

Elementary Lesson Plan #5

GRADE(S): 3rd, 4th, 5th

TOPIC: Surface Water Supplies and the Texas Settlements

TITLE: Let's Settle It

OVERVIEW: All living things need water to be able to survive. One of the main concerns of all settlers to a new area was a consistent water supply. By mapping the early Spanish and American settlements, the students will discover that a water supply was a determining factor in the settlement's location.

This activity is to be used in addition to the classroom lesson on the settlement of Texas.

TEXAS ESSENTIAL KNOWLEDGE AND SKILLS:

Science, 3rd Grade

(b) Knowledge and Skills

(3.3) Scientific processes. The student knows that information, critical thinking, and scientific problem solving are used in making decisions. The student is expected to:

(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information

(C) represent the natural world using models and identify their limitations

(3.11) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:

(A) identify and describe the importance of earth materials including rocks, soil, water, and gases of the atmosphere in the local area and classify them as renewable, nonrenewable, or inexhaustible resources

English Language Arts and Reading, 3rd Grade

(b) Knowledge and Skills

(3.12) Reading/inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to:

(E) interpret and use graphic sources of information including maps, charts, graphs, and diagrams (2-3)

Social Studies, 3rd Grade

(b) Knowledge and Skills

(3.16) Social studies skills. The student applies critical thinking skills to organize the use of information acquired from a variety of sources including electronic technology. The student is expected to:

(E) interpret and create visuals including graphs, charts, tables, timelines,

illustrations, and maps

Science, 4th Grade

(b) Knowledge and Skills

(4.3) Scientific processes. The student knows that information, critical thinking, and scientific problem solving are used in making decisions. The student is expected to:

(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information

(C) represent the natural world using models and identify their limitations

Social Studies, 4th Grade

(b) Knowledge and Skills

(4.22) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:

(B) analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, making generalizations and predictions, and drawing inferences and conclusions

(C) organize and interpret information in outlines, reports, databases, and visuals including graphs, charts, timelines, and maps

(F) use appropriate mathematical skills to interpret social studies information such as maps and graphs

English Language Arts and Reading, 4th Grade

(b) Knowledge and Skills

(4.13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to:

(D) interpret and uses graphic sources of information such as maps, graphs, timelines, tables, and diagrams to address research questions (4-5)

Science, 5th Grade

(b) Knowledge and Skills

(5.3) Scientific processes. The student knows that information, critical thinking, and scientific problem solving are used in making decisions. The student is expected to:

(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information

(C) represent the natural world using models and identify their limitations

(5.4) Scientific processes. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:

(A) collect and analyze information using tools including calculators,

microscopes, cameras, safety goggles, sound recorders, clocks, computers, thermometers, hand lenses, meter sticks, rulers, balances, magnets, and compasses

Social Studies, 5th Grade

(b) Knowledge and Skills

(5.25) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:

(B) analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, making generalizations and predictions, and drawing inferences and conclusions

(C) organize and interpret information in outlines, reports, databases, and visuals including graphs, charts, timelines, and maps

(F) use appropriate mathematical skills to interpret social studies information such as maps and graphs

English Language Arts and Reading, 5th Grade

(b) Knowledge and Skills

(5.13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to:

(D) interpret and uses graphic sources of information such as maps, graphs, timelines, tables, and diagrams to address research questions (4-5)

DID YOU KNOW?

The Spanish settled Texas in the form of towns and missions in the 1600s and 1700s.

In the early 1800s the Spanish governor of Texas was issuing land grants to people willing to set up colonies in Texas.

Colonies were settled by Stephen F. Austin, Empresario Green DeWitt, John McMullen and James McGloin.

Many Mexicans also moved into Texas to start new lives. These Mexican settlers were called Tejanos.

In 1830 the Mexican leaders changed their laws and no longer gave land grants to people from the United States and let only people from Mexico and Europe settle in Texas.

LEARNING EXPERIENCE:

GENERAL TIME FRAME: Each part will take approximately 45 minutes.

Materials:

- Map of Spanish settlements in Texas
- Map of United States settlements in Texas
- Map of Texas rivers
- Blank Texas map for each student
- (The first three maps may be included in the social studies textbook.)

Advanced Preparation:

1. Obtain the maps of the Texas settlements and rivers (see Resources).
2. Obtain the blank maps of Texas.

Procedure:

Part I

1. Students will make a map of rivers in Texas.
2. Students will locate the early Spanish settlements on the river map.
3. Students will add the early U. S. settlements.
4. Students will make a list of these settlements and identify the water source for each.

Part II

1. Divide the students into groups.
2. Each group will be assigned to be a family in a particular settlement.
3. Each group will make a list of their individual family water needs. For example, livestock watering, irrigation of crops, drinking, bathing and cooking.
4. Calculate how much is needed per family per day.

Teacher Talk:

1. The earliest people arrived in Texas thousands of years ago. When the first people arrived, the land was different than it is today. Moist prairies and forests covered much of the land. Many large animals were fed by the abundant plant life. Over a period of hundreds and hundreds of years the climate slowly changed by getting hotter and drier.
2. Because of this drier climate, the people who came to make permanent settlements had to make sure that there was a reliable water supply to meet their needs.
3. By using a map of the rivers in Texas and plotting these early Texas settlements, it becomes obvious that the early settlers located their towns close to a water source.

RESOURCES:

Literature on water conservation by the Texas Water Development Board. View and order currently available brochures at <http://www.twdb.state.tx.us/assistance/conservation/pubs.htm>, contact Patsy Waters at patsy.waters@twdb.state.tx.us, fax the form to (512) 936-0812, call (512) 463-7955, or write to:

Conservation
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711-3231

Maps of Texas River Basins, Aquifers, and Regional Reservoir Basin Maps are available on TWDB's website at <http://www.twdb.state.tx.us/mapping/index.htm>

Boehm, Richard G. et al., **The Story of Texas**, Orlando, 1997.

EXTENSIONS:

1. Have the students carry two, one gallon plastic milk containers full of water for several minutes to identify with the early settlers difficulty in obtaining water for their daily needs. Have the students estimate how long this water would last if it was all that they had.
2. Invite a local historian or librarian to speak about Texas settlements.
3. Divide the students into groups and have them decide on where in Texas would they locate a permanent settlement today.
4. The students will write a newspaper advertisement to encourage the settlement of the new town in #3.