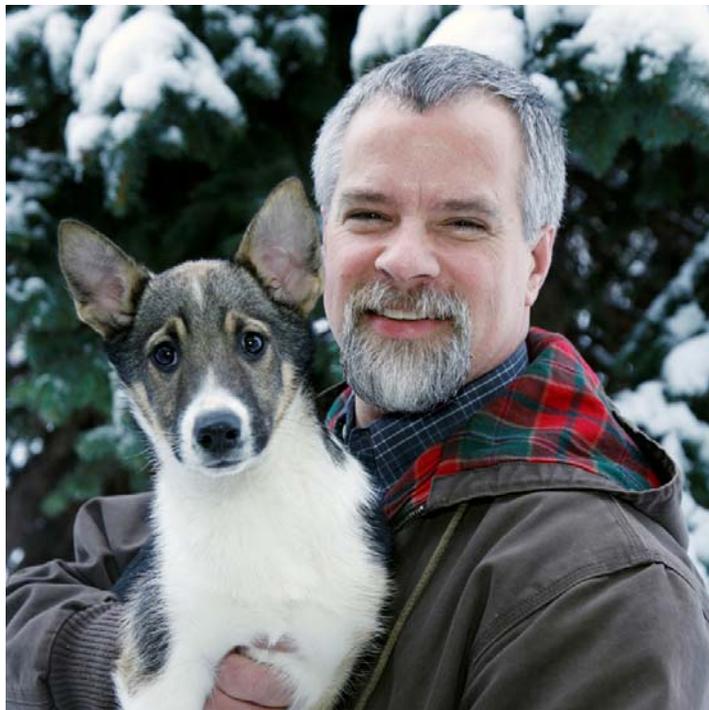


Herb Brambley's  
Lessons for the Classroom  
Science, Math, Technology, Social Studies,  
Environmental Education, and other content areas  
Lessons for Elementary and Secondary Students



Herb Brambley, 2011 Iditarod Teacher on the Trail™

## Herb's Lessons

Lesson 1: Introduction to the Iditarod Sled Dog Race; Grades 2-8; *Geography, Social Studies, and Science*; This lesson introduces how climate relates to lifestyle and culture.

Lesson 2: The Alaskan Husky; Grades 4-8; *Technology, Science*; This lesson uses computer skills such as cutting, pasting, and saving a Word document as a vehicle to learn the unique characteristics of the Alaskan Husky.

Lesson 3: Making Electricity from the Sun; Grades 4-12; *Science, Technology, Geography, Environmental Education*; In this hands on lesson students see how the angle of a solar panel in relationship to the sun's rays directly effects voltage output. The Internet is used to research the average hours of sunlight per day for locations across the globe.

Lesson 4: Wilderness Survival; Grades 4-8; *Social Studies, Environmental Education*; Students actually build a debris shelter(or model) as they study the hierarchy of survival priorities. Read Iditarod stories of survival from the book *More Iditarod Classics*.

Lesson 5: The Reason for the Seasons; Grades 2 -6; *Science, Environmental Education*; Students learn about the tilt of the earth and the angle of incidents of the sun's rays and explain the causes of seasonal change.

Lesson 6: Are We There Yet; Grades 5-12; *Technology, Geography*; Find out how far it is from your house to Alaska and how long it will take to get there driving, walking, or using public transportation.

Lesson 7: Why is Iditarod a Ghost Town ; Grades 4-12; *Environmental Education, Social Studies*; Students determine the best place to locate a village by evaluating several locations for available water resources, type of soil, signs of wildlife, and ease of travel.

Lesson 8: The Cold Hard Facts; Grades 4 and above; *Technology, Science, Math*; In this lesson students use an Excel spreadsheet to record temperature data from their local area and a location in Alaska. They also use the graphing capability of Excel to create a graph that compares the 2 locations.

## Introduction to the Iditarod Sled Dog Race

Developed by: Herb Brambley

Discipline / Subject: Geography/Social Studies/Science

Topic: Iditarod Sled Dog Race

Grade Level: 2<sup>nd</sup> – 8<sup>th</sup>

Resources / References / Materials Teacher Needs:

Movie – *Nanook of the North*

Movie – *Alone in the Wilderness*

Book – Enchantment of America: Alaska

Book – Balto by Natalie Standiford

Globe

Flashlight

Internet site with animation of earth's orbit:

[http://www.uwsp.edu/geo/faculty/ritter/geog101/textbook/energy/earth\\_sun\\_relations\\_seasons.html](http://www.uwsp.edu/geo/faculty/ritter/geog101/textbook/energy/earth_sun_relations_seasons.html)

**Lesson Summary:** This lesson introduces Alaska and the Iditarod to the students. It is also a lesson on why we experience the change in seasons.

**Standard's Addressed: (Local, State, or National)**

1. NSES 6.4 Earth and Space Science
2. PA S&T 3.4D Explain and illustrate the cause of seasonal change.
3. USNGS 6 How Culture and Experience Influence People's Perceptions of Places and Regions
4. NCSS 3 People Places and Environments

**Learning Objectives:**

1. Students will describe the movement of the earth in relationship to the sun.
2. Students will explain how the tilt of the earth relates to the change in seasons.
3. Students will identify differences between our culture and that of people from the arctic regions.

**Method of assessment for learning**

1. Students will draw the tilt of the earth and its relationship to the sun in each of the 4 seasons.
2. Students will demonstrate the movement and tilt of the earth in relationship to the sun.
3. Students will list differences between their culture and Nanook's culture.

**Procedural Activities**

1. Using the globe and solar system model, describe the orbit of the earth around the sun.
2. Use the flashlight and globe to show how the tilt of the earth causes parts of the earth to receive less sunlight certain times of the year.
3. Show students the Internet site with the animation of earth's orbit.
4. Since we receive heat and light energy from the sun, parts of the earth get less heat and light during some months and are therefore colder.
5. Relate lifestyle and culture to climate.
6. Show students the movie *Nanook of the North*.
7. Have students list differences and similarities in culture they observed.

**Materials Students Need:**

Worksheet page with picture of the sun and earth's orbit.

**Technology Utilized to Enhance Learning:**

Computer with internet access to show animation of earth's orbit.

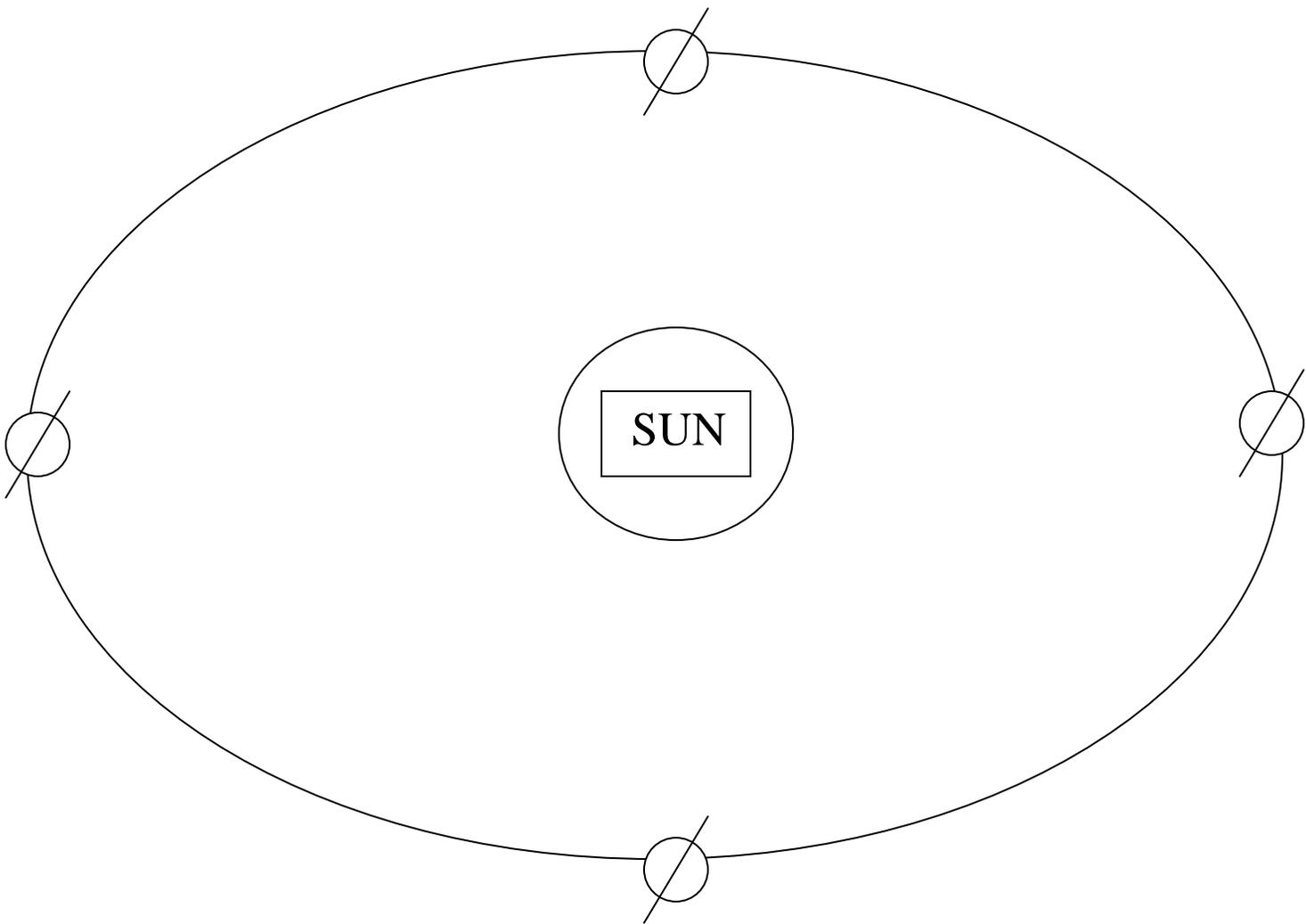
**Other Information:**

Preview *Nanook* before showing it to your class. Some material may not be suitable for children.

**Modifications for Special Learners/ Enrichment Opportunities:**

This is a great hands-on lesson for learning the orbit and tilt of the earth.

Students who understand the concept of earth's tilt may describe in their journals the affect there would be on the seasons if earth had no tilt.



## The Alaskan Husky

**Developed by: Herb Brambley**

**Discipline / Subject: Technology/Iditarod/Alaska**

**Topic: What makes the Alaskan Husky different from other dogs?**

**Grade Level: 4<sup>th</sup>-8<sup>th</sup>**

**Resources / References / Materials Teacher Needs:**

LCD projector

Smart Board if available, or projector screen

Alaskan Husky Website: <http://www.dogbreedinfo.com/alaskanhusky.htm>

**Lesson Summary:**

This lesson primarily is a lesson in cutting and pasting into a word document, saving a word document in the proper drive, and learning the unique characteristics of the Alaskan Husky.

**Standard's Addressed: (Local, State, or National)**

1. NETSS 3b – locate and use information from a variety of sources.
2. NETSS 6a – understand and use technology systems.
3. NETSS 6b – select and use applications effectively and productively.

**Learning Objectives:**

1. Students will demonstrate the skill of cutting from an internet site and pasting the information into a word document.
2. Students will select the proper drive in which to save their completed assignment.
3. Students will identify unique characteristics of the Alaskan Husky.

**Method of assessment for learning:**

1. Is the assignment completed and saved on the proper drive?
2. Have the students selected the correct answers for the questions?
3. Are students able to use the Windows environment to work with two pages at the same time?

**Procedural Activities – All procedures may be demonstrated on a Smart Board before students start the lesson, or work through the lesson simultaneously.**

- 1. Have students log on to the network.**
- 2. Have students open the Word document titled “Link to Alaskan Husky.” This is the WWW page they will need to find the answers. Have students click on the hyperlink.**
- 3. Have students open the Word document titled “Alaskan Husky Question Page.” They now have 2 Word Documents open and 1 WWW page. Every page can be minimized by clicking on the minus symbol in the upper right corner of the page. It will then appear at the bottom of the screen in the Task Bar and can be maximized by clicking on the particular page.**
- 4. After reading a question, students will go to the WWW page, copy the answer, return to the question page and paste the answer.**
- 5. Students will need to go back and forth between the question page and the WWW page until they have completed all the questions.**
- 6. Have students save their work on the proper drive so that the teacher can retrieve it for examination and grading.**
- 7. If a secure drive is not available, teacher may copy the assignments to a flash drive or disk immediately after the class is completed.**
- 8. Students who complete the questions may copy an image of a Husky from Google Images and pick a name for their Husky.**

**Materials Students Need: All work may be completed and saved on network drives. No printing is necessary.**

**Technology Utilized to Enhance Learning:**

**LCD Projector**

**Smart Board**

**Network Drives**

**Other Information:**

**Network capabilities may vary from school to school. Check with your technology coordinator for more specific instructions. If your computers are networked together, many trees can be saved by using available drives instead of printing out assignments. Also, it is much easier to carry a flash drive of assignments in your pocket than a tote bag full of papers.**

**Modifications for Special Learners/ Enrichment Opportunities:**

**Special learners can cut and paste information of their choosing onto a blank Word Document instead of answering specific questions.**

**Enrichment activities may include additional questions or searching for additional sites about Alaskan Huskies.**

# Alaskan Husky

Name:

Grade:

**Directions:** Answer the questions on the first page by going to the internet site that is listed below.

1. Cut and paste your answers below the questions. No typing is necessary. **All** the answers are found at the internet site listed below.
2. On a separate Word Document page that you will open, paste a picture from Google Images of the husky you would like to adopt. Don't forget to name your dog.
3. Save your documents on your own drive in order to protect them.

<http://www.dogbreedinfo.com/alaskanhusky.htm>

## Questions

1. Alaskan Huskies are primarily bred for what reason?
2. What is the temperament of the Alaskan Husky?
3. What type of climate are they best suited for?
4. What is a huskies coat like?
5. How much exercise do they need?

**Making Electricity from the Sun**  
**Solar Power**  
**Can they use it in Alaska?**

**Developed by: Herb Brambley**

**Discipline / Subject: Environmental Education/Science/Geography**

**Topic: Solar Electricity**

**Grade Level: 4<sup>th</sup> – 12<sup>th</sup>**

**Resources / References / Materials Teacher Needs:**  
Solar Panel available from [www.harborfreight.com](http://www.harborfreight.com)  
Volt Meter  
Output Data Chart

**Lesson Summary:**

**Students will go to several locations and use a volt meter to measure the electrical output of a solar panel. Information recorded on a chart will be used to determine the best location for setting up an array of solar panels to generate electricity. Further research on the Internet will reveal the average hours of sunlight a day for particular locations.**

**Standard's Addressed: (Local, State, or National)**

1. PA EE 4.2 Renewable and Nonrenewable Energy
2. PA EE 4.8 Analyze the relationship between natural resources and sustaining our society.
3. USNGS 18 How to apply geography to plan for the future.

**Learning Objectives:**

1. Students will compare the electrical output of a solar panel in several locations.
2. Students will interpret data to determine the best location for producing electricity.
3. Students will use a map of the US from the internet to determine average hours of sunlight per day for a location.

**Method of assessment for learning**

1. Completion of data chart.
2. Conclusion drawn from interpretation of data.
3. Student's ability to demonstrate skill in using the internet.

**Procedural Activities**

1. Demonstrate how to use the voltmeter to measure output from the solar panel.
2. Visit several locations on school property. Some locations should be in direct sunlight. Other locations should be shaded to varying degrees.
3. Students record voltage output on the data chart.
4. Conclusions are drawn by the students based on their data as to which location is the best for production of solar electricity.
5. Students visit Internet sites to find average sunlight hours per day for specific locations in the United States.  
[http://www.solarseller.com/solar\\_insolation\\_maps\\_and\\_chart .htm](http://www.solarseller.com/solar_insolation_maps_and_chart.htm)
6. Make comparisons between locations in Alaska and your home state.

**Materials Students Need:**

Pencil  
Solar Panel  
Volt Meter  
Data Chart

**Technology Utilized to Enhance Learning:**

Computers with internet access  
Solar Panel  
Volt Meter

**Other Information:**

Some interesting research can be done on the internet concerning hours of daylight and electricity generating potential. I discovered that Anchorage, Alaska actually receives more sunlight in a year's time than Pittsburgh, Pennsylvania!!

Visit the site listed below for special alternative energy considerations in Alaska.

<http://www.absak.com/library/alternative-renewable-energy>

**Modifications for Special Learners/ Enrichment Opportunities:**

The solar panel is a low voltage, low amperage solar panel with no risk of shock. Special learners can be shown how to measure the energy stored in a battery first, then go to the solar panel and demonstrate before allowing them to measure the output.

Enrichment opportunities include researching where and how solar energy is being used in Alaska. Solar car kits are available on line. The particular solar panel I have included information on comes with a light. Students can experiment with determining how many hours they can get out of one days charge of the batteries. Is there a difference between cloudy days and sunny days?

# Solar Panel Data Chart

Location	Time of Day	Output in Volts	Describe Location-(open field, woods)
1			
2			
3			
4			
5			
6			
7			
8			

## **Wilderness Survival Basic Needs**

**Developed by: Herb Brambley**

**Discipline / Subject: Environmental Education/Social Studies**

**Topic: Wilderness Survival**

**Grade Level: 4<sup>th</sup> – 8<sup>th</sup>**

**Resources / References / Materials Teacher Needs:**

**Computers with internet access**

**Smart Board or Movie Screen**

**More Iditarod Classics by Lew Freedman**

**Debris to build a shelter.**

**The following site has an example of a debris shelter:**

**<http://www.wilderness-survival-skills.com/outdoorsurvivalshelter.html>**

**Lesson Summary: Students will learn the basic human needs and relate them to wilderness survival skills. One of these needs being shelter, the students will construct a debris shelter for protection from the elements out of available resources. Students will read stories of survival along the Iditarod Trail and relate them to basic needs. Students research types of shelters used in Arctic and Subarctic regions.**

**Standard's Addressed: (Local, State, or National)**

1. PA EE 4.8A Explain how people use natural resources in their environment.
2. PA EE 4.8B
  - Describe how natural resources are used for survival.
  - Explain how climate influences people's lives.
3. NCSS 3 People, Places, and Environments

<p><b>Learning Objectives:</b></p> <ol style="list-style-type: none"> <li>1. Students will articulate the hierarchy of basic needs for survival.</li> <li>2. Students will construct a basic shelter out of available resources in a natural setting, or as a model.</li> </ol>	<p><b>Method of assessment for learning</b></p> <ol style="list-style-type: none"> <li>1. Students complete a list of survival priorities for a survival situation.</li> <li>2. Teacher observations of student participation.</li> </ol>
<p><b>Procedural Activities</b></p> <ol style="list-style-type: none"> <li>1. Lead off with a discussion of basic human needs.</li> <li>2. Relate basic human needs to hierarchy of survival priorities. <a href="http://www.geocities.com/Yosemite/Falls/9200/survival_priorities.html">http://www.geocities.com/Yosemite/Falls/9200/survival_priorities.html</a></li> <li>3. List resources that are available in a natural setting at your location.</li> <li>4. View instructions for building a debris shelter. <a href="http://www.wilderness-survival-skills.com/outdoorsurvivalshelter.html">http://www.wilderness-survival-skills.com/outdoorsurvivalshelter.html</a></li> <li>5. Have students build shelter.</li> <li>6. Discuss why shelter is one of the first priorities for survival.</li> <li>7. Relate shelter building activity to the Iditarod and Arctic Conditions. If conditions warranted, where would a musher get shelter along the trail?</li> <li>8. Read stories of survival from <u>More Iditarod Classics</u> by Lew Freedman. Page 89 “Bob Ernise”</li> </ol>	
<p><b>Materials Students Need:</b></p> <p>Small branches Dirt Leaves Moss</p>	
<p><b>Technology Utilized to Enhance Learning:</b></p> <p>Computer with internet access. Smart Board</p>	
<p><b>Other Information:</b></p> <p>The shelter building activity can be completed by having each student build a model instead of building a full size shelter.</p>	
<p><b>Modifications for Special Learners/ Enrichment Opportunities:</b></p> <p>Special learners may need help breaking sticks to the correct size.</p> <p>For enrichment, students may research emergency shelters built from other kinds of materials.</p>	

## **The Reason for the Seasons**

Why are Alaska winters so long?

**Developed by: Herb Brambley**

**Discipline / Subject: Science/Environmental Education**

**Topic: The tilt of the earth and how it affects the amount of energy the earth receives from the sun in places like Alaska.**

**Grade Level: 2<sup>nd</sup>-6<sup>th</sup>**

**Resources / References / Materials Teacher Needs:**

**Computer with internet access.**

**Flashlight**

**Blow up globe**

**Smart Board**

**Lesson Summary: Students learn about the solar system, orbit of the earth around the sun, 23 ½ degree tilt of the earth, and that the sun provides light and heat energy to the earth that warms the earth and gives it light.**

**Standard's Addressed: PA State Standards for Science and Technology**

**3.4.4.D Describe the composition and structure of the universe and the earth's place in it. Explain and illustrate the causes of seasonal change.**

**3.5.4.C Know basic weather elements. Explain how the different seasons effect plants, animals, food availability and daily human life.**

**Academic Standards for Environment and Ecology**

**4.8.4.B Know that environmental conditions influence where and how people live.**

**Learning Objectives:**

1. Students will explain why the poles receive less energy in their respective winters.
2. Students will describe and demonstrate the orbit of the earth around the sun.
3. Students will relate Alaska winters to the tilt of the earth and Alaska's location on the globe.

**Method of assessment for learning**

1. Students demonstrate the orbit and tilt of the earth around the sun using a globe and flashlight.
2. Students draw a diagram of the orbit of the earth around the sun and label the 4 seasons at the proper location.
3. Student journals.

**Procedural Activities**

1. As part of the discussion on why dog sled racing is so popular in Alaska, pose the question, why are the Alaska winters so cold and long? Discuss possibilities.
2. Demonstrate the orbit of the earth around the sun using a flashlight and globe. Make sure you have the tilt of the earth correct to demonstrate summer and winter. Allow students to demonstrate using the globe and flashlight.
3. Diagram the orbit on the board.
4. Visit the internet site to see the animation:  
<http://www.astro.illinois.edu/projects/data/Seasons/index.html>
5. Have students diagram the orbit and tilt of the earth in their journals.

**Materials Students Need:**

**Journals, pencils, globe, flashlight**

**Technology Utilized to Enhance Learning:**

**Smart board and LCD projector.  
Computer with internet access.**

**Other Information:**

**This is a difficult concept for some young students to grasp and may require explanation several times throughout the year.**

**Several learning styles are addressed in this lesson. Visual-by seeing the demonstration and internet site. Auditory-by hearing the explanation. Kinesthetic and Tactile-by using the flashlight and globe to demonstrate.**

**Modifications for Special Learners/ Enrichment Opportunities:**

**For enrichment, have the students write a story about how the seasons would be if the earth didn't have a 23 ½ degree tilt. What would happen to the plants and animals on earth? How would it affect amphibians, bears, migration of animals? How would the Iditarod be affected?**

**For Special Learners, allow them to work with the flashlight and globe. Stress that the earth receives energy from the sun in the form of heat and light. Write a story about what would happen to the earth if we didn't receive this energy.**

## Are We There Yet?

**Developed by: Herb Brambley**

**Discipline / Subject: Technology/Geography**

**Topic: Distance from where you are to a city in Alaska.**

**Grade Level: 5-12**

**Resources / References / Materials Teacher Needs:**  
**Computers with the program Google Earth, networked printer**

**Lesson Summary: Finding out how far it is to Alaska and how long it will take to drive, walk, or use public transportation.**

**Standard's Addressed: (Local, State, or National)**

1. NETS – 6.a understand and use technology systems
2. NETS – 3.d process data and report results
3. NSS-G.K-12.1 Understand how to use maps and other geographic representations, tools and technologies to acquire, process and report information from a spatial perspective.

**Learning Objectives:**

1. Students will select the Google Earth program from the list of programs and enter the name of the town where they live into the proper location.
2. Students will interpret the data from Google Earth and explain its meaning.

**Method of assessment for learning**

1. Authentic Assessment – Are students able to enter information into the computer to allow the program to process and return the correct information?
2. Students are to print out a copy of their results using the networked printer.

**Procedural Activities**

1. Students select the Google Earth program from the program menu.
2. City they are going from and city they are traveling to, gets entered into the appropriate box. Cities may be saved in my places by right clicking on the city and selecting "Save to my places."
3. Click on the "Directions Tab."
4. Click on the city and enter the city in the "to here" or "from here" box by clicking on the correct selection.
5. Driving directions will appear in the box. Scroll to the top of the box and click "Printable Version."
6. Underneath the city names is an options box that will allow the students to change their driving directions to walking directions and public transit directions. The amount of time required for each trip will be shown.
7. Students are to print directions on the networked printer.

**Materials Students Need: Computer linked to school network. Internet access.**

**Technology Utilized to Enhance Learning: Computer, Google Earth Program**

**Other Information: If students are just beginning to use programs where they have to enter information or click the proper selection, very specific, step by step directions are required. If a Smart Board is available, allowing the students to follow the teacher's examples on the Smart Board is also helpful.**

**Modifications for Special Learners/ Enrichment Opportunities:**

**Special Learners may require help entering and spelling names of cities. Once the cities are saved in "My Places," they will just have to click on them. Cities may also be entered for them before class time.**

**Enrichment Opportunities include recording latitude and longitude coordinates for "to here" and "from here" cities, and naming other cities along their route.**

**Why is Iditarod a Ghost Town?  
Village Location as it Relates to Natural Resources**

**Developed by: Herb Brambley**

**Discipline / Subject: Environmental Education/Social Studies**

**Topic: How does the environment and topography influence where people live?**

**Grade Level: 4-8**

**Resources / References / Materials Teacher Needs:**

**Soils Chart**

**Shovel**

**Compass**

**Topographic Map**

**Lesson Summary:**

**Students will go to several marked locations on the school grounds and determine the best location at which to build a village. Students need to evaluate each location for available water resource, southern exposure, type of soil, signs of wildlife, and ease of travel.**

**Standard's Addressed: (Local, State, or National)**

1. PA EE 4.8A – Describe how the development of civilization relates to the environment.
2. PA EE 4.8B – Explain how people use natural resources and how they sustain our society.
3. USNGS 15 – Environment and Society, How physical systems affect human systems.
4. USNGS 17 – How to Apply Geography to Interpret the Past

**Learning Objectives:**

1. Students will evaluate the available natural resources in order to determine the best location for human habitation.
2. Students will communicate their evaluation to the class in order to defend their conclusion.

**Method of assessment for learning**

1. Teacher Observations of student participation, ability to work with others, and communication skills.
2. Journal Entry – Prompts – Explain how to evaluate a location for human habitation. Explain why early settlers of our area built villages at specific locations. Do any of these villages exist today?

**Procedural Activities (Class may be divided into groups.)**

1. Choose a variety of locations on school property to be evaluated by the students. Assign each site a village name.
2. Before going out, have the students locate the school on the topo map. Observe any roads, trails, or waterways in close proximity. Discuss the relationship between these and existing towns or villages.
3. Visit several locations on school property. Have the students take note of water resources, trails or roads, and signs of wildlife for food.
4. Have the students determine if there is a clear view of the southern sky by using the compass. Southern exposure is important for crops and solar panels.
5. Use the soil chart to determine the type of soil and if it is suitable to raise crops.
6. Have the students record the information on the chart.
7. Groups are to debate among each other the best location for a settlement. Some locations may contain one resource but not another. Groups need to decide which resources are more important.
8. Groups then present their findings to the entire class along with their reasoning.
9. Relate the history of the town of Iditarod to this lesson with natural resources. Research the history of other Alaska towns.

[http://www.sitnews.us/JuneAllen/Iditarod/030405\\_iditarod.html](http://www.sitnews.us/JuneAllen/Iditarod/030405_iditarod.html)

**Materials Students Need:**

**Each group needs:**

1. A topographic map of the area. Available from USGS.
2. Soils chart and garden trowel.
3. Compass or GPS
4. Resource Chart

**Technology Utilized to Enhance Learning:**

**GPS**

**Journal Entries on the computer. Research on the Internet.**

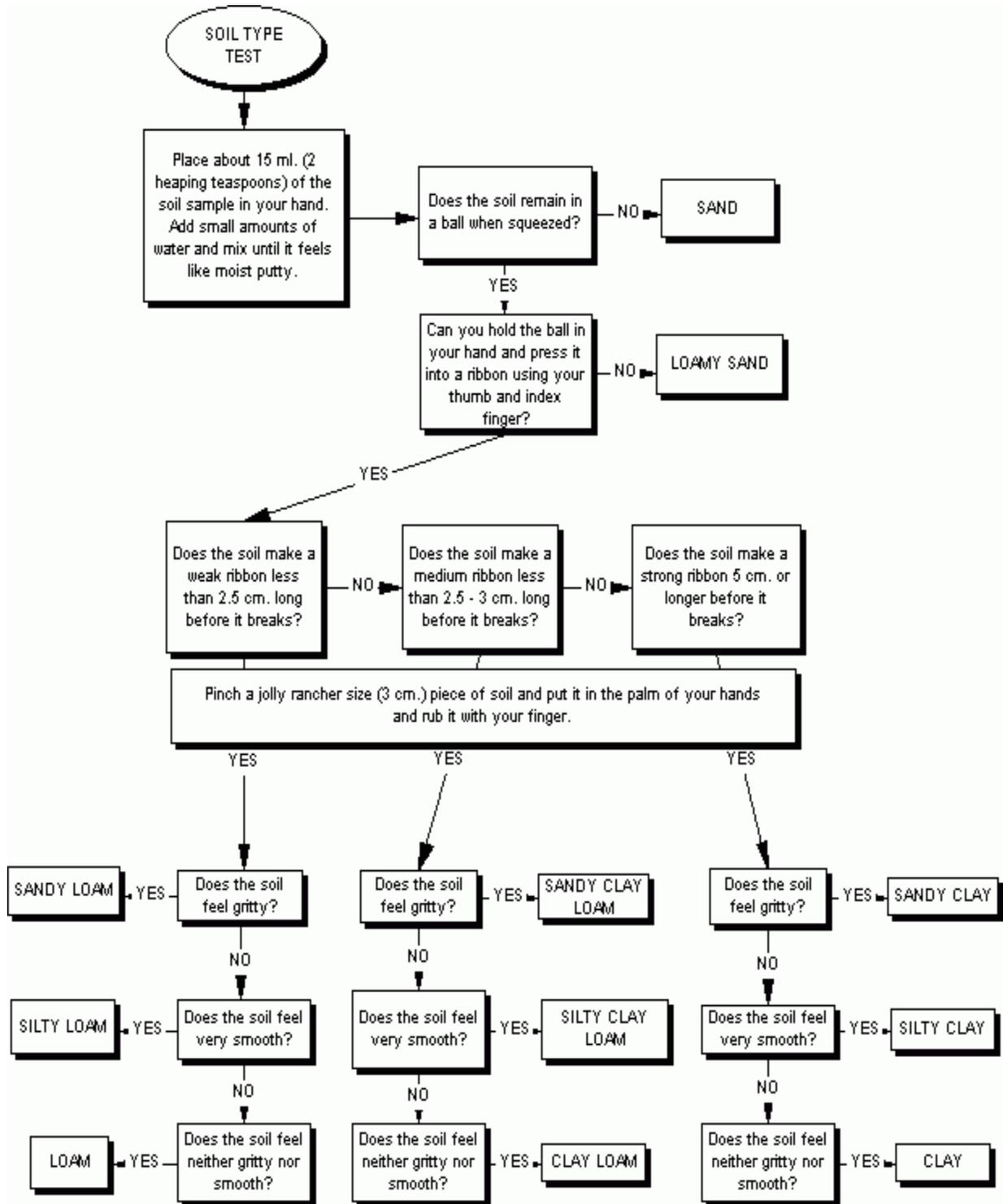
**Other Information:**

I have done this activity on our 140 acre school property with great success. I realize not every teacher has access to such a large area. But, this activity can be accomplished on a smaller scale. For example, a location can be chosen on the sunny side of the school and one on the shady side. A location can be chosen next to a water hydrant or next to a pathway in order to simulate a water resource and access to transportation opportunities.

**Modifications for Special Learners/ Enrichment Opportunities:**

This is a good activity for learners of all levels. Special learners may need more guidance but everyone loves to use the compass and do the soil evaluation. Advanced students can research the history of a local town or village and relate its existence to local natural resources. Many local towns in our area are along waterways or along well traveled roads that were once dirt paths.

# Soil Identification Chart



## The Cold Hard Facts

**Developed by:** Herb Brambley

**Discipline / Subject:** Technology, Science, Math

**Topic:** Using Excel to graph temperatures from 2 locations for comparison purposes.

**Grade Level:** 4<sup>th</sup> grade and above.

**Resources / References / Materials Teacher Needs:**

Computers for each student  
Networked printer  
Internet access

**Lesson Summary:** Students will research temperature for their local area and for a location in Alaska. Students will enter the data onto an Excel spread sheet. Students will use Excel to create a graph that compares the temperatures. *Students can use the temperature in Wasilla shown on the Iditarod Home Page during the race and the temperature at their school.*

**Standard's Addressed: (Local, State, or National)**

1. PA State Standard – Math – 2.6 Statistics and Data Analysis
2. PA State Standard – Technology – 3.6 Technology Education
3. PA State Standard – Science – 3.5 – Earth Science
4. NETS Standard – 6.a – Select and Use Applications Effectively

**Learning Objectives:**

1. Students will demonstrate the proper use of Excel to create a spread sheet and comparison chart.
2. Students analyze the data from the chart.

**Method of assessment for learning**

Authentic assessment – students will be assessed on their ability to create the spreadsheet and chart. Students will be assessed on the ability to interpret the data and draw conclusions from their chart.

**Procedural Activities**

1. Log onto the Internet and go to the site <http://countrystudies.us/united-states/weather/>
2. Record the normal daily temperature into spreadsheet for 2 cities. (refer to attached example)
3. Highlight the information.
4. Go to **Insert** on the menu bar. Come down to **Chart** on the dropdown menu.
5. Select the type of chart you prefer from the choices. I like everyone to do a column graph and print it out to hand in before they experiment with other types of charts.
6. Highlight the area you want to print including your chart.
7. Go to **File** on the menu bar and come down to print area and set print area.

**Materials Students Need:** Computer with Internet access and printing capabilities.

**Technology Utilized to Enhance Learning:** Computer, printer, Excel software, LCD projector and Smart Board to demonstrate procedure to class.

**Other Information:** This activity can be done with a variety of topics such as precipitation or length of days.

**Modifications for Special Learners/ Enrichment Opportunities:** The complexity of this activity can be simplified for lower level learners by limiting the number of months used on the spread sheet. This will decrease the amount of data that needs to be entered and simplify the level of interpretation required for assessment.

## Music to Mush By

**Date:** February 26, 2010

Here are the words to some mushing songs I use in my classroom. I've used some familiar tunes but have changed the words.

Nine Days on the Trail - Sung to the tune of - "Six Days on the Road"

Musher's Blues - Sung to the tune of - "Folsom Prison Blues"

One Chance - Sung to the tune of - "Paradise"

Ghost Huskies in the Sky - Sung to the tune of - "Ghost Riders in the Sky"

150 Huskies - Sung to the tune of - "A Hundred and Sixty Acres"

There are many benefits of using music in the classroom. Information that shows the beneficial effects of music on the brain can be found in the book *The Mozart Effect* by Don Campbell.

**Some of the hundreds of benefits are:**

- *Improves test scores*
- *Cuts learning time*
- *Calms hyperactive children and adults*
- *Reduces errors*
- *Improves creativity and clarity*
- *Heals the body faster*
- *Integrates both sides of the brain for more efficient learning*
- *Raises IQ scores 9 points (research done at University of California, Irvine)*

A study was conducted in 1996 on all students taking their SAT exam. Students who sang or played an instrument scored 51 points higher on the verbal portion of the test and 39 points higher on math.

\*Words to Music to Mush by follow this page.

# Nine Days on the Trail

(Sung to the tune of Six Days on the Road)

Well I pulled out of Willow,  
I'm running down Iditarod Trail.  
I got my Huskies wound up,  
And there running like they're carrying the mail.  
There's a checkpoint ahead all right,  
But I don't see a musher in sight.  
Nine days on the trail and we're pulling into Nome tonight.

My dogs are a little old,  
But that don't mean there slow.  
There's a fire in their heart,  
And they're pulling really hard through the snow.  
White Mountain's clean out of sight,  
If you think I'm happy you're right.  
Nine days on the trail and we're pulling into Nome tonight.

Well it seems like a month,  
Since I left old Willow behind.  
I could have given up,  
But I wanted to give it a try.  
I got their booties strapped on tight,  
And we're cruising on through the night.  
Nine days on the trail and we're pulling into Nome tonight.

# Musher's Blues

(Sung to the tune of Johnny Cash's Folsom Prison Blues)

**I hear them dogs a coming  
There coming round the bend  
And I ain't seen Vern Halter  
Since I don't know when  
I'm stuck in Anchorage  
And time keeps dragging on  
But those mushers keep on rolling  
In the Iditarod**

**When I was just a baby  
My mamma told me son  
Don't become a musher  
It ain't no fun  
But I bought a dog in Willow  
Ain't never had such fun  
When I'm mushing through Takotna  
I just let em run**

**I bet Lance Mackey's sitting  
In a fancy checkstop**

**He's probably eaten shrimp  
And drinking down some pop  
Well I know I had it coming  
I know I can't be first  
And when Lance gets to Nome  
He's going win that purse**

**If they free me from red lantern  
If the leaders spot was mine  
I guess I'd move it on  
A little farther down the line  
Far from Anchorage  
That's where I want to stay  
And I'd let them little Huskies  
Run my blues away**

## **One More Dog Sled Ride**

**When I was a child my Granddad would take me,  
For a husky pulled sled ride through mountains of dreams,  
He'd load up the sled with me and home cooken,  
And we'd travel all day along ridge tops and streams.**

### **Chorus**

**And Granddad won't ya take me for one more dog sled ride,  
Along the Blue Mountain by my home in the woods,  
There's a place where we'd stop to rest and remember,  
A place if we wanted to no longer could.**

**We'd travel together over snow covered mountains,  
Our huskies would pull through the trail on the run,  
The white fluffy snow on my rough would glisten,  
With the deep dark blue sky, and bright shining sun.**

**Then the people kept coming from every location,  
The progress they sought was a destructive one,  
They no longer knew solitudes goodness,  
They destroyed it all and nature did shun.**

**Then on one sad dark day the huskies quit howling,  
The knew that the sled had done its last run,  
The old sourdough would no longer harness,  
He'd be driven the team, beyond the bright sun.**

**If I had one wish, it's please won't you listen,  
We have but one chance, it's our only turn,  
We'll reap what we sow, the greed will destroy us,  
Earth's pleading cry, its lessons to learn.**

## **Ghost Huskies in the Sky**

1. An old musher went mushing one dark and snowy day,  
Upon a ridge he rested as he mushed along his way,  
When all at once a mighty pack of red eyed dogs he saw,  
A plowin through the snowy skies, and up White Mountain draw.

Chorus

Howl, Howl, Ghost Huskies in the sky.

2. Their tails were still on fire and their paws were made of steel,  
Their coats were black and shiney and their hot breath he could feel,  
A bolt of fear went through him as they thundered through the sky,  
For he saw the huskies comin hard, and he heard their mournful howl.
3. As the mushers loped on by him, he heard one call his name,  
If you want to save your soul, quit mushing on our range,  
Then musher change your ways today or with us you will glide,  
A tryin to catch the devils pack, across the endless skies.

## 150 Huskies

I've got a 150 huskies in the valley  
I've got 150 huskies that I love  
Got an old sled there  
That'll pull me where  
With the 150 Huskies that I love.

Up at dawn to greet the sun  
I've forgotten what a care or worry means  
Head for home when day is done  
With my little puppies yappen at my knees

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