Topic 1	Lesson 4	
Topic 1	Physical Geography of Germany	
Lesson 4	What are the "major" means of transportation in Germany?	
Lesson Objective	The student will discuss the relationship between natural geographical features and the movement of people, goods and materials in Germany.	
Materials and Resources	 Handout 4 Worksheet 3 Transparency 11 Transparency 12 Transparency 13 	"Germany's Transportation System" "Decision Making Chart" "German Waterways" "The Federal Highways" "The Federal Railway System"

Strategies

Explain the following simulation scenario to students:

You are a German entrepreneur interested in establishing a large discount store selling do-it-yourself home improvement materials. You will be importing goods from other countries (e.g., lumber from Canada, hardware from the Czech Republic and wallpaper from France) as well as from other areas within Germany. You have enough capital to build one store. Identify which one of the following cities should be chosen as the site for your store and explain your reasoning: Hamburg, Berlin, Frankfurt.

Divide students into groups of three or four and distribute one copy of **Handout 4 "Germany's Transportation Systems"** per group. Each group should read the handout and then use **Worksheet 3 "Decision Making Chart"** to list and discuss the consequences of each city selection. Assign different roles to the members of the group (e.g., reader, recorder and consensus checker) to facilitate cooperative interaction and completion of the task.

Show **Transparency 11 "German Waterways"** and ask students the following questions:

- 1. What makes it possible to ship goods by river from Frankfurt (located on Main River) to Passau (located on Danube River)? [Answer – Main-Danube Canal]
- 2. Which two rivers form part of the eastern boundary of Germany? [Answer Oder and Neisse Rivers]
- 3. What shortens the route for ocean vessel traffic moving between the North and Baltic Seas? [Answer – Kiel Canal = North Sea-Baltic Sea Canal]
- 4. What are the three primary tributaries of the Rhine River? [Answer – Neckar, Main and Moselle Rivers]
- 5. In which direction do the following rivers flow: Danube, Rhine and Weser? [Answer Danube, east; Rhine, northwest; Elbe, northwest]

Topic 1

Next, show **Transparency 12 "The Federal Highways"** and ask the following questions:

- 1. If you were traveling from Leipzig to Munich (München), you would travel south on which expressway (Autobahn)? [Answer – Expressway 9]
- 2. Which Federal state seems to have the highest concentration of expressways? [Answer North Rhine-Westphalia]
- 3. How many miles is it by highway from Hamburg to Berlin? [Answer 155 miles]

Next show **Transparency 13 "The Federal Railway System"** and ask the following questions:

- 1. Which cities are the major rail centers of Germany? [Answer – Hamburg, Berlin, Cologne, Frankfurt, Munich, Leipzig]
- 2. How many miles is it by rail from Stuttgart to Cologne? [Answer 297 miles]

As a summary, place students into groups of two, three or four and give each group the following task:

Trace and compare water, highway and rail routes (illustrated by the three transparencies) which could be used to ship goods between the cities of Ulm and Berlin. Which route is the most direct based on a comparison in miles?

Which one might be the quickest? Which do you think would be most cost effective for delivering large amounts of lumber?

Have each group reach a consensus about their answers to the above questions. Then, randomly call on individuals from different groups to give their answers and explain their rationale.