

Title: Watery Words and Places

Source: The Water Sourcebook Series, U.S. Environmental Protection Agency

Subject(s): Science, Social Studies, Language Arts

Grade(s): 3-5

Objectives: Students will name several kinds of bodies of water on earth; locate the major bodies of surface water in Georgia; and construct a relief map of Georgia using a physical map.

Summary: Students will find as many words as possible in the “Watery Words” word search. They will then find the definitions for five words they are not familiar with. After examining a wall map of Georgia, students will color in and identify major cities and bodies of water on physical maps of the state. Students will discuss the importance of these bodies of water for transportation and as water sources. Then, using their physical maps as guides, students will form groups and construct a relief map of Georgia using salt dough.

Modifications: Students can create a relief map of Georgia as a class. Students can break up into small groups and take charge of different cities and/or important water bodies and oversee their construction.

Standards: ELA3R2. The student acquires and uses grade-level words to communicate effectively.

SS3G1. The student will locate major topographical features.

SS3E1. The student will describe the four types of productive resources.

ELA4R3. ELA5R3. The student understands and acquires new vocabulary and uses it correctly in reading and writing.

S4E3. Students will differentiate between the states of water and how they relate to the water cycle and weather.

SS4G1. The student will be able to locate important physical and man-made features in the United States.

SS5G1. The student will locate important places in the United States.

WATERY WORDS AND PLACES

OBJECTIVES

The student will do the following:

1. Name several kinds of bodies of water on earth.
2. Locate the major bodies of surface water in your state.
3. Construct a relief map of his/her state using a physical map.

BACKGROUND INFORMATION

Most of the surface of our world is covered by water. Salt water bodies include bays, estuaries, fjords, gulfs, harbors, oceans, seas, sounds, and straits. Fresh water bodies include coves, creeks, inlets, lagoons, lakes, ponds, reservoirs, rivers, rivulets, streams, tributaries, and waterfalls.

Term

surface water: precipitation that does not soak into the ground or return to the atmosphere by evaporation or transpiration, and is stored in streams, lakes, wetlands, reservoirs, and oceans.

ADVANCE PREPARATION

A. Have the blue paper “pond” ready.

- B. Make salt dough for the relief map:
- 1 cup (250 mL) plain flour
 - 1/2 cup (125 mL) salt
 - 2 tsp (10 mL) cream of tartar
 - 1 cup (250 mL) water
 - 1 tbs (15 mL) cooking oil
 - food coloring (green, brown, or blue)

Stir the dry ingredients together in a heavy saucepan. Add the liquids and cook 3 minutes at low temperature or until it pulls away from the sides of the pan. Knead slightly almost immediately and store in an airtight container. Determine how many batches of each color you need by your state’s geography and the number of maps to be made.

C. Obtain individual-sized pizza boxes (one per student or team) from a local restaurant.

SUBJECTS:

Geography, Language Arts, Art

TIME:

3-30 minute periods

MATERIALS:

3' x 5' (1 m x 1.5 m) piece of blue paper
magic marker
salt dough (recipe included)
food coloring (blue, green, brown)
physical map of your state (2 copies per student or team)
individual-sized pizza box for each student or team
glue
crayons
pencils
wall map of your state
student sheet (included)
teacher sheet (included)

- D. Get 2 or 3 parent volunteers or aides to help you with the map activity.
- E. Obtain a physical map of your state. Make two copies of a physical map of your state for each student or team; reduce or enlarge them as necessary to make them fit the small pizza boxes.
- F. Make a copy of the word search puzzle (included) for each student.

PROCEDURE

I. Setting the stage

- A. Have the students complete this analogy.

generic : common nouns :: brand name : _____
(proper nouns)

- B. Tell the students that in the following activity, they will be using common nouns.
- C. Have the students brainstorm all the types of surface water they can think of. Write the appropriate words on the blue paper as they think of them.

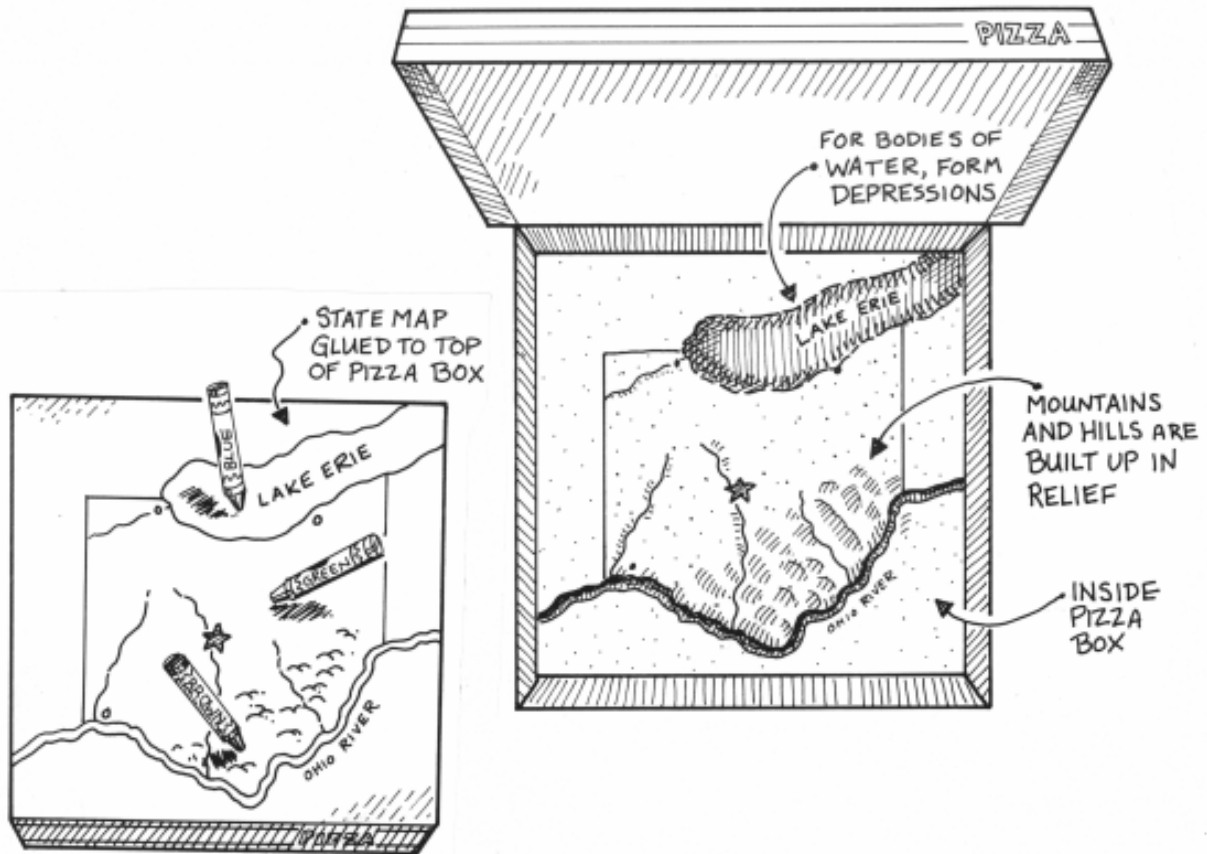
II. Activities

- A. Pass out the student page “Watery Words” (word search).

1. Have them find as many words as possible. (See the teacher key following the puzzle.)
2. Have the students select 5 words they are not familiar with. Look them up, and write the definitions on the back of their paper.

- B. Have the students construct a relief map of your state. Use cooperative learning groups or, if you have enough supplies, let each student do his/her own map. (NOTE: You will need several adult helpers.)

1. Have the students examine a wall map of your state. Discuss the most noticeable features of your state’s geography.
2. Give the students two copies of the state’s physical map and have them use blue, green, and brown crayons to color the maps. Have them make a legend and label the important bodies of water and cities.
3. Discuss the fact that many cities were originally located on rivers because of transportation and water source purposes.
4. Have the students glue this map to the top of the pizza box and glue the second map to the inside of the box.
5. Have them use the salt dough to build the relief map, starting with the green or brown dough to make the mountains, hills, and valleys. Tell them to do the blue bodies of water last. They will be in depressions. Let the maps dry.



III. Follow-up

- A. Have the students redraw from memory a map of your state. Tell them to name the major bodies of water (choose appropriate requirements for you state and your students).
- B. Have the students write sentences using 10 of the “watery words” correctly. (If you desire, you could modify this to require more words or to use a given number of them in a story.)

IV. Extensions

- A. Have the students put the water words on your blue pond in alphabetical order.
- B. Have the students look up different countries, cultures, and/or bodies of water around the world. What do they call their boats? (Examples: Hong Kong - sampan, junk; Alaska - kayak; Florida - hydrofoil; Navy - destroyer. What about ferry, tugboat, felucca, prau, scor, xebec, and dhow?)
- C. Check the Macmillan 4th Grade Book, Music and You (pages 22-23) for the song “Little Blue Top.” Teach it to the students.
- D. Play the Alphabet Game: Form a circle with your class. Say, “I am going to start the alphabet game using proper nouns associated with water.” Begin by saying, “A - Atlantic Ocean.” The next person says “B - _____.” (Rules: Students must say their letters then think of the word. This assures that they are working on the correct letter. You might want to give a time limit for thinking. If a student wants to pass, he/she may just say “pass.” The next person must repeat the same

letter and think of a word. If everyone in the circle passes, then the game continues with the first person that passed taking the next letter in the alphabet. (It should continue like this: B- Bay of Fundy, C-Caribbean Sea, etc.) (This may be difficult for them, but you could let them play in teams, with each team using a globe or world map.) You may play it with other categories of water words.

E. Have the students complete more analogies.

swam : swim :: sailed : _____ (sail)

NaCl : salt :: _____ : water (H₂O)

source: beginning :: outflow : _____ (end)

river: line :: lake : _____ (circle)

F. Have the students list water words related to prepositional water phrases. Put the following on the chalkboard. Get students to think of words to put in each column.

With Water	On Water	In Water
shower (example)	ski (example)	swim (example)

G. Read At the Edge of the Pond by Dewey to students. Ask your students to think of as many verbs as they can to describe how pond animals move. (slither, dart, gyrate, leap, etc.)

H. Ask your students to think of as many adjectives as they can to describe water in this phrase: the _____ pond (smooth, glassy, ripply, wavy, scummy).

I. If you have an Electronic GeoSafari Geography Game, this is a great time to use it.

J. Ask the students what body(ies) of water could they swim in where they would float most easily? (Great Salt Lake, Dead Sea) Have the students investigate where they would find inland salt lakes or seas. Look for information on “why” they are salty. Locate them on a world map.

K. Read Paul Bunyan stories that pertain to water to your class (see Resources section).

RESOURCES

Dewey, Jennifer Owings, At the Edge of the Pond, Little, Brown & Co., Boston, Massachusetts, 1987.

Electronic GeoSafari Geography Game, Educational Insights, Dominquez Hills, California, 1989.

“Little Blue Top,” Music and You, 4th Grade Book, Macmillan, New York, pp. 22-23.

Rounds, Glen, “The Whistling River,” Ol’ Paul the Mighty Logger, Cadmus Books, Wisconsin, 1949.

Schwartz, Linda, I Love Lists, Learning Works, Santa Barbara, California, 1988.

Shephard, Esther, “Digging Puget Sound,” Paul Bunyan, Harcourt, Brace & Co., New York, 1952.

WATERY WORDS

Y L S M I R N M S W P C D G P S H M Q O Y X M M B U E Q
B Z E G T E X K K W N W I N S L O S D W R I V U L E T I Q
I G A V C X S K O B Y Q H C Q A V E A E X G O O I I C F B S
Y A F B I P J R P N K P F A E H D T N E R R K Q Y C C F U R O
N Y J X J T D I E B Z C A I S I T O B R A O A G D D P G X N
I M O G Z L C V E V C A U W E R A N P S L I R C E N Z C W L J X D
N O R P E X T E V Q R J Q A U V T I W E A N P S L I R C E N Z C W L J X D
L G D Q E F Q R J Q A U V T I W E A N P S L I R C E N Z C W L J X D
E T K C F N T Q G M I W T I W E A N P S L I R C E N Z C W L J X D
T F S I H V M O M I W T I W E A N P S L I R C E N Z C W L J X D
D E H D Q G H D S K X U T I W E A N P S L I R C E N Z C W L J X D
X A S M S W V N S Q C P T L W O R T S M S V Q D E K Q B O R C S F
Y U Z M T H R H Z M T E N H R G L K K E W P P R L O R C S F
S I V W R G F U J C B A C V H A A L X Z A X B B T M O D L L F E O
Z P N G A T F H Y B A C V H A A L X Z A X B B T M O D L L F E O
G O N K I Q O C E A N A K E Z S S U N J U D D E D D U A L L Z H
Y N Y P T P J O F M Y P L I D C D X B O K R P P G K J O T A J
B D F U U H I O F D Z K K Z V R L V W Y U P P H O J O T A J
M U K E S T U A R Y S M B T E E Q A Z C R M J I F F Q O N D D F E
S T L O K D J C E K U P D U U K L K C E B B C G N A B I T T Y
E S T R E A M Q A V P D U U K L K C E B B C G N A B I T T Y

WATERY WORDS ANSWER KEY

Y B I Y N I N L E T D X Y S Z G Y B M S E
L Z A F J O R D K S H D M Z V N G A I P N Y F U K L O K R E
M G V B X J G P Q C I H Q S M T R A I T U E S T U A R R Y
I R E X S J D C T L X F N V G H W R G T Q P J I O F H I O F U
R X S J D C T L X F N V G H W R G T Q P J I O F H I O F U A R R Y
N K O P E B V J G M O D S N H Z J Y C E A P U K E S T U A R R Y
M K O P E B V J G M O D S N H Z J Y C E A P U K E S T U A R R Y
S W N Y K E O Z C A U V T U X C P E B C A N P L Z S M B U P
P W Y K E O Z C A U V T U X C P E B C A N P L Z S M B U P
C I N H F J V S I R E W T I W L H T O H E Z C R E T U A R R Y
G S L Q A E R W J T O B P S I W W L H T O H E Z C R E T U A R R Y
D G P S O A H D U N K G R A N K X T U W L H T O H E Z C R E T U A R R Y
M D E T E R F A L L I S H A H N O Y C R E
Q W A T E R F A L L I S H A H N O Y C R E
O R E S E R V O I R Q V W X V J K U J M B
O R E S E R V O I R Q V W X V J K U J M B
X I V U L L E F I Q T P S O U N D X L J F O P H C O J E
X M M B U E I Q T P S O U N D X L J F O P H C O J E
X M M B U E I Q T P S O U N D X L J F O P H C O J E