

Laurel Main Wyoming Geographic Alliance

OVERVIEW OF MAIN IDEA: Explore four industries in Wyoming and the resources they use to support our economy.

TEACHING LEVEL: Fourth Grade

CONNECTION TO THE CURRICULUM: Social Studies, Reading, Science, Math

CONNECTION TO THE NATIONAL STANDARDS: Reading Informational Texts #7: Interpret information presented visually, orally, or quantitatively and explain how the information contributes to an understanding of the text in which it appears.

CONNECTION TO THE STATE ANDARDS: LA.04.01.01h:

Students will understand level-appropriate technical and subject specific vocabulary. LA.04.01.01i: Students use text organizers such as type, headings, and graphics to predict and categorize information. LA.04.03: Students use listening and speaking skills for a variety of purposes and audience. LA.04.03.05: Students speak and listen in small groups cooperatively. MA.04.04: Students use algebraic methods to investigate, model, and interpret patterns and functions involving numbers, shapes, data, and graphs in a problem solving situation. MA .04.05.01: Students collect orgaznie and compare data in graphs, Venn diagrams, tables and charts. SC.04.02.02b: Students will analyze and interpret using simple graphs, charts, diagrams, and models to communicate results. SS.04.03 Students demonstrate an understanding of economic principles and concepts and describe the influence of economic factors on societies. SS.04.05: Students demonstrate an understanding of interrelationships among, people, places, and environments.

TIME: A minimum of 20 minutes per station and 30 minutes for introduction, modeling and closing.

MATERIALS REQUIRED:

- Smart Table or Smart Board
- Pictures of the resources that support Wyoming industries
- 12 foot x12 foot Wyoming floor map
- 8 sheets of 2 foot x 2 foot butcher paper
- Graph paper, scissors, glue, pencils
- "Selected Economic Characteristics" data sheet
- Local newspapers, magazines, calendars

OBJECTIVES: Students will

- understand Wyoming's industries and the resources utilized by each industry.
- distinguish between renewable and nonrenewable resources
- analyze resource availability
- associate individual resources and products with the appropriate industry

GEOGRAPHIC THEMES or SKILLS:

 physical system, environment and society, uses of geography, places and regions

SUGGESTED PROCEDURE:

- whole group
- small group activity
- To better manage these four stations working with another teacher, such as tech teacher, resource teacher or title teacher
- Student prior knowledge and vocabulary required for this lesson.
- Vocabulary needed, nonrenewable, renewable, industry, products, tourism, agriculture, fossil fuels, logging

OPENINGS:

• How does Wyoming acquire the money to repair the road? Where does the money come from to maintain Connor Battle Field (Ranchester park)? How does the Sheridan County Museum and

Sheridan schools pay their light bills? Who pays the governor? Where does the money come from?

DEVELOPMENT/PROCEDURE:

• Explain and model the four activities to the whole group

Station 1: Smart Table lesson, see attachment

Station 2: Using a variety of magazines, newspapers and calendars students will cut out resources in Wyoming. Using collaboration the students will sort the pictures under headings renewable and nonrenewable on large sheets of paper on the floor

Station 3: On the Wyoming floor map students will place pictures of products sold by Wyoming industries on their place of origin

Station 4: Use data provided the students will make a graphic representation of the amount of civilian population employed 16 years and older for each industry. (See website link below)

CLOSING or CONCLUDING THE LESSON:

- Review objectives
- Ask students which activity they liked best and why?
- Share graphs, resources on the floor map and pictures collected.
- Celebrate their learning.

ASSESSMENT OF STUDENT LEARNING: Informal teacher notes from discussion of pictures placed with each industry from station 2 and the students' graph created in station 4.

EXTENDING THE LESSON:

- How do these industries compete for Wyoming's limited resources?
- How do we conserve the nonrenewable resources?
- Conduct a survey to determine which jobs are directly or indirectly associated with each of the four industries.
- Research other industries that contribute to Wyoming's economy

RESOURCES: http://www.harmonyhallow.net

Download The Hat freeware

http://factfinder.census.gov/home/saff/main.html? lang=en

Fast Access to Information heading – enter your county and your state, press Go. Scroll down to Economic Characteristics, click show more. Scroll down to Industry *subheading Civilian employed population 16 years and over.

If a smart table is not available this can be done on a smart board.