

The Location of Wood Product Mills in Oregon

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Overview:

Students create a mental map of the location of wood product mills in Oregon. They look at an actual map showing the location of wood product mills, and compare it to their mental map, noting the difference. They then work in small groups to look at maps of transportation networks in the state to analyze the location of wood product mills in relation to the transportation networks. The students will determine why the mills are in the positions that they are, and report their findings to the rest of the class.

Geographic Question:

How do transportation networks influence the position of wood product mills in Oregon, and where are the mills located?

National Geography Standards:

(#2) How to use mental maps to organize information about people, places, and environments in a spatial context.

(#3) How to analyze the spatial organization of people, places, and environments on Earth's surface.

(#12) The processes, patterns, and functions of human settlement.

Oregon State Content Standards and Benchmarks:

Oregon Benchmark Geography: Benchmark 2

Examine and understand how to prepare maps, charts, and other visual representations to locate places and interpret geographic information.

Oregon Benchmark Social Science Analysis: Benchmark 2

Identify a response or solution and support why it makes sense, using support from research.

Grade Level(s)

Fourth grade level, but can be used for other grade levels using extensions and adaptations.

Objectives:

After creating a mental map of Oregon wood product mills, students in small groups will:

- a.) locate the mills in Oregon on a blank map.
- b.) compare this map to their mental map.
- c.) analyze maps to determine the influence of transportation networks on the positions of mills.
- d.) report their findings to the rest of the class.

Materials:

- a. Blank maps of Oregon, including county boundaries.
- b. Colored pencils, pens, crayons.
- c. Loy, W. (Editor), *Atlas of Oregon*, (2nd Edition). University of Oregon Press, 2001, pages 72-75, 104-105, 108-109, 112-113.
- d. Assessment checklist

Presentation Steps:

1. Anticipatory Set: Ask students what they know about wood product mills in Oregon in order to get them to start focusing on the content of the lesson.
2. Pass out blank maps of Oregon to students, and have them create a mental map of the position of wood product mills in Oregon.
3. Once they are finished, present the geographic question to the students.
4. Have students get in small groups to work on the question presented.
5. Pass out copies of the maps from the Atlas of Oregon to groups and have them look at where the mills are positioned. (Page 74.) Ask them to compare this to their mental maps. What were some of the differences that they found?
6. Tell students to look at the transportation networks on pages 104-105, 108-109, and 112-113 to analyze why the mills are positioned where they are.
7. Give students blank maps of Oregon and have them draw the positions of the mills on the map, as well as the road, rail, and water transportation networks.
8. Next, have students talk among themselves to come up with reasons for the positions of mills. Which of the three transportation types are most significant?
9. Have students present their ideas and findings to the rest of the class.
10. Once students have looked at the relationship between transportation networks and the positions of mills, have students look at individual counties and determine why there are no mills in particular counties that manufacture wood products. (For example, Wheeler County has 100% manufacturing of wood, paper, and furniture products, but no mills in the county.) Have students explain why that might be.

Assessment:

Students will be assessed on the presentation of their ideas and findings in relation to the geographic question. They will also be assessed on their drawings of the positions of the mills and transportation networks on the blank map provided. Teachers can use the attached scoring guide for evaluating student's oral presentations and map work.

Adaptations:

- Team different level learners in small group discussions.
- Look at one transportation system with students as a whole class in order to make sure all students understand what is expected of them.

Extensions:

- Have students look at the numbers for employment in mills for individual counties. Have them determine which counties have the highest and lowest employment in mills.
- Have students look at mill closures between 1980-2000. (Page 75) Have them explain why the mills closed.
- Look at the three different types of transportation networks, road, rail, and water to see what is most significant.

Assessment Checklist

Oral Presentation:

_____ The presentation has a clear purpose and the student can clearly state the geographic question(s) investigated.

_____ The student can describe how:

- observations and collected data were made
- the data was organized
- the data was analyzed to answer the geographic question

_____ The student has created a map to organize and analyze the results.

_____ Maps and other visuals are accurate, neat, and have titles or labels.

Maps:

_____ The student's map has a clear title that explains its purpose.

_____ A key or legend is included on the map which explains all symbols.

_____ The map is neatly drawn, detailed, labeled, and easy to read.

_____ A scale is included.

_____ The map is oriented properly towards North with a North sign or compass rose.

