

Lesson - Gates

Topic: Water - Rivers - their uses.

NIE Lesson

Social Studies / Environment

Lesson - What's in your river?

Standards: Geography, Language Arts, Science

Objective:

- 1) Students will learn to classify different types of land uses
- 2) Student will scan newspapers to find examples of the types of land uses.
- 3) Students will then assemble a river puzzle to understand how water is impacted by man.

Note: By assembling a "river" from puzzle pieces, students will develop awareness of how people and wildlife use and depend on rivers; how actions within a river system can affect the entire system; and that people need to take action to maintain the vitality of river systems.

Vocabulary: Nature, Agriculture, Industry, pollution, fertilizer, pesticides, storm drains, wetlands.

Materials:

- 1) Newspapers
- 2) Printout of the 2-page "[River Puzzle](#)" (2 sets for each student / groups)
- 3) River Example - What is happening and Impacts
- 4) Construction Paper, Glue Stick, crayons
- 6) scissors.

Activities:

Anticipatory Set

- 1) Ask students to wonder - where does their water come from? Discuss that most drinking water comes from lakes or rivers.
- 2) What impacts rivers? what makes them clean? dirty?
- 3) Are there other uses for rivers, lakes besides drinking water?

Classify and collect data

2) Pass out the puzzle pieces to students who can work individually or in groups. Have the students group the puzzle pieces according to the following land use categories: Nature, Agriculture, Industry, Recreation, Power,

3) After the students have classified their puzzle pieces, have them take 5 pieces of construction paper, and write the Category names across the top. Then have students glue the pictures to each category.

4) Then on another set of construction paper have the students find examples for each category in the newspaper. Each day students would review the newspaper and cut out examples of pictures, stories/headlines for each of the categories.

5) Students in their groups would then review each of their categories and list the positive and negative impacts the land use would have on the water quality.

Puzzle Practice

3) Students or Student Groups each review the following "River Example - What is happening and impacts"

4) Students describe next to each land use - what is happening and impacts.

5) Students could use crayons to color the pictures, and color the stream using blues for clean water, green colors to represent impact of lawn fertilizers, and brown to represent sewage, and etc.

Putting the Puzzle together

6) Students now take all of the puzzle pieces and assemble them into a river system. The only requirement is that the "Source" goes first, and the "Mouth" goes last. Students assemble their puzzle pieces, and then glue their final plan onto construction paper.

7) Students can then take photos or headlines from newspapers - to attach near each land use to provide relevant examples from their community or other communities from around the world.

Assessment

5) Teacher reviews information going around and checking for understanding

6) Students then describe their river systems to other classmates.

Enrichment

- play the computer simulation game - sim city.

Online Resources:

The following resource will provide the teachers with additional information on water quality.

<http://www.nationalgeographic.com/resources/ngo/education/geographyaction/ga53.html>



