NAVI GATION: Traveling the Water Highways!
**River Vessels:**
The most prominent way of transporting goods on rivers is by TUGBOATS. A few of these are the TUGBOATS used on the Mississippi River, which are typically larger than those used on smaller rivers.

**Transport:** There are many different types of river vessels, including barges, tugboats, and houseboats. These vessels are used for transportation, recreation, and fishing. The most common type of river vessel is the barge, which is used to transport goods and materials on the water.

**ACTIVITY:**
**Comparing Different Modes of Transportation**

**Introduction**
Transportation is a major component of our society, and it plays a crucial role in our daily lives. Different modes of transportation have different advantages and disadvantages, and choosing the right mode of transportation depends on various factors such as distance, cost, and convenience.

**Objectives: Students will:**
1. Calculate equivalent cargo capacities and traffic of rivers.
2. Compare range capacities of barges, trains, and trucks.
3. Compare range capacities of all three modes of transportation.

**Materials:**
- Pencils and paper,
- Calculator, if desired.

**Teacher Preparation**
- Display the poster “Navigating the Waterways” several days before conducting this activity.
- Discuss the different ways that people and cargo travel, emphasizing the importance of navigation to our nation’s economy.

**Interpreting Questions**
- Use the following information in the answer to the following questions:
  1. “New York Harbor” refers to the busiest port in the United States, located in New York City, with a total of 200 miles of navigable waterways.
  2. “Tugboats and barges” are used to transport goods and materials on the water.
  3. “The speed of a river vessel” refers to the speed at which the vessel travels on the water.

**ACTIVITY**
**Kentucky River Map and Profile**

**Introduction**
The Kentucky River is a major river in the eastern United States, flowing through the states of Kentucky and Tennessee. The river is approximately 370 miles long and has a drainage basin of about 10,000 square miles. It is a major source of water for the region, providing drinking water for millions of people.

**Objective:** Students will:
1. Develop skills in reading maps and plans.
2. Learn to compare a map with the same location in profile.
3. Apply math skills to practical situations.

**Materials:**
- A map and profile of the Kentucky River.
- Pencils and paper.

**Teacher Preparation**
- Display the poster “Navigating the Waterways” several days before conducting this activity.
- Discuss the different ways that people and cargo travel, emphasizing the importance of navigation to our nation’s economy.

**ACTIVITY**
**When to Use What River Vessel?**

**Introduction**
When deciding to transport goods on a river, it is important to consider the type of vessel that will be most effective. Different vessels have different capacities and are suited to different types of transportation.

**Objective:** Students will:
1. Calculate the range capacities of river vessels for different types of cargo.
2. Compare the range capacities of river vessels with other modes of transportation.

**Materials:**
- Pencils and paper,
- Graph paper.

**Teacher Preparation**
- Display the poster “Navigating the Waterways” several days before conducting this activity.
- Discuss the different ways that people and cargo travel, emphasizing the importance of navigation to our nation’s economy.

**Interpreting Questions**
- Use the following information in the answer to the following questions:
  1. “New York harbor” refers to the busiest port in the United States, located in New York City, with a total of 200 miles of navigable waterways.
  2. “Tugboats and barges” are used to transport goods and materials on the water.
  3. “The speed of a river vessel” refers to the speed at which the vessel travels on the water.

**ORDERING INFORMATION**
- U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, Mississippi, 39181-5002, 601-634-2550
- U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, Mississippi, 39181-5002, 601-634-2550

**ACKNOWLEDGMENTS**
- The Navigating poster was sponsored by the U.S. Army Corps of Engineers Water Resources Engineering Support Center, Vicksburg, Mississippi. Significant contributions were made by staff of the IHM and the Navigation Data Center.