

## **The World in Spatial Terms**

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**Geography studies the relationships between people, places and environments by mapping information about them into a spatial context. The geographically informed person knows and understands:**

Standard 1. How to use maps and other geographic representations, tools and technologies to acquire, process and report information from a spatial perspective.

### ***CRINKLE MAPS!***

Crinkle Maps are one of those ideas that are so simple, wonderful and rich that you could spend months devising various, rich learning activities throughout the school-year. Here is what you do: Take a sheet of paper (8 ½ x 11, or larger), partially crumple it up in your hand, and carefully tape it onto a piece of colored card stock. The crumpled piece of paper becomes a model of an island (complete with a wealth of landforms- a central mountain, river valleys, coastal areas, etc.) and the card stock becomes the ocean. It's something you may need to try a few times to see the varieties possible.

Once students make their crinkle maps they can become familiar with the landforms on their island. The assessment task will be for students to make a physical map of their island. The map could be a strictly physical map or could also include some political features (for example cities and farms).

### **CRINKLE MAP SCORING GUIDE**

#### **5**

- Map is neat, labeled, titled and easy to read.
- Key includes color codes, symbols and a compass rose.
- Scale is identified and seems plausible.

#### **3**

- Map is legible; some ideas are unclear, not communicated well.
- A key is used but may not be entirely helpful; may lack colors symbols or a compass rose.
- Scale is not used or is not plausible.

#### **1**

- Map is difficult to read, poorly labeled or lacks labeling.
- Key is confusing or not present.
- Scale is not attempted.

## **PLACES AND REGIONS**

**The identities and lives of individuals and peoples are rooted in particular places and in those human conducts called regions. The geographically informed person knows and understands:**

Standard 4. The physical and human characteristics of places.

A large part of our social studies curriculum in 4<sup>th</sup> grade is the study of our state, Oregon. When we study the state we learn about the geographic regions of the state, population centers, wildlife, lifestyles and recreation.

An interesting and effective way to assess the students would be for the students to create a brochure that describes the human and physical characteristics of a specific region of the state. The purpose of the brochure would be to persuade people to relocate to that part of the state.

Again, it is expected that this assessment takes place after much scaffolding of skills, including looking at a variety of professionally made travel brochures.

Once the brochures are finished, the students will give a 2 minute persuasive speech that focuses on that region and why it is best.

### **Assessment**

A holistic scoring guide could be used to assess the speech. The following scoring guide was adapted from one developed by Mark Twain Elementary School (1997). The key question to keep in mind for the presentation is, "Why is the \_\_\_\_\_ region of Oregon a desirable location for a family to move to?"

## **PHYSICAL SYSTEMS**

**Physical processes shape the Earth's surface and interact with the plant and animal life to create, sustain and modify the ecosystems. The geographically informed person knows and understands:**

Standard 7. The physical processes that shape the patterns of the Earth's surface.

This standard is a great opportunity to get out of the classroom and do a little field study! We will walk to a nearby hill side and stream to take note, sketch and gather information about the area. The question I would present to the students is, "How has weather and ground cover effected landforms outside our community?" Since I teach in the small, high desert town of Madras, it is relatively easy to get out of town to find obvious examples of landforms effected by weather and (lack of) ground cover.

## ASSESSMENT

An assessment of the field study could come in the form of a visual display made upon poster board. The question the display should answer is:

“How has weather and ground cover effected the land near the hillside and creek? Should the county Department of Works do anything about what you have observed?”

The following 4 point scoring guide could be used:

**Rate each area from 1 to 4**  
(1= Limited; 2= Basic; 3=Proficient; 4=Advanced)

### Reasons/Evidence

- 4 Supports with appropriate and accurate evidence
- 3 Supports with some evidence
- 2 Little in descriptive text; or often inappropriate/irrelevant
- 1 Little attempt at description or faulty

### Geographic knowledge

- 4 Relates detailed, specific geographic facts
- 3 Relates specific facts
- 2 Relating of geographic information is inconsistent or somewhat unclear
- 1 There is no relating of geographic information or it is incorrect.

### Presentation

- 4 Presentation is very clear and enriches the project
- 3 Presentation is clear, information is easy to find
- 2 Some parts of presentation are clear; commitment to quality is inconsistent
- 1 Presentation is messy, distracting and confusing

## HUMAN SYSTEMS

**People are central to geography in that human activities help shape the Earth’s surface, human settlements and structures are part of Earth’s surface, and humans compete for control of Earth’s surface. The geographically informed person knows and understands:**

Standard 9. The characteristics, distribution, and migration of human populations on Earth’s surface.

A worthwhile activity for the students would be to survey and interview family/community members about *their* migration to their state/country of residence. With the exception of Native Americans, most people living in Oregon have ancestors or family members who relatively recently migrated to this state. The reasons for migration are varied; but the stories are nearly always compelling and important. I see this as a powerful learning experience waiting to happen

The class could then compile the data from all of the surveys onto a table. The table could list places of origin and year of migration.

**ASSESSMENT:** The students would then be given the choice of creating a line or a bar graph that communicates the information found in the composite table. The scoring guide on page 5 A will be used to assess the task. To meet the standard the student will need to score one point in each of the nine elements.

As an alternative task, the survey/interview information could be turned into a writing assignment.

**ASSESSMENT:** The students could write an essay, or play based upon the interview/ survey that they conducted. The topic of the essay would be, “What reasons led to \_\_\_\_\_’s Decision to migrate to this community?” The writing could be done as a historical fiction, a play or a straight report. This play could be performed for the class or a class family night! Assess the writing using the “*Checklist for a Cause and Effect Essay*” found on page 5 B. To meet the standard the student would need to earn 7 points to meet the standard.

## ENVIRONMENT AND SOCIETY

**The physical environment is modified by human activities, largely as a consequence of the ways in which human societies value and use Earth’s natural resources, and human activities are also influenced by the Earth’s physical features and processes. The geographically informed person knows and understands:**

Standard 15. How physical systems affect human systems.

This standard can be assessed by focusing on the following inquiry question: “How did the topography of the western United States influence the choices of Oregon Trail travelers?”

Students could answer this inquiry question by performing a one or two person dramatization (role play) imagining they were Oregon Trail travelers. The play would be about the choices available and, finally, made when the travelers encountered a specific topographic form (mountain pass, river fork, fertile valley, etc.). The play would be assessed using the scoring guide that follows. (NOTE: If the play has two players the score will be based upon the entire performance.)

### **ROLE PLAY SCORING GUIDE**

For each item score 1-4 (1 = poor; 2= average; 3=good; 4= excellent)

#### **Content**

- Analyzed problem for its vital (geographic) issues. \_\_\_\_\_
- Presented sufficient evidence. \_\_\_\_\_
- Used logical, credible evidence. \_\_\_\_\_
- Play dealt with one question related to topography. \_\_\_\_\_
- Play showed evidence of research into the topic. \_\_\_\_\_

## Delivery

- Volume was sufficient. \_\_\_\_\_
- Play was interesting and enjoyable. \_\_\_\_\_
- Gestures, props, actions used to make play interesting. \_\_\_\_\_

Total Points: \_\_\_\_\_

## Comments:

## THE USES OF GEOGRAPHY

**Knowledge of geography enables people to develop an understanding of the relationships between people, places and environments over time –that is, of Earth as it was, is and might be.**

**The geographically informed person knows and understands:**

Standard 18. How to apply geography to interpret the present and plan for the future.

This standard could be a great place to pull out those wonderful Crinkle Maps! Given the world of their Crinkle Map (a world with houses, towns schools, wildlife areas and more!) what would be the best location for one of the following: a new school, a large subdivision, a factory, garbage dump or a wildlife preserve)? Prepare an oral presentation to the Planning Commission of Crinkle-land explaining your reasons for the location you recommend. The presentation will be no more than 5 minutes. Use of maps and charts is encouraged.

## **PRESENTATION SCORING GUIDE**

### **5**

- Reasons for location choice are stated in geographic terms including location **and** human systems.
- Presentation uses 3 well-developed reasons for the choice.
- Charts and/or maps are used effectively.
- Presentation is well-organized (introduction, body and conclusion)
- Presenter is enthused and easy to understand.

### **3**

- Reasons for location are not always stated in geographic terms.
- Presentation uses less than 3 reasons and/or the reasons are not well developed (overly broad or simplistic)
- Charts and or maps are used but not very effectively.
- Presenter's commitment to the topic is inconsistent.

### **1**

- Geographic terms are not used or are badly misused.
- Presentation's reasons are not developed or confusing.
- Charts and maps are not used or they are used very badly.
- Presentation lacks structure, rambles, and seems poorly organized.
- Presenter's commitment to the topic is totally lacking or the presentation is so hard to follow that the listener is confused.

### **Student Checklist for Graphs/Timelines**

- I chose the best type of visual display to show my data.
- My graph/timeline has a clear title, which explains its purpose.
- I have placed the data I collected on the graph/timeline accurately, using the correct axis.
- I have labeled the axis correctly.
- I chose a scale for each axis that uses the space well, and is appropriate for the data.
- I used color and shading to make the graph/timeline easy to read.
- I included a key where appropriate
- My graph/timeline was neat and easy to read.