

FLOATING YOUR BOAT

GRADE LEVEL: K - 3

OBJECTIVE:

Students will understand how the shape of a boat determines how well it floats and how much it can safely carry.

MATERIALS:

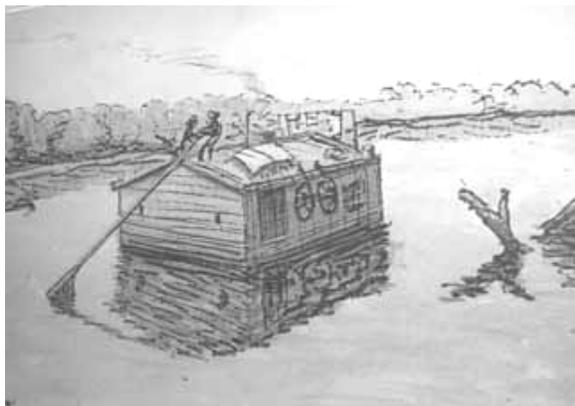
Pans of water (plastic dishpans are an excellent choice)

Aluminum foil

Marble chips, marbles, plastic chips or pennies

PROCEDURE:

1. Inform the students that they are to make boats from the aluminum foil and float them in the water and test them for being able to carry cargo.
2. Divide the students into small groups of three or four. Place one pan of water on newspapers in the midst of each group. Dispense one square of aluminum foil to each child. Allow them to work on designing different types of crafts to float in the water.



Flatboat on the Ohio River

3. Have the students test their boats for their ability to float and not take on water.

4. Supply each group with small items to place in the boats as cargo. Marble chips, marbles, pennies, plastic chips all work well. Have students find out which boat holds the most cargo without sinking.

5. Have students display their boats and have them discuss which models held the most cargo. Have the students tell which shape will be best for moving cargo up and down the river. (Large flat-bottomed boats can carry the most cargo like the barges we see on the river.)

EXTENSIONS/EVALUATIONS:

6. Have the students build their own barge or river boat and research the history of ship building in Indiana.

7. Have the students write a story about the "Great Steamboat Race".

8. Take the students on a field trip to visit the McAlpine Locks. Besides watching the operation of the locks, the students can become familiar with the history of the river canal and the building of the locks from the display in the visitor center. [Note that there is limited access during construction of the new 1,200-foot lock chamber.



Delta Queen steamboat