

Human river

http://www.cce.org/resources/learning_centre/classroom_activities/user_friendly_rivers.asp

Grade level: 5-8 (Approximate age range: 10-13 years old)

Objective: Students will understand their connection to rivers through watersheds. (This activity will take one or two class periods.)

Relevant U.S. National Geography Standards: 1, 7, 15

Materials

River system diagram

Students will break into three groups. Each group will need:

- Blue enamel paint
- Miniature objects to simulate a model river system: e.g., Monopoly® houses or hotels, small plastic animals, trees, boats, cars
- Modeling clay
- Tempera paint
- Toothpicks and construction paper
- Sheet of plywood, or plastic or metal trays
- Water

Procedure

Day One

With students, examine the river system diagram. Have students speculate where they are located in their own watershed. Where is the nearest river? The nearest tributary? Remind students that the drawing is a generic representation of elements of rivers, and that every river system is unique. Does a local river resemble the river in the diagram?

Explain that rivers connect to land, and that people connect to rivers either directly or indirectly, via their watershed. Ask, How do people use rivers? (drinking water, other fresh-water needs, agriculture, industry, manufacturing, power, transportation, recreation) How does wildlife use rivers? (food, habitat) Write students' answers on the board.

Now, divide students into three groups. Each group will build a model watershed from clay, either on a sheet of plywood, or on a plastic or metal tray. Have students level parts of the river: source, tributary, floodplain, meander, wetland, main river, mouth. Students should then paint 'river' areas with blue enamel paint and paint the 'land' with tempera paint. Have students place miniature objects on the model to simulate a model river system, or make figures from construction paper and back them with toothpicks.

Day Two

Allow the model to dry overnight. The next day, have students pour a slow, steady stream of water from the top of the mountain. As students pour water, discuss flooding and drought.

End by reminding students that what people put into the water, and how people use the water available to them is very likely to affect the quality of the water—and the quality of life of its users—both locally and in other areas of a watershed.