

## **DAM IT**

**Goal:** Students will understand the environmental effects of altering the dynamics of a river by the construction of a dam.

**Objectives:** Students will...

- Brainstorm the logical results (agricultural, geographical, economic, etc) that arise from building a dam
- Analyze the benefits and the drawbacks of dam building

**Time Required:** 45-60 minute period

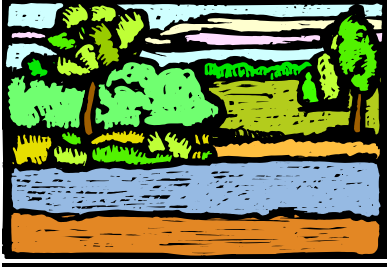
**Standards Met:** Science standards 1, 2, 3, 4

**Materials (For class of 30 students):**

- Stream table (at least one, but several work even better) – several models or types are available from scientific catalogs or you can construct one relatively easily using a plastic cement mixing tray, several bags of sand, and a small piece of tubing that you can hook to a faucet.
- Small pieces of PVC pipe (several sizes)
- Class set of Student Sheets
- Camera projection system

**Procedure:**

- Have the students begin by discussing how the construction of a dam on a river would alter the environment of the river and the surrounding landscape.
- On their Student Sheets, have the students draw a model of how they would use the stream table to demonstrate the effects of a dam.
- Using the camera projection system, have several students volunteer to show and explain their model. Have the students vote on what they feel would be the best model to represent the construction of a dam.
- Using the stream table, have the student whose model was selected, along with several other selected students, construct the model that was chosen. Run the stream table and have the students observe the effects of the dam in the model.
- If time permits, try several other models. Allow time for clean up and answering the Questions for Thought on their Student Sheets.



## Dam It -- Student Sheet

NAME: \_\_\_\_\_

### Diagram 1

**Model of Dam:** Draw a model of how you would use the stream table to demonstrate the effects of a dam.

## Questions for Thought

1. How does a dam alter the course of a river?
2. What are some of the benefits of building a dam?
3. What are some of the problems associated with dams?
4. Looking at your model, and how it behaved, what in your mind is the single most environmental effect that a dam has on the surrounding landscape?
5. What are the names of some dams with which you are familiar? Do you know what rivers they are on?