

An in-depth unit that integrates geography, science, social studies, art, and language skills.

By: Aelfric Wolf

Contained in this portfolio you will find five assessments that I have created for use in an elementary school classroom in conjunction with a geography unit called “Crinkle Island”. I have created this unit for my combined grades 3 and 4 classroom to teach geography, problem-solving, language, science, and presentation skills. I currently teach full-time at a school in Albany, Oregon named Waverly Elementary. This school is a Title I school (about 90% on free and reduced breakfast and lunch) ranking as the 34th lowest socio-economic elementary in Oregon. The students lack many basic skills and basic knowledge needed for successful functioning in society. This unit, Crinkle Island, will help teach them many basic skills. I created the following five assessments for three main reasons. 1) To grade the students - a well planned assessment has a higher degree of validity than one thrown together the night before. 2) To get feedback as to what the students have learned and where their skill level is at. To do this I have created a variety of assessment types to help demonstrate their knowledge and skills. 3) Possibly the most important reason, to help drive and focus the unit. Assessments that are created at the beginning of the formation of the unit act as a lens with which to stay focused on the goals of the unit. The assessments help clarify what preteaching and scaffolding must be covered to get the students to the end result that the teacher desires. Throughout the following five assessments notice the connections to these three reasons.

This entry is to explain some of my thinking for the “Scoring Guide for a Map”. This rubric is designed to comprehensively score the many aspects of a detailed map that the students are to produce. This map is the culmination of a large portion of study within the unit and acts as an important checkpoint of the student’s progress. Owing to its importance and the number of details to be included on the map, I chose to use an analytical style scoring guide to accurately and completely assess the student’s work. The analytical scoring guide allows the assessor to separate a large number of details and give credit for each detail, thus increasing the accuracy of the final score given. The analytical scoring guide also allows the assessor to grade as many aspects as desired, thus the final grade reflects the completeness of the student’s work. The major drawback to such a comprehensive tool is the amount of time that it takes the assessor to use it. Bearing this in mind, I designed this rubric using the circle-the-number method to increase the expediency and ease of use for the assessor.

This scoring guide is broken into three major areas, the first being the basic mechanics of a map. Each component is only worth one point because they do not represent actual problem-solving and thought on the part of the student. The other two areas are content of the map which reflect thought and problem-solving, and are worth more points. While this activity hits on many of the geography standards, the one that it most fully satisfies is number 1: How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective

This entry is to explain some of my thinking for the “The Travel Brochure Scoring Guide”. This is another holistic rubric that helps the teacher assess the cumulative project for this unit. For this project the student will create a brochure, in any format, that encapsulates all of the aspects that have

been created or reasoned for their island. The brochure is to be persuasive in nature to encourage either colonization or tourism of their island. I felt that this scoring guide would be best if holistic in nature to save the teacher time in assessing and because this cumulative project has little new thinking, rather just an arrangement and presentation of previous work. The descriptors in this scoring guide include a reference to ‘minimum requirements’. These would be a list of the items to include in the brochure that either the teacher creates or the teacher in conjunction with the class would create. I would recommend the latter, as it gives the students more ownership in the activity. This list of required items might include their 2-D map; mail order catalog; written descriptions of the land, culture, animals, recreational opportunities, and habitats; reference to the benefits of their careful land use planning; and minimum number of landform terms woven into their text. This final type of project that synthesizes previous work has the added benefit of being almost portfolio-like in nature. It is a wonderful capstone to summarize learning and answer the overarching inquiry question to the entire unit, which is: How does geography affect people, places, and environments?

This activity and assessment demonstrate student learning in the Uses of Geography element, especially regarding standard number 18: How to apply geography to interpret the present and plan for the future.

Informal and formative assessment for the Physical Systems element of Geography.

This entry is to explain some of my thinking for the “Environment and Society Performance Assessment”. This is a developmental style rubric that is designed to be used to assess each individual student that participates in a class debate/discussion on land use planning. Specifically the assessor is watching for the student to demonstrate their use of geography knowledge in their arguments. This scoring guide does not assess any other part of the debate, including speech skills. While an assessor might be interested in also scoring the student based on performance of speech skills, to wrap that assessment into a content-based assessment would serve to complicate the process and reduce the validity of the final grade given. Each category has two components that the assessor is measuring. The first is simply how much, or quantity, of geography terms and concepts the student uses. The second is the quality or correctness of the used terms/concepts. The quantity factor is graded on very vague terms such as “some”, “good” and “very good”. I have designed the rubric this way to account for the variability of different classes and age levels. The assessor will need to establish a baseline of “proficient” or “good” to compare to during the weeks before this performance assessment. If the Teacher is actively engaged with the students for the preceding activities in the unit, then they will easily be able to establish that baseline for their specific class. To simply say that proficient equals the student using 4 geography terms does not take into account the student’s background, ability to learn, language barriers, age, or developmental level.

This activity encourages the student to use all three of the geography standards for this essential element to form their arguments and respond to the arguments of others. These three standards are 14: How human actions modify the physical environment, 15: How physical systems affect human systems, and 16: The changes that occur in the meaning, use, distribution, and importance of resources.

This entry is to explain some of my thinking for the “Mail Order Catalog Assessment”. This is a holistic rubric that assess two aspects of each of the student’s entries into a mail order catalog of items available on their island. Each student creates this catalog to demonstrate their understanding of trade systems and the connection between the geography of the land and the available resources.

The first aspect that this rubric looks at is this connection between the item offered and the geography of the island. The student not only draws a picture of the item and has a small description (just like a real catalog), but then also writes a “because” statement. This is a sentence or three that shows the connection between the item and the geography of the island. This item can be offered in the catalog *because* The teacher would be looking for connection such as: I can offer bread in this catalog because of the prevailing westerly winds that carry moisture off of the ocean which then hit the mountain range in the middle of my island so there is a large fertile and wet area that can grow wheat.

The second aspect that this rubric looks at is the presentation of the item and the text in the catalog. Simply, if the presentation is so bad that the viewer cannot easily understand what is being said, then the student’s communication breaks down and fails to relay even the best of thoughts. This aspect will vary in importance based on the teacher, but it is my intention that “well presented” means that the student’s communication can be understood with a minimum of effort and that their communication does not break down (some small errors would be allowed). That is why there is a higher category for “very nicely presented”. In the end, it is the student’s reasoning that is the most important, so long as their communication does not break down.

This activity hits two standards in the Human Systems element of geography. The first is number 9: The characteristics and distribution of human populations, and the second is number 11: The patterns and networks of economic interdependence. Many other standards are also hit, especially some in the Environment and Society element.

pens to color these items on to their island. The assessment then looks at the neatness of their work (how well other viewers could access the information) and the accuracy of city and habitat positioning (a reflection of their geography knowledge and reasoning of the original inquiry question). This assessment is holistic because of the amount of time it takes to assess each of the students’ islands for all of these details.

These activities hit on many of the geography standards, but the ones that are most completely satisfied are the Places and Regions standards number 4 (The physical and human characteristics of places) and number 5 (That people create regions to interpret Earth’s complexity).

This entry is to explain some of my thinking for the “Places and Regions Scoring Guide”. This is a composite type assessment tool that combines the use of an inquiry question, performance assessment, analytical rubric, and a holistic rubric. As any good investigation starts off, this starts off with a question: “How does the topography of my island affect the placement of cities and habitat types.” This scoring guide then uses two different types of activities, one written and the other hands-on kinesthetic, to allow the student to demonstrate their reasoning. The total point value for both activities is 100 points. Each activity is worth 50 of the 100 points. The first activity that the scoring guide deals with is the essay where the student uses the written word to describe and explain where and why the cities and habitats were placed where the student placed them. The written section of the scoring guide is broken in half between use of English language (as we’ve previously been trained to assess using the state guidelines) - 25 points, and geography content - 25 points. The actual scoring within each of these 25 point halves is holistic in nature because the teacher has already been trained in depth on the use of the state scoring guide and can recognize “above grade level”, “on grade level”, “a little below grade level”, “far below grade level”, and “serious concern” with ease now. This saves the teacher time and makes scoring these student writings an approachable

task. If the teacher feels unknowledgeable in assessing using the state guidelines, then a copy (which is readily available in every school) could be used to analytically derive the student's writing score.

The second 50 point half of the "Places and Regions" scoring guide assesses the actual hands-on placement of the cities and habitats on the island. The student uses paint or marker

This entry is to explain some of my thinking for the "Student Self-Checklist for Placement of Rivers and Lakes". This is a formative and informal assessment tool that the student use on their own to guide the proper placement of rivers and lakes on their crinkle island. The checklist starts off with some very basic concepts, such as the student making sure all of their rivers are running downhill, to keep reality as a foundation for this fantasy island. Without a foundation of reality this unit would be merely an exercise in imagination instead of the powerful learning tool that it is for geography, science, and language. The middle part of the checklist has harder concepts like rivers following the contours of the land. This requires the student to find the path of least resistance that the water would realistically take. The last part of the checklist asks if all of the rivers eventually flow into the ocean which gets back to the water cycle that would have previously been taught. This actively engages the student in most parts of the water cycle as they figure out where moisture would precipitate out on to their island, how it would flow and collect, and where it would eventually rejoin the ocean. The very last entry on the checklist is simply a reminder not to make a mistake that is common for students of this age to make, which is having a river flowing from one coast to another. This does not happen because at some point the river would be flowing uphill. The students can then place the ecosystems appropriately on the island after knowing where the water is located as this is often the determining factor for types of environments.

This activity and assessment satisfies Physical Systems geography standards number 7 (The physical processes that shape the earth's surface) and number 8 (The characteristics and spatial distribution of ecosystems on Earth's surface).

Students make a check mark in the box if:

your rivers all run downhill.

your rivers start in the mountains.

your river follows the contours of the land.

your river collects into a lake if there is a depression in the land.

your river eventually flows into the ocean.

your river does **not** flow from one coast to another coast.

Inquiry question and scoring guide assessment for the Places and Regions element of Geography.

Inquiry Question: How does the topography of my island affect placement of cities and habitat types?

Answer: Students will demonstrate knowledge and reasoning via written essay on this topic and by appropriately marking 3 dimensional island.

Worth: The result of this assessment is equal up to 100 points. These points are broken down in the following manner:

25 - Use of written English language on the essay. This is scored bearing the State Scoring Guide for Writing 1 - 6 scale and descriptors in mind, and then multiplying by 5. If the student were to score a 6, it would still be multiplied by 5 to result in 30 points. As a 6 means far better than grade level, a score of above 100% is reasonable.

25 = 5 x 5 **Above grade level** organization, voice, word choice, sentence fluency, and conventions.

20 = 4 x 5 **On grade level** organization, voice, word choice, sentence fluency, and conventions.

15 = 3 x 5 **A little below grade level** organization, voice, word choice, sentence fluency, and conventions.

10 = 2 x 5 **Far below grade level** organization, voice, word choice, sentence fluency, and conventions.

5 = 1 x 5 **Serious concern** in writing.

25 - Geography Content and Ideas.

25 = 5 x 5 **Above grade level** Geography Content and Ideas.

20 = 4 x 5 **On grade level** Geography Content and Ideas.

15 = 3 x 5 **A little below grade level** Geography Content and Ideas.

10 = 2 x 5 **Far below grade level** Geography Content and Ideas.

5 = 1 x 5 **Serious concern** in Geography Content and Ideas.

50 - Actual placement of habitats and cities on island.

50 - **Habitats are all colored neatly** in their corresponding colors (yellow = desert, white/black/ or gray = snow/mtn. tops, dark green = forests, light green = grasslands, etc...), all **habitats are accurately positioned**,

all **rivers meet guidelines** on “Student Self-Checklist for placement of Rivers and Lakes”, and **cities/harbors are all reasonably placed**.

40 - Habitats are all colored in mostly their corresponding colors, most habitats are accurately positioned, most all rivers meet guidelines on “Student Self-Checklist for placement of Rivers and Lakes”, and cities/harbors are all reasonably placed.

30 - Some habitats are colored, at least 1/2 of the habitats are accurately positioned, at least 1/2 of the rivers meet guidelines on “Student Self-Checklist for placement of Rivers and Lakes”, and cities/harbors are mostly reasonably placed.

20 - Habitats marked in some way, any habitats reasonably positioned, any rivers meeting guidelines, any cities/harbors reasonably placed.

10 - Unacceptable, chance to do over (modifications may be needed).

0 - Unacceptable, No chance to do over.

=====

100 points

Developmental scoring guide for the Environment and Society element of Geography.

This scoring guide is for Teacher use during the class Land Use Planning Commission Debate to score each student on their **use of geography knowledge**.

1 Beginning = **Very Little** or **No** use of geography terms or concepts to support their position.

2 Emerging = **Little** use of geography terms or concepts to support their position that are **mostly incorrect**.

3 Developing = **Some** use of geography terms or concepts to support their position that are **about 1/2 correct**.

4 Proficient = **Good** use of geography terms or concepts to support their position that are **mostly correct**.

5 Strong = **Very Good** use of geography terms or concepts to support their position that are **all correct**.

6 Exemplary = Extraordinary use of geography terms or concepts to support their position that are highly advanced.

Beginning

Emerging

Developing

Proficient

Strong

Exemplary

Analytical scoring guide for The World in Spatial Terms element of Geography.

I. Map Components (title, date, author, colors, labels, compass rose, legend, scale)

1= Met 0= Not met (circle whichever best describes the student's work)

- 1 0 The map has a title.
- 1 0 The map has a date.
- 1 0 The map has the student's name.
- 1 0 The map has colors to differentiate habitat areas.
- 1 0 The map has the correct colors to differentiate habitat areas.
- 1 0 The map has labels to show landforms.
- 1 0 The map has a compass rose.
- 1 0 The map has a legend explaining the symbols used.
- 1 0 The map has a scale that is reasonable.
- 1 0 The map is fairly accurate in representing the student's island.
- 1 0 The map neat, clear, and easy to read.
- 1 0 The map has all correct spelling and conventions.

II. Natural Content (rivers, lakes, snow, forests, grasslands, deserts, and prevailing wind direction to accurately determine habitat types and locales)

5 = All done correctly 3 = At least 1/2 done correctly 1 = Any done correctly 0 = Not done

- 5 3 1 0 The map has rivers according to the student checklist.
- 5 3 1 0 The map has lakes according to the student checklist.
- 5 3 1 0 The map has snow in appropriate areas for the climate and elevation.
- 5 3 1 0 The map has forests accurately placed for the climate.
- 5 3 1 0 The map has grasslands accurately placed for the climate.
- 5 3 1 0 The map has deserts accurately placed for the climate.
- 5 3 1 0 The map has prevailing wind direction noted and used correctly.

III. Natural Content (farming, towns, industrial, wilderness preserves, watersheds, parks)

5 = All done correctly 3 = At least 1/2 done correctly 1 = Any done correctly 0 = Not done

- 5 3 1 0 The map has realistic amounts of farmland realistically placed.

- 5 3 1 0 The map has at least 3 towns (1 a capitol) reasonably placed.
- 5 3 1 0 The map has at least 2 harbors reasonably placed.
- 5 3 1 0 The map has at least 2 industrial sites reasonably placed.
- 5 3 1 0 The map has a wilderness preserve reasonably placed.
- 5 3 1 0 The map has watersheds correctly placed and protected from industry.
- 5 3 1 0 The map has a park reasonably placed.

Holistic scoring guide for the Human Systems element of Geography.

Use the following guide for **each** item entry in the catalog. Those students doing more entries, therefore more work, receive more points. The total number possible points is limited only by the maximum number of entries per catalog in the class. Each descriptor has two parts and the student receives the score for the least satisfactorily demonstrated part. Examples: Student has great connections between item and island's geography, but has poor presentation - the student gets a 6. The student has a fuzzy connection, but really great drawings - the student gets an 8.

10 = Well reasoned connection between the item and the island's geography **and** very nicely presented.

8 = Limited connection between the item and the island's geography **and** well presented.

6 = Weak connection between the item and the island's geography **and** poorly presented.

3 = No connection between the item and the island's geography **and** very poorly presented. This is Unacceptable, chance to do over.

0 = Not attempted, no chance to do over.

Holistic scoring guide for The Uses of Geography element of Geography.

100 Points - Excellent

The brochure demonstrates work that is thoughtful, creative, and above and beyond the minimum requirements. The brochure shows integration of the ideas and concepts covered in class with something extra from the student (evidence of special research or application to their own lives). English language usage is all correct and the presentation is clear and neat.

85 Points - Good

The brochure demonstrates work that has some thoughtfulness or creativity. The student has done slightly more than the minimum requirements. The brochure shows

integration of the ideas and concepts covered in class. English language usage contains few errors and the presentation is mostly clear and neat.

70 Points - Meets Minimal Requirements

The brochure demonstrates work that just meets the minimum requirements. The brochure shows some integration of the ideas and concepts covered in class. English language usage is about 2/3 correct and the presentation is fairly clear and neat.

40 Points - Less Than Minimal Requirements, Can Do Over

The brochure demonstrates work that is attempting to meet the minimum requirements. The student has put forth some effort and with some more work can meet the minimal requirements. The brochure shows an attempt at integration of the ideas and concepts covered in class. English language usage is about 1/3 all correct and the presentation is clear and neat enough to decipher (modifications may be needed).

0 Points - Not Attempted, Can NOT Do Over

No reasonable attempt was made to meet the minimum requirements. The student has put forth no appreciable effort and is far from the minimum requirements.