this book contain illustrations?
5. In which year was this book published?
6. Why is it important to know the publication date?
7. What is a bibliography?
8. Under which other subjects would you look in the card catalog for related sources?



## Lesson # 2 - Finding Information - Library Skills

The following are six topics to research. Using the card catalog, list three books or sources on each topic. Place a check mark beside the source which you think would be the best.

Civil War

Arkansas History

Women's History

Organized Crime

Drug Abuse

Black History

If you cannot find books in your library on any of the above topics, where else would you look?

## Lesson # 3 - Finding Information - Library Skills

The Reader's Guide to Periodical Literature: Each year many millions of articles are published in American magazines and other periodicals. Making sense out of this hodge-podge of information is a most difficult task. No single bibliography covers all of these magazines. However, the Reader's Guide to Periodical Literature indexes by subject over 150 major American periodicals in a wide variety of fields and disciplines. With the use of the Guide you are able to locate a whole mine of current information on a wide variety of subjects.

The Guide is arranged alphabetically. For example, if you were interested in what was going on in modern-day Ireland, you would find Ireland listed alphabetically.

See the example below which is a small part of a page from the May 10, 1977 issue of the Guide.

SUBJECT HEADING: The subjects are arranged alphabetically.

NAME OF AUTHOR: Usually only the author's last name is written in full.

NAME OF MAGAZINE: Often the name of the magazine is abbreviated.

EVANGELICALISM  
Evangelical summertime? C. F. H. Henry. Chr Today 21:33+ Ap 1 '77  
Bibliography  
Choice evangelical books: key books of '76.  
D. Tindler. Chr Today 21:24-5 Mr 18 '77  
Theology

CROSS INDEX HEADINGS: These are related subjects where you might find more information.

See Theology-

VOLUME AND PAGE NUMBERS: These numbers help locate the particular issue of the magazine.

DATE OF MAGAZINE: This information also helps in locating the magazine. Generally the months are abbreviated.

It takes a little practice to become proficient in using the Guide. On the next page are several exercises to assist in learning to use the Guide properly.

## Lesson # 3 - Finding Information - Library Skills (con't)

## EXERCISE:

Using the information found at the right, answer these questions:

1. Who is the author of an article on Irish Americans?
2. Two articles are listed on the "Irish Republican Army." In which magazines were they printed?
3. In which issue of Christian Century was Paul Irish's article published? (Volume Number?)
4. McPherson's article from Newsweek on the Irish Republican Army (IRA) was published in which issue and on which pages?
5. Of the two articles on the Irish Republican Army, which do you think would probably be the more thorough and detailed?
6. Using the Reader's Guide in your library, list two articles dealing with the following topics (give the title of the article, name of magazine, and date): Watergate, Energy Crisis, Inflation, Middle East Crisis, Motorcycles, and American Indians.

IRELAND  
*See also*  
 Astronomical observatories—Ireland  
 Fishing—Ireland  
 Northern Ireland  
 Police—Ireland  
 Industries  
 New exodus from Ireland. M. Dammerman. II Forbes 119:69-70 Ap 1 '77  
 IRELAND, Northern. *See* Northern Ireland  
 IRISH, Paul  
 Death in detention in South Africa. Chr Cent 94:8 Ja 5 '77  
 IRISH Americans  
 Golden clan; excerpt. J. Corry. II N Y Times Mag p 16-19+ Mr 13 '77  
 IRISH in the United States  
*See also*  
 Irish Americans  
 IRISH Republican Army  
 Buying back Belfast? IRA business activities. M. Dammerman. II Forbes 119:25-7 Mr 15 '77  
 IRA's young Turks. M. MacPherson. Newsweek 89:30-1 F 21 '77  
 IRON  
*See also*  
 Wrought iron  
 IRON, Sponges  
 Sponge iron in steel's future. S. Ross. II Fortune 95:106-10+ Ja '77  
 IRON metallurgy  
*See also*  
 Iron, Sponges  
 IRON mines and mining  
 United States  
 Shades of Adirondack iron: Salisbury Iron Mine. D. L. Tuttle. II Conservationist 31:33-5 Mr '77  
 IRONWORK  
*See also*  
 Blacksmithing  
 Collectors and collecting  
 Address book; dealers in iron objects. S. Sunderland. House B 119:32+ Mr '77  
 IRRIGATION  
 Drip irrigation case history. II Sunset 158:292-3 Ap '77  
 They irrigate by phone. W. Waltner and E. Waltner. II Farm J 101:MM1+ Mr '77  
 Water management can offset higher irrigation costs. Suc Farm 75:no538 Mr '77  
*See also*  
 Watering of gardens, lawns, etc.  
 South Dakota  
 McGovern vs. the farmers: South Dakota's water showdown: Oahe Irrigation Project. H. Gardner. II Nation 224:456-61 Ap 16 '77  
 United States  
*See also*  
 United States—Reclamation. Bureau of  
 IRRIGATION machinery  
 Financing irrigation: lender's point of view. Suc Farm 75:no2 8 F '77  
 IRVING, Washington  
 Rip Van Winkle: dramatization. *See* Thane, A.  
 IRWIN, Manley R. and Johnson, S. C.  
 Information economy and public policy. bibl Science 195:1170-4 Mr 18 '77  
 IRWIN, Mark  
 Frog's advice to a young girl in love: poem. Commonweal 104:210 Ap 1 '77  
 ISAAC (biblical character) *See* Bible—Bibliography  
 ISADORA Duncan sleeps with the Russian Navy: drama. *See* Wanshel, J.  
 ISEMAN, Peter A.  
 Last of the Bedouin. II Horizon 19:32-9 Mr '77

#### Lesson # 4 - Finding Information - Oral Interviews

Oral Interviews: One of the best ways to learn about the past is from people who have lived through it. Every person has had unique experiences which will help us better understand the world around us. Our parents, our grandparents, our neighbors down the street--all these people have lived through various parts of American history. We should use this resource and bring their knowledge into the educational experience.

This educational technique is known as "oral history," and to use it successfully takes certain skills. First, you must be able to identify people with past experiences worth sharing. For example, just because a person is elderly does not mean he or she is a good subject for an oral history interview. Some people have poor memories; some are not comfortable in talking with others; and some are overly-eager and want to talk about too many diverse subjects.

Having chosen someone to interview, your next problem is to decide which questions to ask. It is usually best to write a few questions before the interview. However, you should not ask only these questions. It is necessary to remain flexible enough to get additional information on important subjects which arise during the interview. Try to ask general questions which require the person you are interviewing to give extended answers. Avoid questions which can be answered with a simple "yes" or "no".

Having collected information from an interview, you must evaluate it. Humans are not perfect and the information they give is likewise imperfect. Memories become dim with the passage of time. Sometimes people modify their memories to make their own role seem more important. For example, some have a tendency to remember only the good parts of their school days.

Some exercises are included on the following page to aid you in conducting interviews.

## Lesson # 4 - Finding Information - Oral Interviews (con't)

## EXERCISE:

1. For an interview on life in the United States during World War II, which would you choose: (A) your grandmother who was a homemaker during the war (B) your grandfather who was a soldier in France (C) a neighbor who was in elementary school during the war? Why?
2. Which of the following questions would be best to begin an interview on World War II: (A) Do you remember World War II? (B) Were you in World War II? (C) What are some of your memories of World War II? (D) Do you remember the bombing of Pearl Harbor during World War II? Why?
3. If the person being interviewed mentions briefly that on his way to Europe during the War he saw a German submarine sunk, which of the following would be the best question to ask next: (A) Why were you going to Europe? (B) Give some more details on the submarine sinking you saw. (C) Where is Europe? (D) Did you fly or sail to Europe?
4. If the person being interviewed states that when she was a child "young people were better behaved than now," would you: (A) believe her completely? (B) realize that the person might have forgotten some of the misbehavior of her childhood? (C) refuse to believe her entirely?
5. HOMEWORK ASSIGNMENT: Interview one of your parents or relatives and write a brief summary.

## CLASSIFYING DATA

To the teacher:

The study of social science or any other discipline reveals a multitude of terms, facts, and other information. It is important for students to be able to organize this material for it to have meaning and for them to understand that data can be classified in various ways depending on how it will be used.

Lesson # 1: Be sure that students understand that data must sometimes be reorganized to make it easier to learn or to use.

Lesson # 2: Some ways this list could be classified are according to: sex, occupation, ages at death, whether they were "only" children, centuries of birth, alphabetical order, marital status, and race. The last question (Why did you choose this method?) should indicate to the student that the method of classification depends on how the information is to be used. Have them suggest ways their lists of methods could be used.

Lesson # 3: Students might need further help in understanding the physical features of a graph such as what makes a line graph, or how to distinguish a line graph from a bar graph or a circle graph, or that 55 is located halfway between 50 and 60, or that a particular point on the line graph is the intersection of vertical and horizontal lines.

Lesson # 4: Students need to know what type of information goes on a graph. They might need some assistance deciding on the variables that go on the graph "Immigration to America Through 1775". This information could also be shown on a circle graph.

Lesson # 5: This is a short lesson on inferences, but you can apply these examples to other lessons or to different circumstances.

Lesson # 6: Students might want their circle graphs to show different needs from the ones given. You could have them consult with their parents to see what the actual costs are and then graph those results.

After completing these lessons, students should know which type of graph to use for certain information and how to construct it. After students have acquired the skills of analyzing charts and graphs, teachers should constantly refer to the charts and graphs located in their social studies texts.

## CLASSIFYING DATA

Further suggestions for the teacher:

1. Conduct a survey of students in a class (or classes) to determine the name of the state in which they were born. Make a graph showing the results.
2. Using library resource material, find the population figures for the ten most populous cities in the U.S. today. Compare these with the 1950 figures for each city and then graph the differences. Make a statement concerning population trends.
3. Find circle graphs in the newspapers. What do they show?
4. Make lists of the following information and decide how to classify it.
  - the number of football victories for the area high school over the last 20 years
  - the percentage of people voting in presidential elections for the last 40 years
  - the number of years of required school attendance in 15 countries
  - the comparison of miles per gallon for 10 American cars
  - the average family size in the U.S. since 1630
  - the number of people killed in ten different wars

## Lesson # 1 - Classifying Data - Using Charts

There are many facts used in the social studies. These must be organized so they have meaning. To classify things means to place data in groups that belong together. Look at Chart # 1 (below) of major battles in the Civil War. The chart has three columns: Time, Place, and Winner. Notice that the battles appear on the chart in order of time from 1861 through 1865. This is one way to classify data.

CHART # 1: MAJOR BATTLES OF THE CIVIL WAR

<u>TIME</u>	<u>PLACE</u>	<u>WINNER</u>
1. July 21, 1861	Manassas, Virginia	South
2. April 6-7, 1862	Shiloh, Tennessee	North
3. May 1, 1862	New Orleans, Louisiana	North
4. August 29-30, 1862	Manassas, Virginia	South
5. September 16-17, 1862	Antietam, Maryland	North
6. December 13, 1862	Fredericksburg, Virginia	South
7. May 1-4, 1863	Chancellorsville, Virginia	South
8. May 23-July 4, 1863	Vicksburg, Mississippi	North
9. July 1-3, 1863	Gettysburg, Pennsylvania	North
10. September 19-20, 1863	Chicamauga, Tennessee	South
11. November 23-25, 1863	Chattanooga, Tennessee	North
12. May 5-12, 1864	The Wilderness, Virginia	North
13. July 22-September 2, 1864	Atlanta, Georgia	North
14. December 15-16, 1864	Nashville, Tennessee	North
15. December 22, 1864	Savannah, Georgia	North
16. March 29-April 5, 1865	Appomattox, Virginia	North

You can classify data in a variety of ways. Chart # 1 classifies the major battles in the order of time. Suppose you want to answer this question: Did most of these battles take place during the warm weather months? Then you could list these battles according to the different seasons of the year--fall, winter, spring, and summer--to see how many occurred during each season. On Chart # 2 make a list of battles that classifies them according to the seasons in which they occurred:

CHART # 4

FALL September-November	WINTER December-February	SPRING March-May	SUMMER June-August

Source: Barry K. Beyer, Carnegie-Mellon University, 1973



## Lesson # 1 - Classifying Data - Using Charts

Did most of the battles take place during the warm weather months?

Make a chart of your own that would illustrate this question: In which years did most southern victories take place?

What is the answer? \_\_\_\_\_

List other ways you could classify the information on Chart # 1.

## Lesson # 2 - Classifying Data - Using Charts

## FAMOUS AMERICANS

Ulysses S. Grant

Robert Fulton

John Adams

Meriwether Lewis

Susan B. Anthony

John Glenn

Orville Wright

Andrew Jackson

Neil Armstrong

Daniel Boone

George Washington

Elizabeth Cady Stanton

Abraham Lincoln

Alexander Graham Bell

Thomas Jefferson

Calvin Coolidge

Sacajawea

Richard Nixon

Frederick Douglass

Thomas Edison

Harriet Beecher Stowe

Gerald R. Ford

John F. Kennedy

Wilbur Wright

Lyndon B. Johnson

Harry S. Truman

Martin Luther King, Jr.

Dwight D. Eisenhower

From these names, list the ways they could be classified.

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Choose one of the ways you listed and make your own chart. Use the back of this sheet.

Why did you choose this method to classify the information?

## Lesson # 3 - Classifying Data - Using Line Graphs

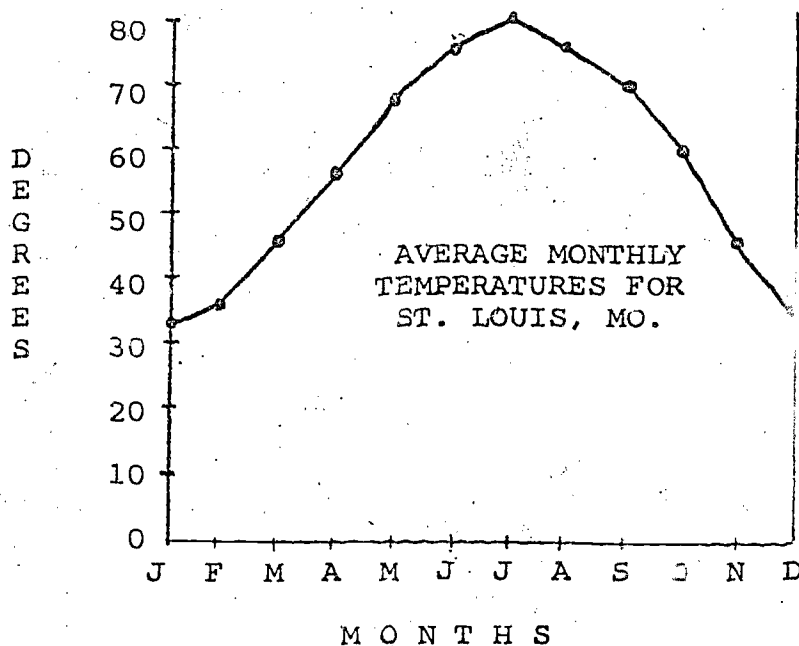
Information that is put on a chart can also be used on a graph. Graphs help to show "relationships" between different things.

Example: Over a year's period of time, the monthly temperature averages for St. Louis were as follows:

Jan. 33	May 68	Sep. 70
Feb. 35	Jun. 75	Oct. 60
Mar. 45	Jul. 80	Nov. 55
Apr. 55	Aug. 75	Dec. 35

This same information can be shown on a line graph, which is useful for showing changes over a period of time.

GRAPH # 1



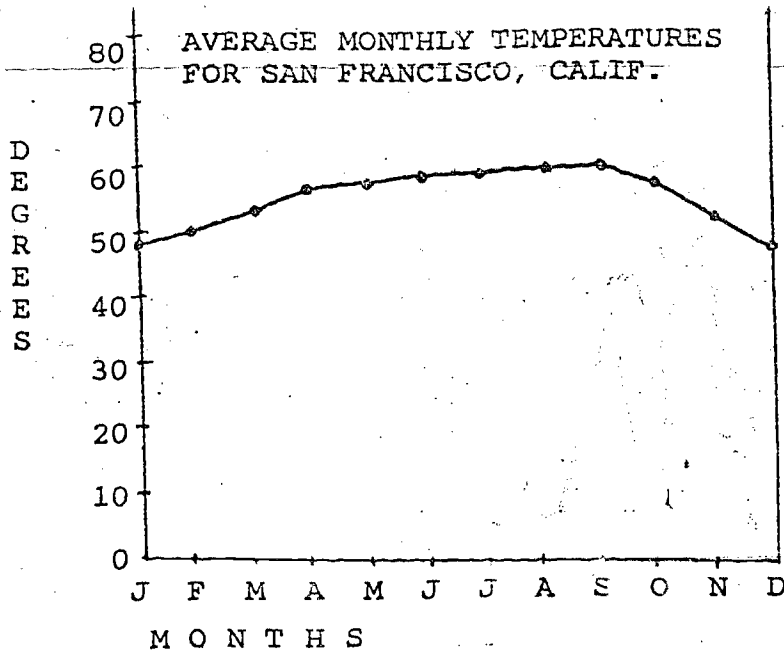
The temperature degrees are shown on the vertical line; the months of the year on the horizontal line.

Use the graph to answer the following questions:

1. In what months of the year do the average monthly temperatures reach 65 or above? \_\_\_\_\_
2. What is the range (the difference between the lowest and the highest) of the average monthly temperatures? \_\_\_\_\_

## Lesson # 3 - Classifying Data - Using Line Graphs (con't)

GRAPH # 2



Use Graph # 1 and Graph # 2 to answer the following questions:

1. Which city has the highest summer temperatures? \_\_\_\_\_
2. Which city has the lowest winter temperatures? \_\_\_\_\_
3. What is the temperature range (approximate) for San Francisco?  
\_\_\_\_\_. How does this compare with the temperature range for St. Louis? \_\_\_\_\_.

Using these figures, make a line graph on the back of this sheet.

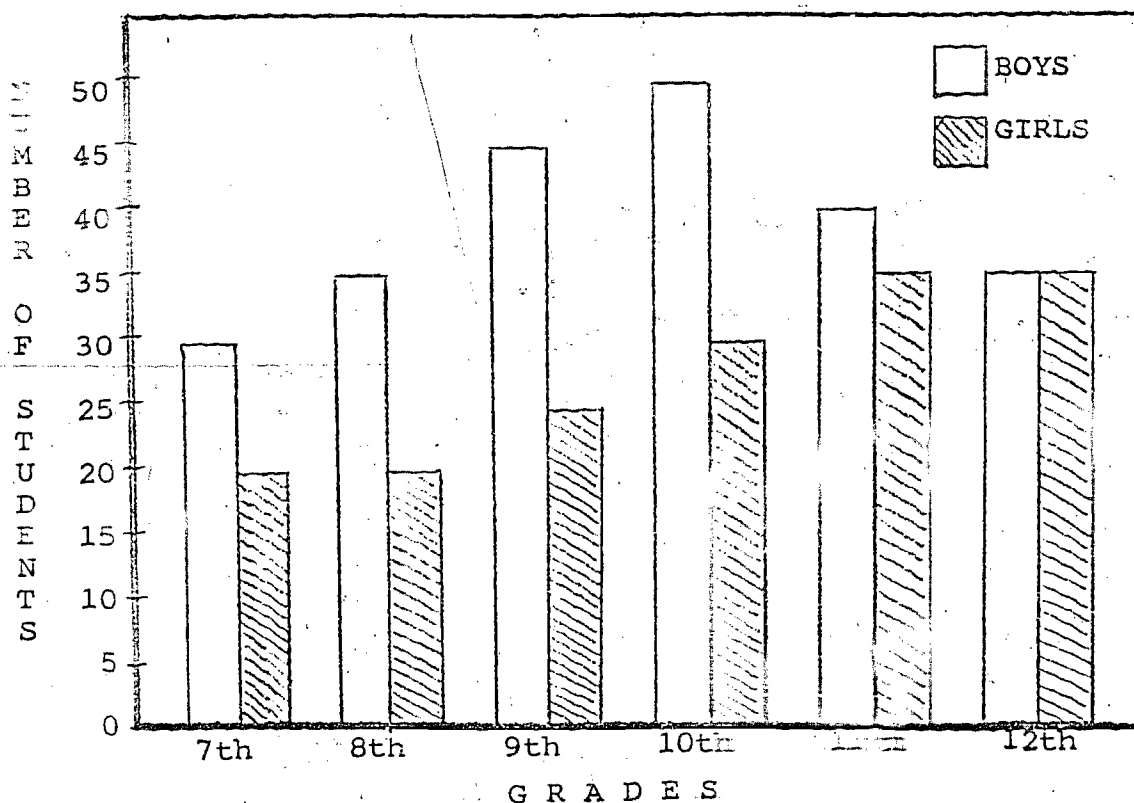
## Average Monthly Temperatures - Washington, D.C.

Jan.	35	Apr.	55	Jul.	78	Oct.	55
Feb.	36	May	65	Aug.	72	Nov.	46
Mar.	43	Jun.	72	Sep.	68	Dec.	38

## Lesson # 4 - Classifying Data - Bar Graphs

Bar graphs help in comparing several things.

Example: At Brooks High School the 9th grade class made a survey of all students taking part in the school athletic program. It was found that a total of 400 students grades 7 - 12, participated. The results of the survey were presented in this way:



Answer these questions using this graph.

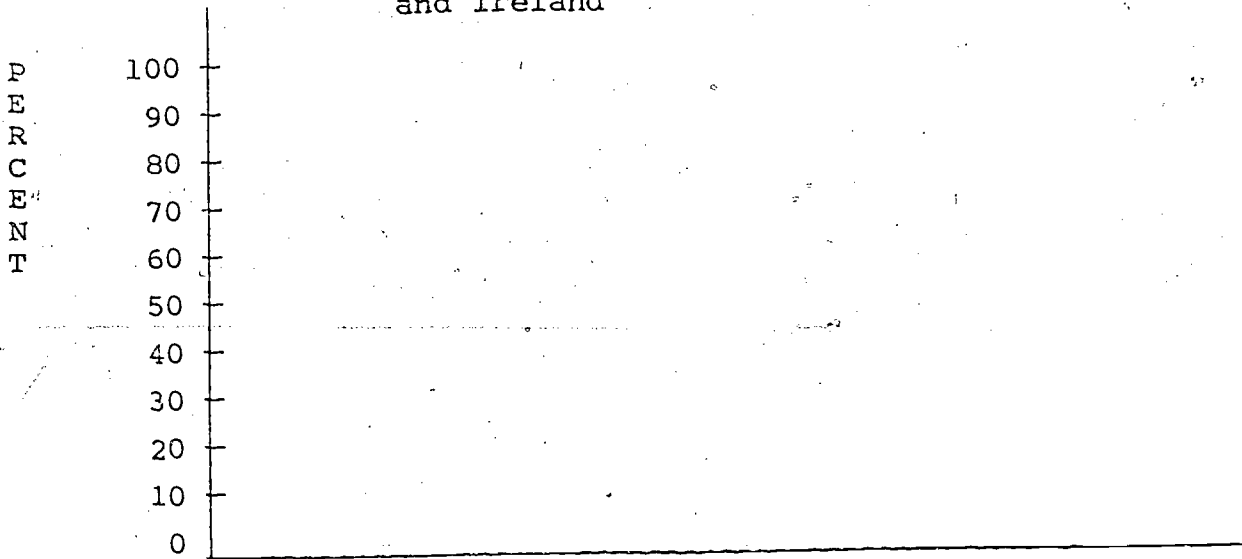
- How many 8th grade boys participated in the sports program? \_\_\_\_\_  
How many 8th grade girls? \_\_\_\_\_
- How many 10th grade students take part in the program? \_\_\_\_\_
- What is the total number of boys who participate? \_\_\_\_\_
- In which grade(s) does the same number of boys and girls take part? \_\_\_\_\_
- In which grade(s) would you find the greatest differences in the number of boys and girls participating? \_\_\_\_\_

## Lesson # 4 - Classifying Data - Bar Graphs (con't)

Using the following information, complete this bar graph.

## IMMIGRATION TO AMERICA THROUGH 1775

62% came from England  
 20% came from Africa  
 8% came from Scotland  
 and Ireland  
 6% came from Germany  
 4% came from other countries



Answer these questions, using your graph.

1. From what country did most of the immigrants come? \_\_\_\_\_
2. From studying the graph, why do you suppose English is the official language of the U.S. today? \_\_\_\_\_

## Lesson # 5 - Classifying Data - Making Inferences From Bar Graphs

Look at questions # 1 and # 2 on the previous page. The answer to question # 1 is a fact that is shown on the graph. The answer to # 2 is one that you "suppose" to be correct because facts on the graph support your answer. Statements based on data are called inferences. Inferences are more than just guesses--they must be based on given data.

- Examples:
1. Most early immigrants to America came from England.  
(This is a fact shown on the graph.)
  2. English is the official language of the U.S. today because early settlers were mostly English.  
(This is an inference based on the facts shown on the graph.)
  3. Most Africans came to America against their will.  
(This is an unacceptable inference because there are no facts shown on this graph to support this statement.)

How many statements can you make based on the information given on the graph IMMIGRATION TO AMERICA THROUGH 1775?

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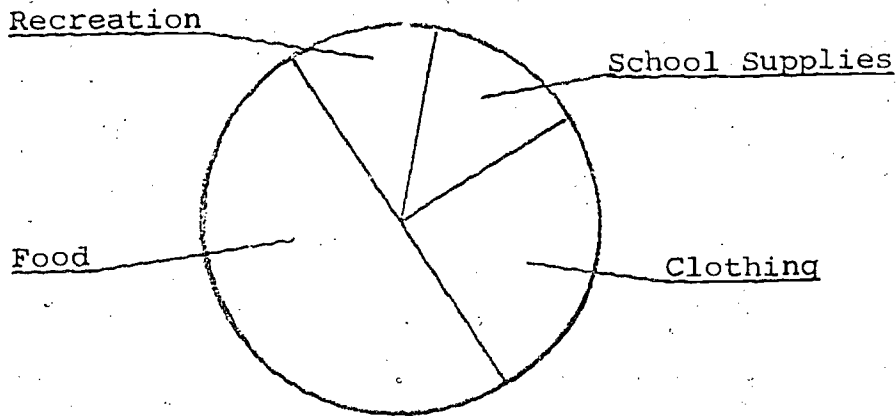
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Place a check mark beside the statements that are inferences.

Lesson # 6 - Classifying Data - Circle Graphs

CIRCLE GRAPHS help to show proportions. Proportions show the relation of one part to another.

Example: If you spent \$100 a month on food, clothing, school supplies, and recreation, a graph showing how you divided the costs might look like this



1. Which costs the most? \_\_\_\_\_ . Does it take 50%, 25%, or 15% of the total spent?
2. Which costs the least? \_\_\_\_\_
3. What percent was spent on recreation and school supplies? \_\_\_\_\_

How much do you think it really costs a month to supply your needs? Construct a circle graph showing the proportions you think it takes.



## MAP SKILLS

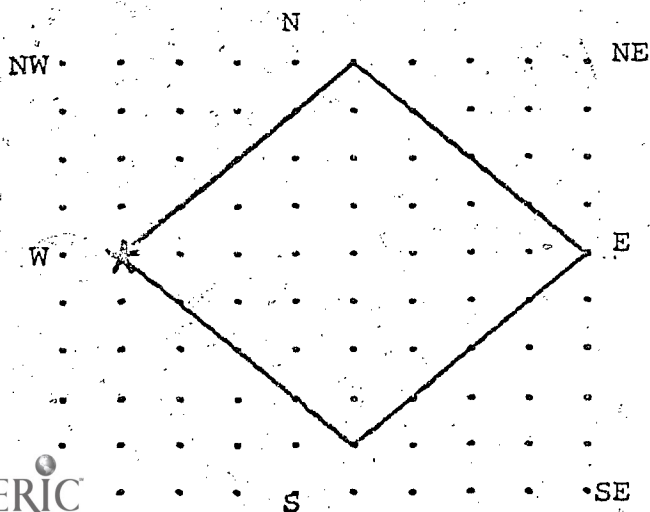
To the teacher:

MAP DIRECTIONS: One of the basic map skills is that of map directions. This includes following instructions and determining directions (north, south, east, west). A simple way to determine whether or not students know how to read directions is to present them with a connect-a-dot direction map. Give the students a copy of the map (lines of dots with directions indicated) which has a starting point indicated by a star or large dot, etc. Tell the students to follow directions carefully and a picture will emerge. If they do not follow directions it will not materialize. As a teacher you will have to assist students with problems such as indicating directions on the map and helping find mistakes if they are made. Three lessons are provided for you to use with your students. The map in Lesson # 1 will form a rocket; Lesson # 2 a commode or toilet; and Lesson # 3 a pistol. The directions in Lesson # 3 are inverted (north is at the bottom of the map) to challenge the students.

After your students have become accomplished at following the directions of a connect-a-dot direction map, have the students construct a map of their own. There are a few items to remember in order to have success in developing one of the maps, for your direction as well as the students. They are:

1. Place dots on a sheet of paper, usually a 15 by 15 dot map will work.
2. Draw the figure that you want to plot on the map. Be sure that it lends itself to straight lines. A circle may not look like a circle if every line between two points is straight instead of curved.
3. Plot a starting point. Usually a star or an asterisk is placed at some point on the figure.
4. Beginning with the starting point and going in one direction, develop directions that will complete the figure. (Example--2 spaces east, then 5 spaces southeast, etc.)
5. When completed, work the map out on a separate sheet to make sure that the direction will yield the desired figure. If not correct, check your directions.

Example of a connect-a-dot direction map:



Directions:

1. Begin at star
2. Move 4 spaces northeast
3. Move 4 spaces southeast
4. Move 4 spaces southwest
5. Move 4 spaces northwest

To the teacher: (con't)

USING LEGENDS: When students have learned to follow directions, the next step is to learn to use map legends. Included to help you teach students the skill of reading legends are the following lessons:

Lesson # 4: This lesson uses a map of the fictitious town of Rockton. It depicts various points of interest by the use of pictures and symbols. Questions are included to develop the students' skill in interpreting the legend. It is suggested that students develop their own map to put the skill into practical use.

Lesson # 5: A map of the population of certain Arkansas cities and towns is used in this lesson. Have students use the map and legend to answer the questions. More questions could be added.

MAKING INFERENCES: Once students have acquired the skills of using a legend and following directions, they should be ready to use those skills in making inferences from maps. To make an inference means to draw a conclusion from the available information.

Lesson # 6: Students should study the map and try to make conclusions about the types of jobs, buildings, or schools in the town of Manhole.

Lesson # 7: This lesson delves deeper into the skill of making inferences. Students will explore city characteristics using a map that has little information except symbols for mountains, railroads, and rivers. Questions about why cities are built in certain locations would help the students develop their conclusions.

Lesson # 8: Some students give little thought to the factors involved in choosing a business or home site. This lesson is designed to help students make decisions about business and residential locations. You might have students choose a business in their own community and then make inferences about its location.

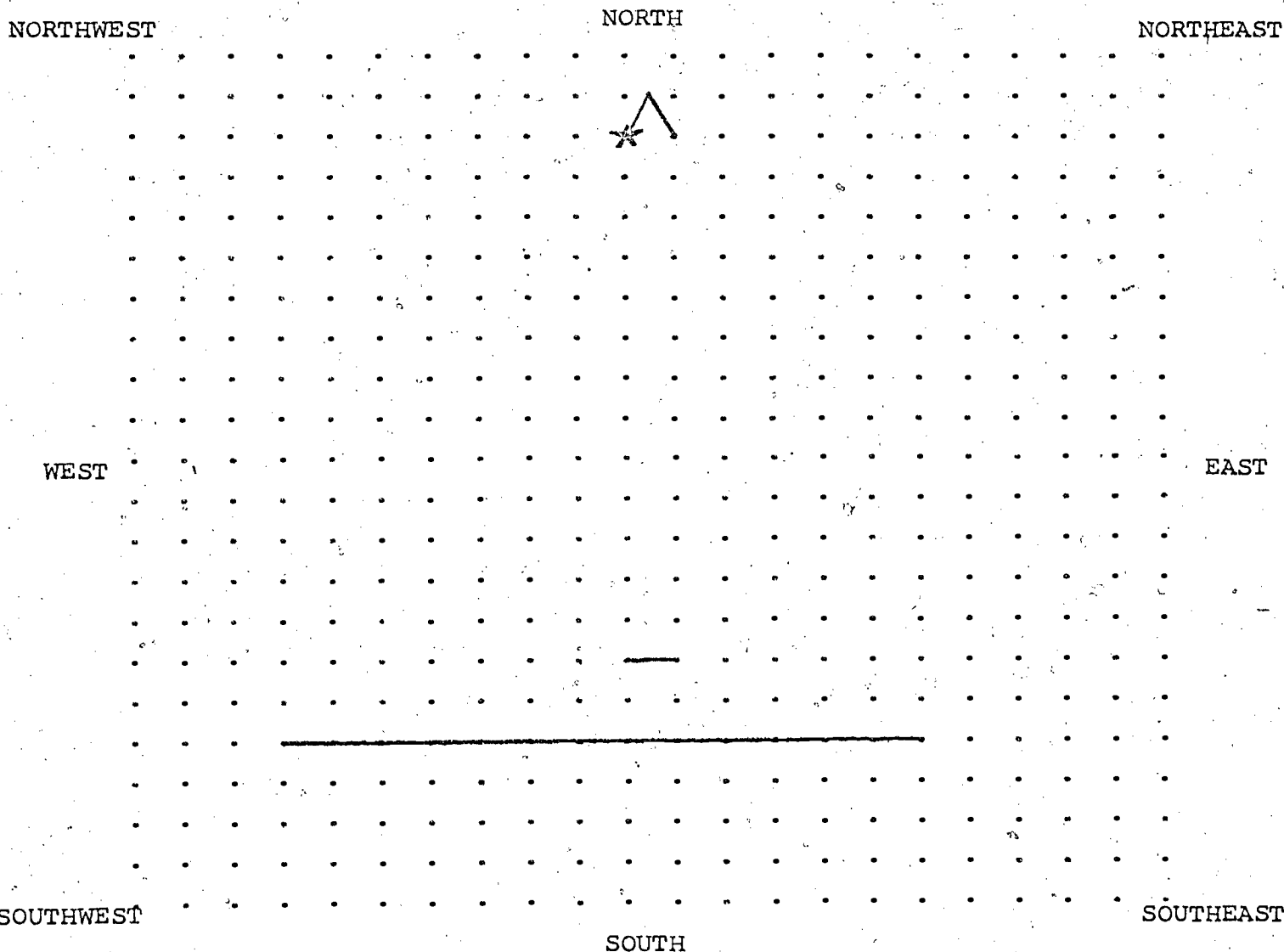
Further suggestions:

There are many practical exercises that might be done using Arkansas highway maps. Students could practice map skills by doing some of the following activities:

- A. Have the students calculate the distance between cities or famous historical sites in Arkansas.
- B. Have students draw inferences on why towns are located where they are.
- C. Have students hypothesize where they would locate factories (name specific types of factories). Make them justify the location.
- D. Have students practice using the legend.

Lesson # 1 - Following Directions - Connect-A-Dot Direction Map

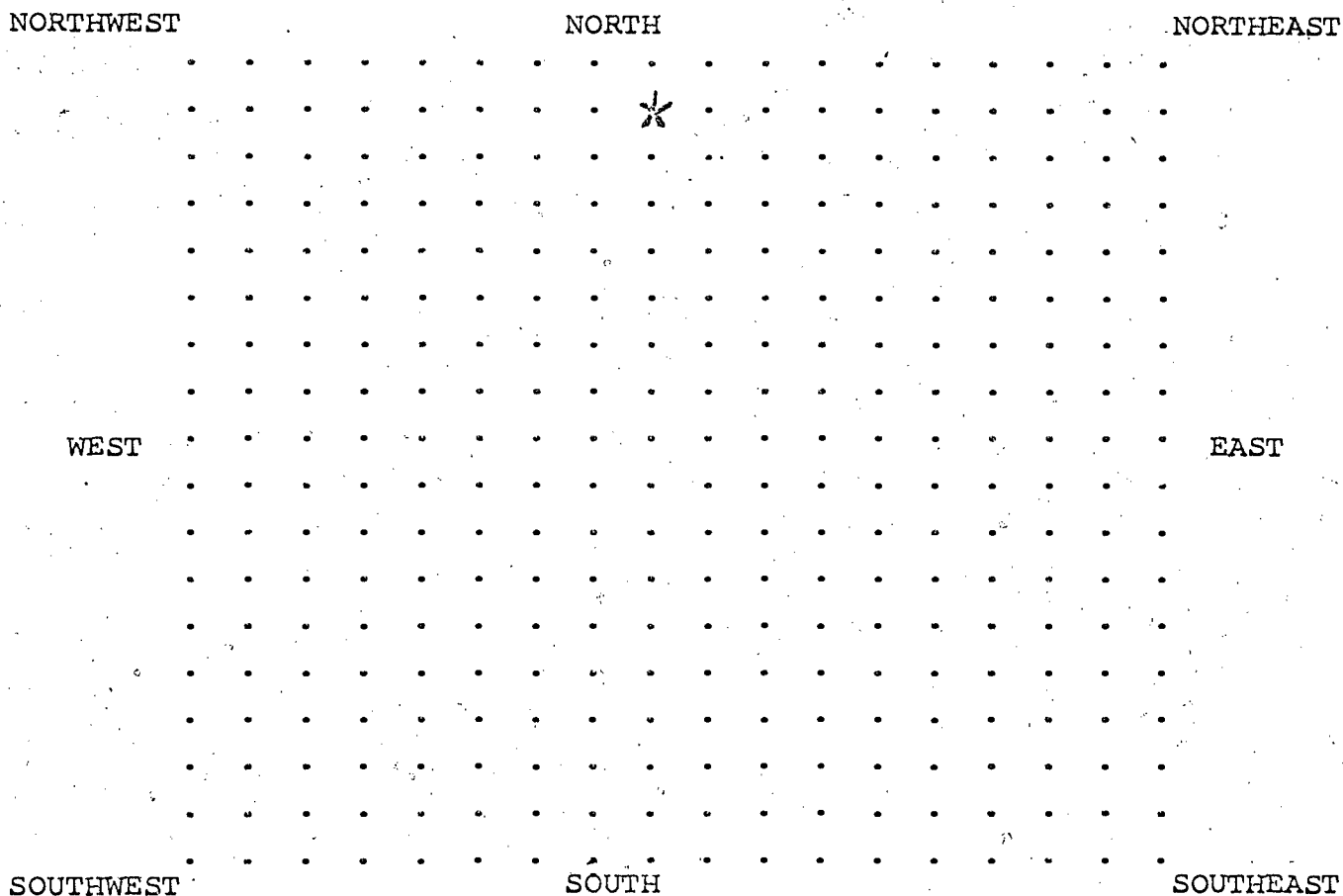
Study the compass directions on the puzzle below. They are the same as those you will find on most maps. It is important to understand compass directions on a map in order to read it correctly. On most maps that you use, North is at the top of the page; South is at the bottom; West is on the left; and East is on the right. Follow the directions below, you will finish with a picture of a means of travel.



1. Begin at the star.
2. Move 2 spaces southwest
3. Move 3 spaces south
4. Move 1 space southwest
5. Move 3 spaces south
6. Move 1 space southwest
7. Move 5 spaces south
8. Move 2 spaces northeast
9. Move 2 spaces east
10. Move 1 space southwest
11. Move 3 spaces east
12. Move 1 space northwest
13. Move 2 spaces east
14. Move 2 spaces southeast
15. Move 5 spaces north
16. Move 1 space northwest
17. Move 3 spaces north
18. Move 1 space northwest
19. Move 3 spaces north
20. Move 2 spaces northwest

Lesson # 2 - Following Directions - Connect-A-Dot Direction Map

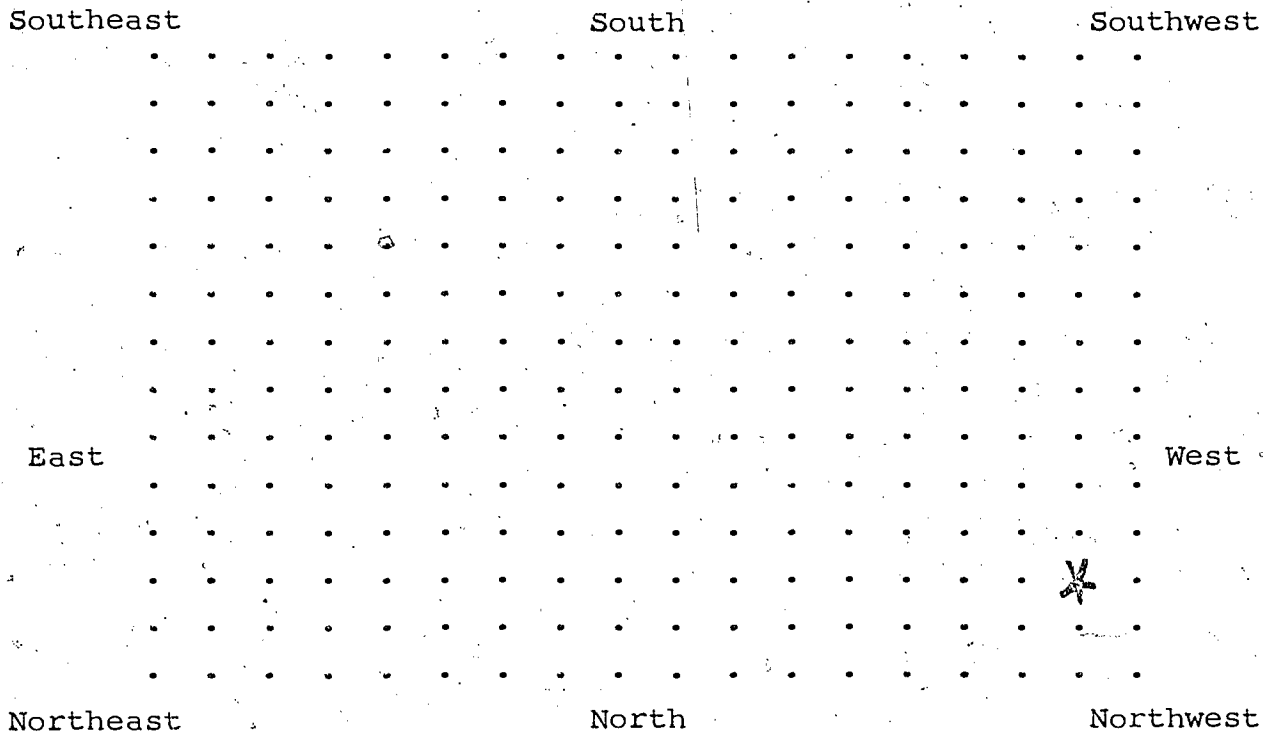
Study the compass directions on the puzzle below. They are the same as those you will find on most maps. It is important to understand compass directions on a map in order to read it correctly. On most maps that you use, North is at the top of the page; South is at the bottom; West is on the left; and East is on the right. Follow the directions below and you will finish with a picture of a household fixture.



1. Begin at the star
2. Move 4 spaces west
3. Move 9 spaces south
4. Move 2 spaces east
5. Move 3 spaces southeast
6. Move 3 spaces south
7. Move 5 spaces east
8. Move 2 spaces north
9. Move 2 spaces northeast
10. Move 2 spaces north
11. Move 7 spaces west
12. Move 1 space north
13. Move 6 spaces east
14. Move 1 space southeast
15. Move 7 spaces west
16. Move 1 space northwest
17. Move 8 spaces north

Lesson # 3 - Following Directions - Connect-A-Dot Direction Map

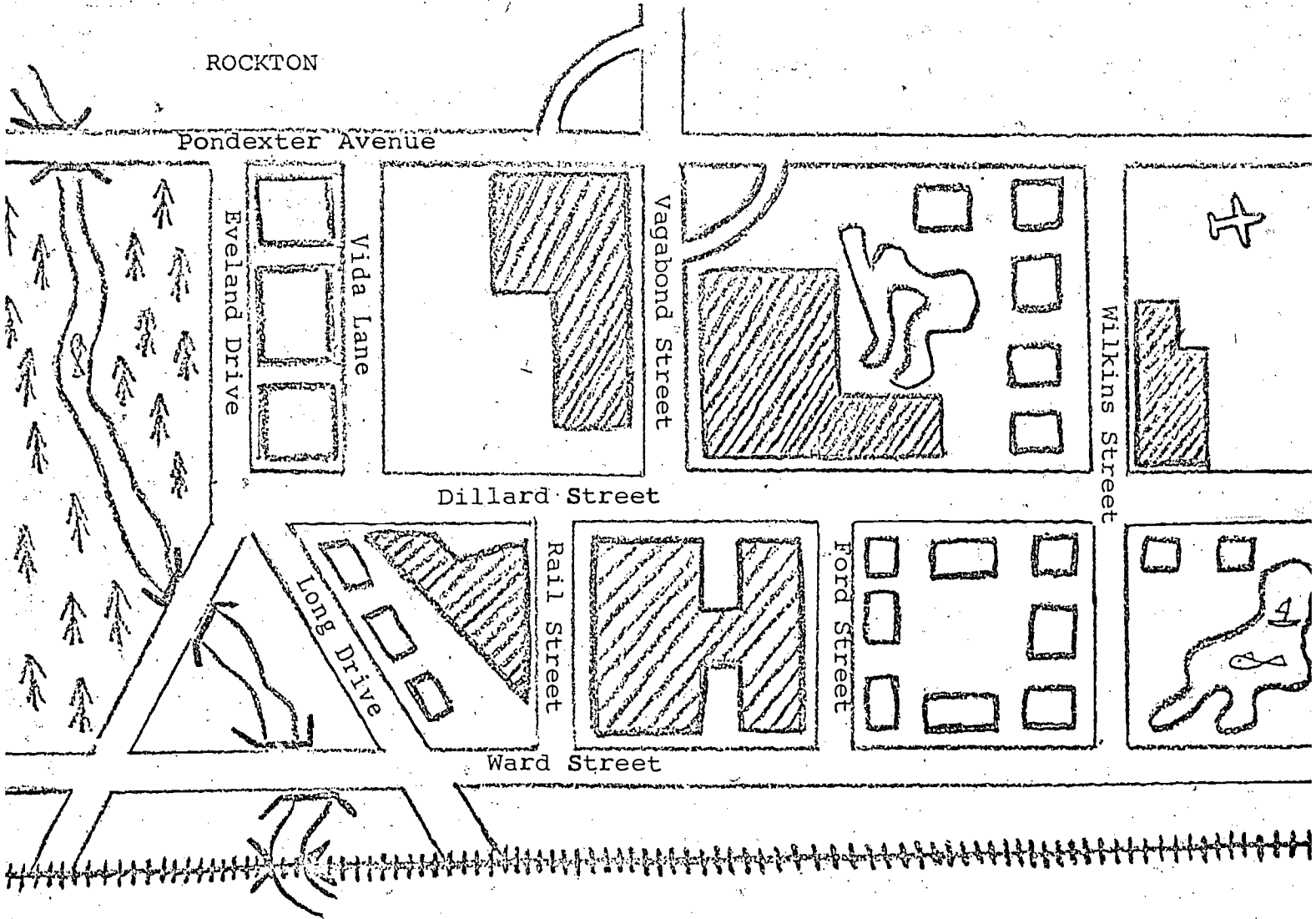
Study the compass directions on the puzzle below. They are the same as those you will find on most maps. It is important to understand compass directions on a map in order to read it correctly. On most maps that you use, North is at the top of the page; South is at the bottom; West is on the left; and East is on the right. Follow the directions below and you will finish with a picture of a weapon.






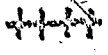





- |                            |                            |
|----------------------------|----------------------------|
| 1. Begin at the star       | 14. Move 2 spaces north    |
| 2. Move 1 space north      | 15. Move 1 space east      |
| 3. Move 12 spaces east     | 16. Move 1 space south     |
| 4. Move 1 space southeast  | 17. Move 1 space northeast |
| 5. Move 1 space northeast  | 18. Move 1 space southeast |
| 6. Move 1 space south      | 19. Move 1 space southwest |
| 7. Move 1 space southwest  | 20. Move 2 spaces west     |
| 8. Move 2 spaces southeast | 21. Move 2 spaces north    |
| 9. Move 4 spaces south     | 22. Move 1 space west      |
| 10. Move 3 spaces west     | 23. Move 1 space northwest |
| 11. Move 4 spaces north    | 24. Move 5 spaces west     |
| 12. Move 1 space southwest | 25. Move 1 space north     |
| 13. Move 2 spaces west     | 26. Move 2 spaces west     |

Lesson # 4 - Map Skills - Using Legends

Using Legends: Reading directions is very important, but not all maps have written directions. Some have special symbols for important features on a map. These symbols are known as the key or the legend. Study the map and its legend below.



LEGEND

	- Bridge		- Airport		- Lake
	- Railroad		- Sailing		- House
	- Businesses		- Fishing		- Forest

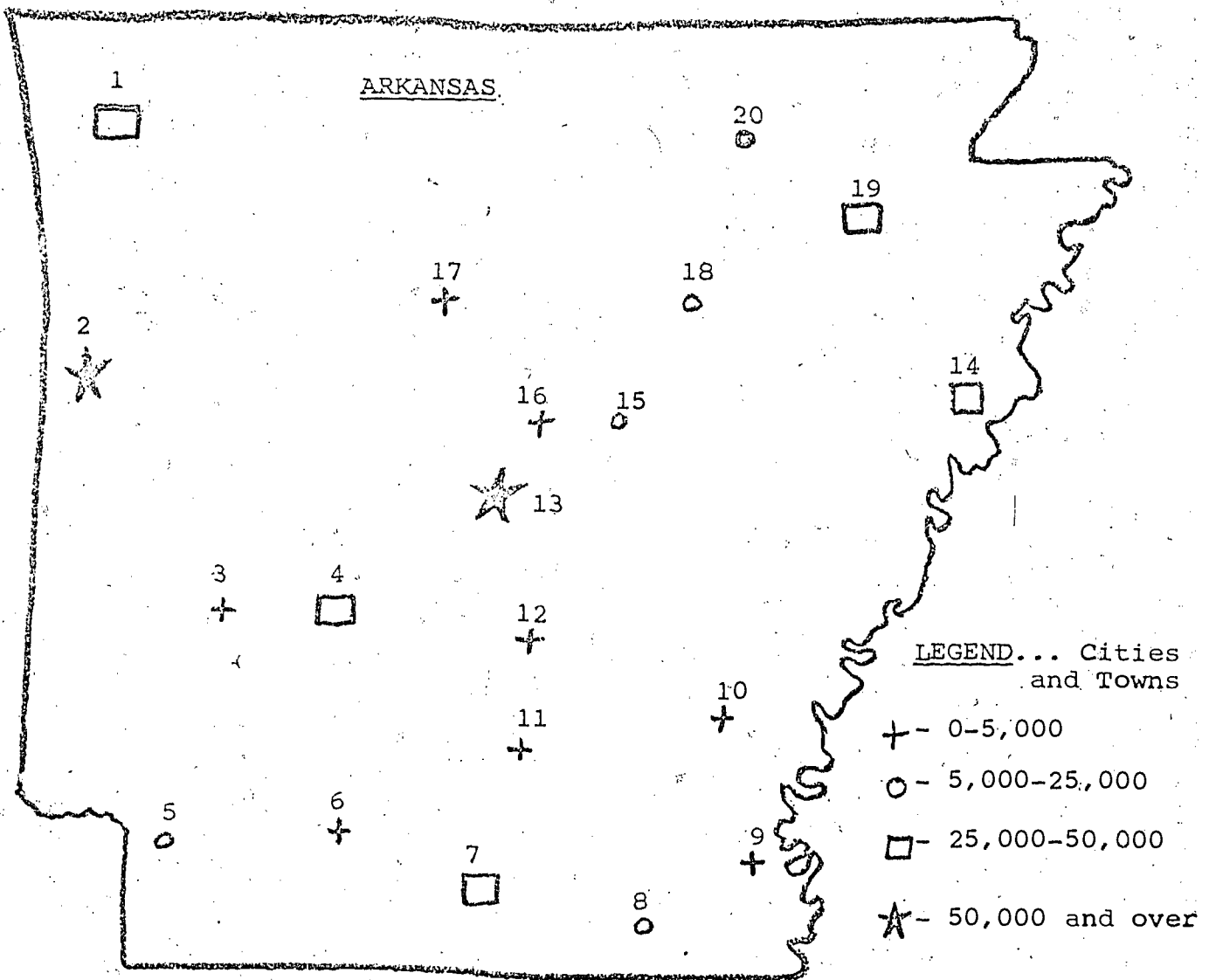
Lesson # 4 - Map Skills - Using Legends (con't)

Use the legend to the map on the previous page and answer the following questions:

1. Is there an airport in Rockton? On what streets?
2. How many businesses are there in Rockton?
3. How many bridges are there?
4. How many lakes are there? Where are they located?
5. Where is the forest located?
6. Are there places to fish in Rockton? If so, on what streets?
7. How many houses are there in Rockton?

Now that you have seen what things a legend can show, draw a map of your city, town, or community using a legend to show points of special interest.

Sometimes maps show more than houses, lakes or roads, they also picture such things as population. Below is a map of Arkansas showing 20 cities or towns and their populations. Each number represents a city or town.



Using the above map and legend, answer the following questions:

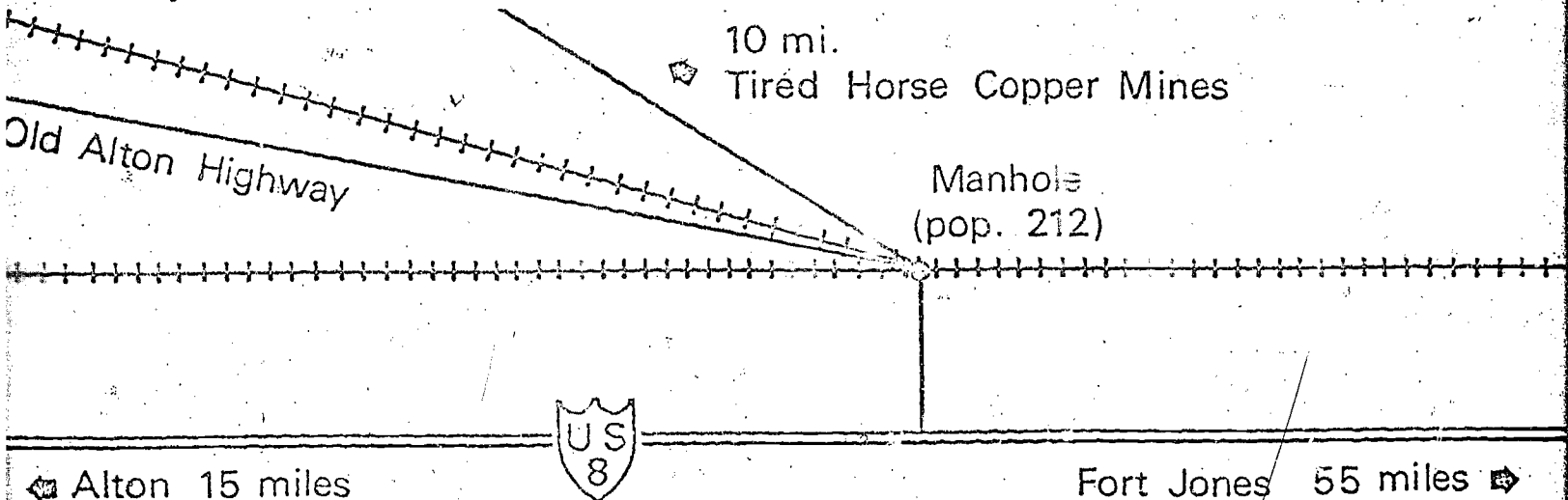
1. Which cities have a population of over 50,000?
2. Which cities have a population of 0-5,000?
3. Which cities have a population of 25,000 to 50,000?
4. Which cities have a population of 5,000 to 25,000?
5. Does the legend show more cities in the range of 0-25,000 or more in the range of 25,000 and over?



# MAKING INFERENCES

To infer means to draw a conclusion.

Many inferences can be made from data pictured on a map



Using the data given on this map, what conclusions can you make about the following: What type of jobs could you find in this town? What types of jobs wouldn't you find in this town? What types of stores would you expect to find?

From the data given on the map above, write a description of what you think each of the following would be like in the town of Manhole.

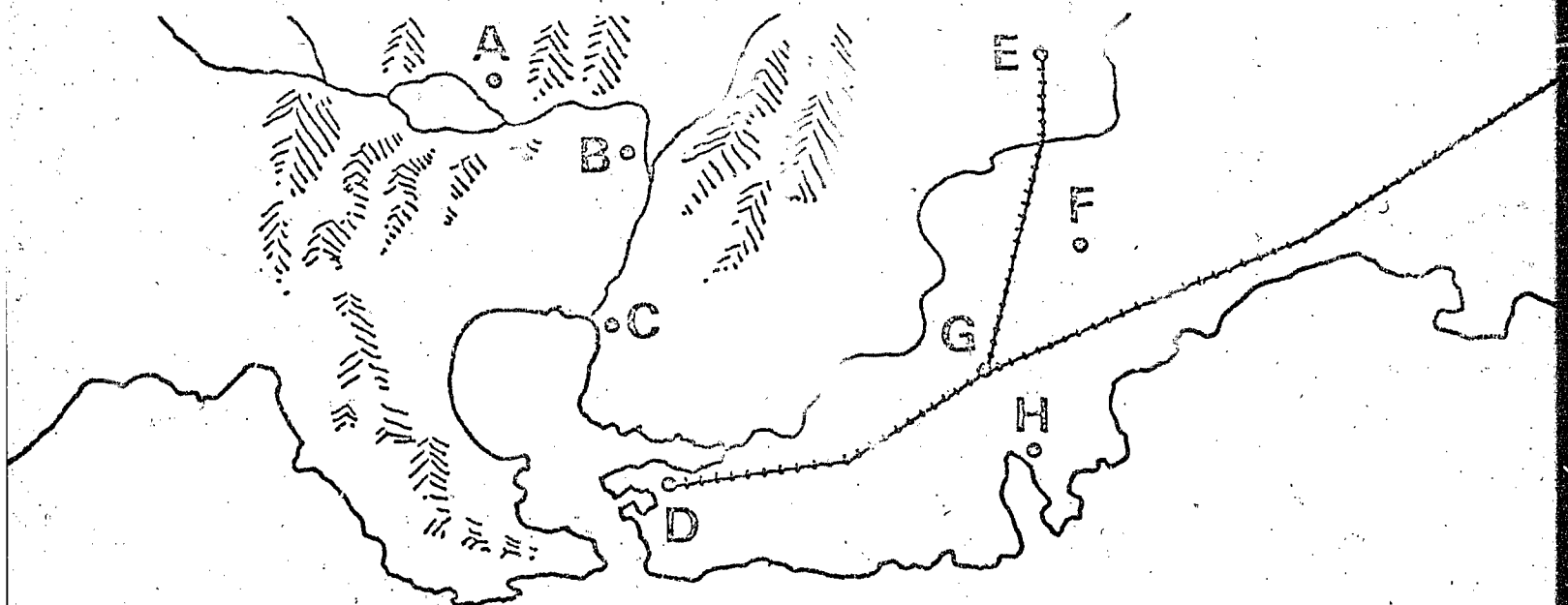
1. The type of buildings you would find. \_\_\_\_\_  
\_\_\_\_\_
2. The type of buildings you would not find. \_\_\_\_\_  
\_\_\_\_\_
3. How do you think the school you would attend in Manhole would differ from the one you attend now? \_\_\_\_\_  
\_\_\_\_\_

(From: "Making Inferences From Maps" Visual Materials Inc., Redwood City, California, 1971)



## Lesson # 7 - Map Skills - Making Inferences

## MAKING INFERENCES ABOUT CITY CHARACTERISTICS

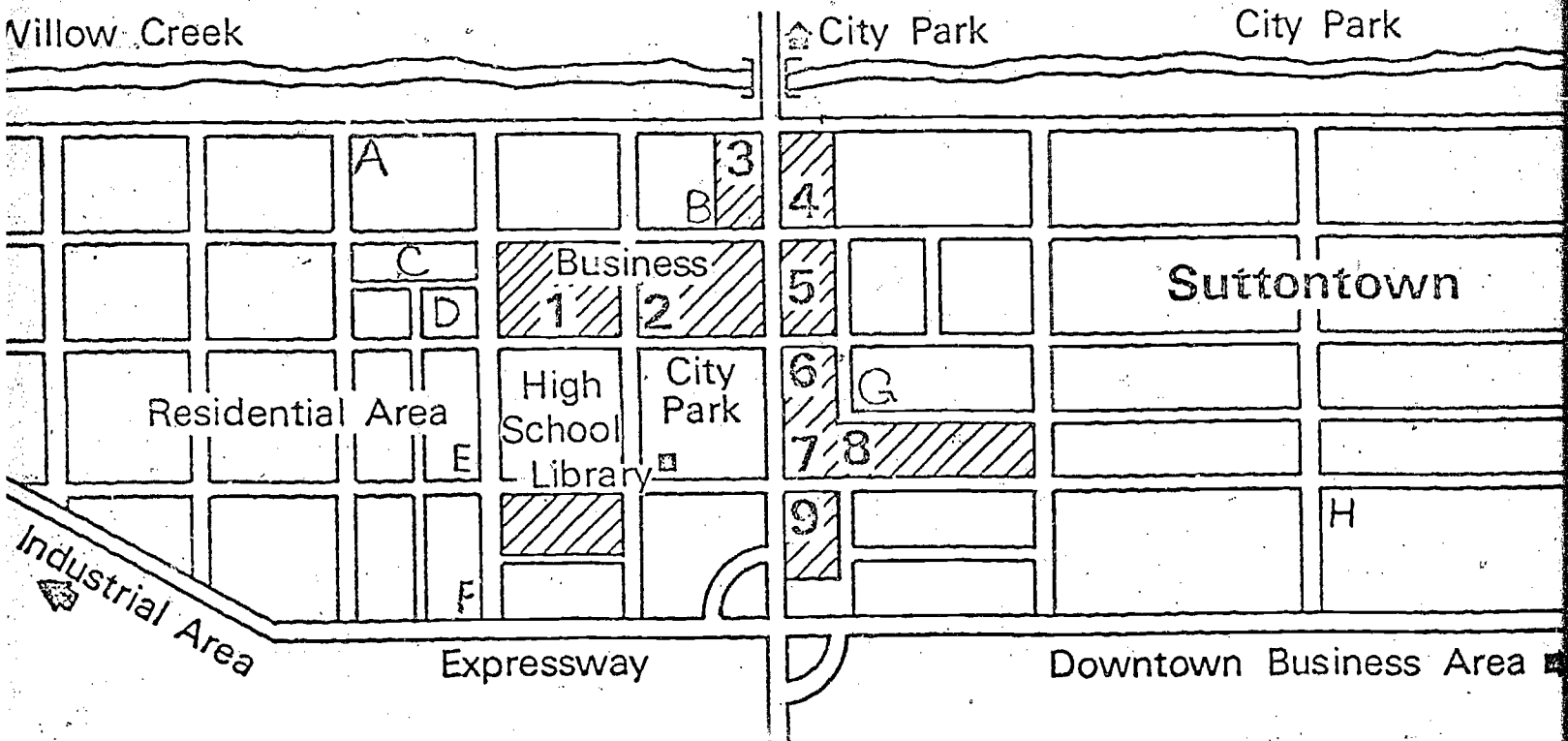


1. List the ways in which you think City E would differ from City D.
2. What could be some possible reasons for running a rail line to City E?
3. In what ways would City A and City H be similar?
4. In what ways would City A and City H be different?
5. Which of the cities do you think would have the largest population? List three reasons to support your choice.

(From: "Making Inferences From Maps" Visual Materials Inc., Redwood City, California, 1971)

## Lesson # 8 - Map Skills - Making Inferences

## MAKING INFERENCES ABOUT BUSINESS LOCATIONS



You are going to build and run a gas station. Using the above map answer the following questions: numbers 1 - 9 are commercial lots.

1. Which of the commercial lots would you select for your gas station? Why?
2. Would lot 6 or lot 2 be a better site for the gas station? Why?
3. If you were building a hamburger stand, which commercial lot would you select? Why?

You are going to buy a lot and have a house built. The letters A through H designate residential lots. Answer the following questions using the above map.

1. On which lot would you build your house? Why?
2. Which lot, A or H, would make the better site for a house? Why?
3. Which lot, F or G, would make the better site for your house? Why?

## TIME CONCEPT

To the teacher:

Perhaps the most difficult skill for young students to acquire is a concept of time. Students grow up thinking about time--indeed from the time they start to school (if not earlier) their whole life is governed by the clock. However, the time they think of is immediate--the hour-to-hour passage of the day. Young people tend to reckon time by milestones in their own lives. Anything that happened before their birth is difficult to identify with. Since their lives have been brief, it is difficult for the young students to develop a sense of continuity, time depth, and duration. And, given this situation, it is almost impossible for the students to project time into the future. They have not developed a concept of time.

Lesson # 1: Teaching students the vocabulary of time can be accomplished in several ways. However, it is recommended that the words and definitions be discussed thoroughly with the students. Perhaps it might be a good idea to list them on the chalkboard.

Lesson # 2: The purpose of the time line is to help the student comprehend time over a great number of years. However, time lines can also be over a relatively brief period of time. One good assignment would be for students to prepare a time line of their own lives. Besides listing the major points of their lives (entering school, first part-time job, first date, etc.), students should also include the important national events which have occurred during the same time.

Lesson # 3: This assignment could be expanded or modified to fit the particular class. For example, a hypothetical family chart could be devised (using the 33-year generational period) going all the way back to the founding of the nation. Also, the questions could be written to emphasize certain subjects (such as politics, important leaders, geography, clothing styles, etc.).

## Lesson # 1 - Time Concept - Vocabulary

## EXERCISE:

The first step toward mastering the concept of time is to learn the time vocabulary. Listed below are several of the important time vocabulary words and their meanings of which students should be made aware:

DECADE.....10 year period of time  
 SCORE.....20 year period of time  
 CENTURY.....100 year period of time  
 MILLENNIUM.....1000 year period of time  
 ERA.....a period of time which is considered  
 important in the history of a person,  
 a thing, or humanity (examples: Water-  
 gate Era, Roosevelt Era, Christian Era)  
 CIRCA (or c.)...an approximate date  
 BC.....time before Christ's birth  
 AD.....time after Christ's birth

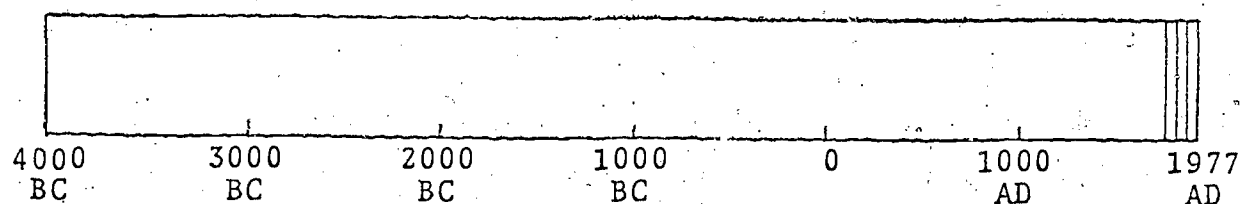
Using what you have learned from this listing, answer the following questions:

1. How many decades are included in a century?
2. How many centuries old is the United States?
3. Approximately how many decades remain until the year 2,000?
4. Approximately how many millennia have passed since the year 1 AD?
5. True or False: You were born in the second millennia AD?
6. Calculate your age in decades. (Round off to the nearest decade.)
7. How many years are included in President Lincoln's famous phrase "four score and seven years ago...?"

## Lesson # 2 - Time Concept - A Sense of Chronology

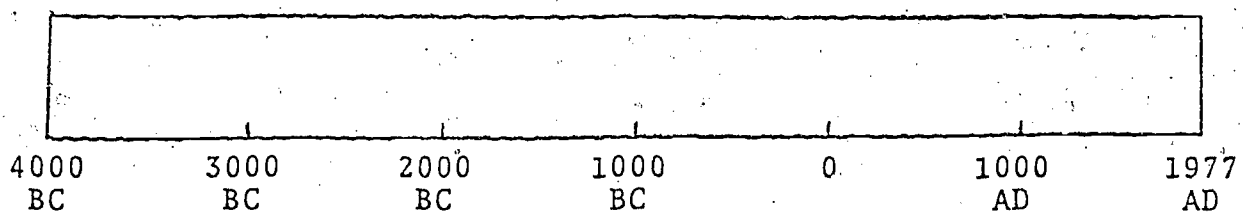
CHRONOLOGY deals with measuring time by regular divisions and giving dates to events which have occurred.


A good way to view this is to use a time line. With the use of a time line vast amounts of time can be shown in a graphic form. For example, the relatively brief history of the United States can be seen in this time line which covers the six thousand years of written history.

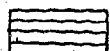


### EXERCISE:

On the time line below chart the lifespans (the length of life) of the United States and Iran (also known as Persia):



 United States

 Iran

## Lesson # 3 - Time Concept - A Sense of Chronology

Another effective way to learn about chronology is to study your own family history. Every person has a family history going all the way back to the beginning of man. By studying your family history, you will get a better concept of the passage of history. The following exercise will help you see the connection between the chronology of your family and the United States.

## EXERCISE:

## Comparison of Generations\*

	YEAR:	Your year of birth	Father's birth year	Grandfather's birth year
Who was president of U.S.?		_____	_____	_____
Who was vice president?		_____	_____	_____
Name a present-day nation which did not exist then.		_____	_____	_____
Name a war which occurred in this year (or close to it).		_____	_____	_____
Had the airplane been invented?		_____	_____	_____
Had Alaska become a state?		_____	_____	_____
Name a music composer who lived then.		_____	_____	_____
Name an author who lived then.		_____	_____	_____
What was the approximate population of the U.S.?		_____	_____	_____

\* If you are unable to determine your father's and grandfather's date of birth, estimate that there were 33 years between each. A generation is 33 years in length.