Delaware Model Unit

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

Unit Title: Landforms and Climate
Designed by: Wendy Harrington
District: Cape Henlopen
Content Area: Social Studies
Grade Level(s): 3

Summary of Unit
In the earliest grades, students should be able to recognize that climate is not the same in all parts of the world. They should be able to distinguish (using precipitation and temperature variations) differences between tropical, temperate (mid-latitude) and high-latitude cold climates, and between areas with moisture deficits (deserts) and areas with moisture surpluses (where precipitation exceeds evaporation). A detailed understanding of climatic causation is not expected but students should be able to grasp the general concept that the sun heats the earth more in the equatorial regions and less towards the poles, and different climates are the result of the redistribution of energy. Furthermore, students should understand why the earth passes through periods of day and night and be aware of seasonal differences.

For landforms, students should recognize contrasts between continents and oceans. They need to be aware that mountains are formed by energy from the earth’s core and that running water (from precipitation) as well as ice produce rivers that carve valleys in the mountains and move eroded material down to coastal plains in an effort to smooth out the earth’s land surface.
Stage 1 – Desired Results
(What students will know, do, and understand)

Delaware Content Standards
- Include those addressed in Stage 3 and assessed in Stage 2.
  Geography Standard Two K-3a: Students will distinguish different types of climate and landforms and explain why they occur.

Big Idea(s)
- Transferable core concepts, principles, theories, and processes from the Content Standards.

Patterns

Unit Enduring Understanding(s)
- Full-sentence, important statements or generalizations that specify what students should understand from the Big Ideas (s) and/or Content Standards and that are transferable to new situations.

  The human response to the characteristics of a physical environment comes with consequences for both the human culture and the physical environment.

Unit Essential Questions(s)
- Open-ended questions designed to guide student inquiry and learning.

  - To what extent do differences in climate and landforms across the earth affect how and where people live?

Knowledge and Skills
- Needed to meet Content Standards addressed in Stage 3 and assessed in Stage 2.

  **Students will know...**
  - Basic landforms
  - Basic climate patterns and where they occur
  - Continents and oceans
  - How humans adapt to and alter the environment
  - Plates and that they are moving

  **Students will be able to...**
  - Use a world map to identify major climate regions
  - Identify the continents and oceans
  - Identify major landforms
Stage 2 – Assessment Evidence
(Evidence that will be collected to determine whether or not Desired Results are achieved)

Suggested Performance/Transfer Task(s)
- Performance/transfer tasks as evidence of student proficiency

An effective assessment for ALL students should be designed to include:
- Complex, real-world, authentic applications.
- Assessment(s) for student understanding of the Stage 1 elements (Enduring Understandings, Essential Questions, Big Ideas) found in the Content Standards.
- Demonstration of high-level thinking with one or more facets of understanding (e.g., explain, interpret, apply, empathize, have perspective, self-knowledge).

Rubric(s)
- Scoring guide to evaluate performance/transfer tasks used as evidence of student proficiency.

An effective scoring guide should:
- Measure what is appropriate for the Content Standard that is assessed.
- Provide opportunities for differentiation of the performance/transfer tasks used as evidence of student proficiency.

Other Evidence
- Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations and supplements the evidence provided by the task).

Landform Quiz
Climate Matching Worksheet
Climate Quiz
Exit Ticket
Error Analysis
Cause and Effect Worksheet

Student Self-Assessment and Reflection
- Opportunities for self-monitoring learning (e.g., reflection journals, learning logs, pre- and post-tests, self-editing—based on ongoing formative assessments).
- Anticipation Guide
**Transfer Task**

- This transfer task and scoring guide should be reviewed with students prior to using the activities in the module. Students should do the assessment after the activities have been.

**Essential Question:**

- How do differences in climate and landforms across the earth affect how and where people live?

<table>
<thead>
<tr>
<th>Prior Knowledge</th>
<th>Now that you have learned about different types of landforms and climates you are ready to use what you know for a new problem.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem</strong></td>
<td>The travel club wants you to present information about different landforms around the world. You are the geographer in charge of this task.</td>
</tr>
<tr>
<td><strong>Role/Perspective</strong></td>
<td>Choose one place in the world with an exciting landform. In a presentation, display the landform and identify its characteristics.</td>
</tr>
</tbody>
</table>
| **Product/Performance** | Your landform should include:  
  - A picture and the name of the place  
  - Description of the landform  
  - Location of landform in the world – include location on a map  
  - Describe the climate region of that place  
At the end:  
  - Explain why you would want to live there based on the climate and landforms.  
  - What type of housing would you have, clothes would you wear, and what activities could you do in this place? |
Rubric
Points for Presentation are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Score of 1</th>
<th>Score of 2</th>
<th>Score of 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landforms</td>
<td>Weak description of landform with incorrect or missing picture or map.</td>
<td>Description of landform including a picture and a map of the location.</td>
<td>Full description of landform including a picture and a map of the location.</td>
</tr>
<tr>
<td>Climate</td>
<td>Accurate identification of climate region with missing or incorrect description of climate characteristics.</td>
<td>Accurate identification of climate region with weak description of climate characteristics.</td>
<td>Accurate identification of climate region with full description of climate characteristics.</td>
</tr>
<tr>
<td>Culture</td>
<td>Weak description of housing, clothing, and activities based on climate and landform.</td>
<td>Description of housing, clothing, and activities based on climate and landform.</td>
<td>Elaborate description of housing, clothing, and activities based on climate and landform.</td>
</tr>
</tbody>
</table>

Total Points = 9
9 & 8 = Above the Standard
7 & 6 = Meets the Standard
5 & below = Below the Standard

Differentiation: If students have a hard time choosing a landform, you could give them choices for places in the world with exciting landforms
- Nile River, Africa (river)
- Mount St. Helens, United States (volcano)
- Iceland (island)
- Rhine Valley, Germany (valley)
- Kings Canyon, Australia (canyon)
- Calabria, Italy (peninsula)
- Wallachian Plain, Romania (plain)
- Mojave Desert, United States (desert)
- Deccan Plateau, India (plateau)
- Mount Fuji, Japan (volcano)
- Argentino Lake, Argentina (lake)
- Mount Olympus, Greece (mountain)

Creativity Ideas:
- Class book
- Power Point Presentation
- Podcast
- Poster
- Brochure
- Slideshow
### Brainstorming Page

**Choose a landform:** mountain, river, canyon, peninsula, valley, plateau, desert, plain, island, volcano, lake

<table>
<thead>
<tr>
<th>Picture</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Landform Name</td>
<td></td>
</tr>
<tr>
<td>Location of Landform in the world</td>
<td></td>
</tr>
<tr>
<td>Map with landform location identified</td>
<td></td>
</tr>
<tr>
<td>Description of Landform</td>
<td></td>
</tr>
<tr>
<td>Climate Region in which the landform is located</td>
<td></td>
</tr>
<tr>
<td>Description of Climate Region</td>
<td></td>
</tr>
<tr>
<td>Housing – description</td>
<td></td>
</tr>
<tr>
<td>Clothing – types for all seasons</td>
<td></td>
</tr>
<tr>
<td>Activities you could do at this place (at least 3)</td>
<td></td>
</tr>
</tbody>
</table>
Key Learning Events Needed to Achieve Unit Goals

- Instructional activities and learning experiences needed to align with Stage 1 and Stage 2 expectations.

Include these instructional elements when designing an effective and engaging learning plan for ALL students:

- Align with expectations of Stage 1 and Stage 2.
- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding.
- Include a wide range of research-based, effective, and engaging strategies.
- Differentiate and personalize content, process, and product for diverse learners.
- Provide ongoing opportunities for self-monitoring and self-evaluation.

Lesson One: Landforms

- How do differences in landforms across the earth affect how and where people live?

Background

Students should recognize contrasts between continents and oceans. They need to be aware that mountains are formed by energy from the earth’s core and that running water (from precipitation) as well as ice produce rivers that carve valleys in the mountains and move eroded material down to coastal plains in an effort to smooth out the earth’s land surface.

Delaware Social Studies Standards
Integrated in the Instructional Strategies

Instructional Strategies

Strategy 1: Gathering Information (Continents and Oceans)

Distribute a copy of the Anticipation Guide to each student. Anticipation guides help students generate prior knowledge at the beginning of new units. Both teachers and students can understand the misconceptions that the students have about the upcoming content. Read the statements to the students and have them complete the first column only. This guide will be distributed again at the end of lesson one and at the end of the unit.

Categorizing Activity – You will need globes, atlases, or world maps to complete this activity. Distribute a copy of the Categorizing Activity to each student. (NOTE: This worksheet can be used as a guide, you can do this as a whole class activity writing the words from the word bank on index cards or as a small group activity.) In this activity, students are categorizing the continents and oceans. At the end, students write their own definitions for each word “continent” and “ocean.”

Begin a word wall – post the words continent and ocean

Print a world map for each student [http://www.eduplace.com/ss/maps/pdf/world_cont.pdf](http://www.eduplace.com/ss/maps/pdf/world_cont.pdf)
Using world maps, atlases, or globes as resources, have students record the name of each continent and ocean on their worksheet.

To learn about the different continents (map, music, people, land, and animals) visit http://www.cfschools.net/schools/veterans/218/index.html

**Check for Understanding**
- What is the difference between a continent and an ocean? Give an example of each.

**Rubric**
2 – This response gives an accurate explanation and an example of each.
1 – This response gives an accurate explanation with inaccurate or no examples.

**Strategy 2: Gathering Information** (Landforms)

Read the poem as a class by Obie Leff
http://www.singtolearn.com/singtolearn/landforms.html

**Landforms** by Obie Leff

Landforms. Landforms.

Across the desert, so hot,
The Earth is dry, no water in sight.
Sand and rocks are everywhere.
Landforms.

Upon the mountain, so high,
Two-thousand feet above the sea.
Steeper and higher than a hill.
Landforms.

Down in the valley, so low.
Where water’s washed away the earth.
The fertile soil grows so much food.
Landforms.

Along the river, so long.
The water flows down to the sea.
Water for everyone to use.
Landforms.

Down to the ocean, so wide.
The water salty, cold, and deep.
Waves crashing on the sandy shore.
Landforms.

Landforms. Landforms.

**Booklet** – begin a personal booklet for each student. Each booklet will have a world map at the beginning and then pages that follow for each landform. The landforms that we will introduce will be volcano, valley, river, island, peninsula, mountain, canyon, desert, sea,
lake and plain. Each landform will have its own page with the following information: landform name, a picture of the landform, description of the landform, and a location on earth with that type of landform. Students will also be mapping that location on the world map at the front of their booklet. You will need world atlases to complete this activity or you could also use Google Earth.

Print the physical world map for each student and 11 copies of the Landform worksheet. Create a booklet with the set of worksheets. Physical world map: [http://www.eduplace.com/ss/maps/pdf/world_phys.pdf](http://www.eduplace.com/ss/maps/pdf/world_phys.pdf)

Write the name of the landform in the top box. Share a picture, read a book, or show a website of the landform – students draw the picture in the first box. Write a description of that landform and then write a location where that landform can be found on earth. See chart below for examples. Leave the Interesting Fact box empty until later.

Turn to the world map at the front of the booklet and locate the place where the landform is found. You can use an atlas or google earth to find its location.

For the tactile learner, students can create the landform at their desk. You can use play dough, shaving cream, or make your own salt dough (recipe in the resource section). Be sure to store the dough in baggies to keep from drying out.

After each landform is introduced and reviewed, add the landform name and a picture to your word wall.

NOTE: There are resources for each type of landform listed in the Resources Section of the unit.

<table>
<thead>
<tr>
<th>Landform</th>
<th>Description</th>
<th>Location on Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volcano</td>
<td>A break in the Earth’s surface through which melted rock flows</td>
<td>Cleveland Volcano, Alaska</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North America</td>
</tr>
<tr>
<td>Valley</td>
<td>The low land between mountains and hills</td>
<td>Death Valley</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North America</td>
</tr>
<tr>
<td>River</td>
<td>Large stream of fresh water that flows to a lake or an ocean</td>
<td>Amazon River</td>
</tr>
<tr>
<td>Island</td>
<td>Land surrounded by water</td>
<td>Galapagos Islands</td>
</tr>
<tr>
<td>Peninsula</td>
<td>Long area of land with water on 3 sides</td>
<td>Delmarva Peninsula</td>
</tr>
<tr>
<td>Mountain Range</td>
<td>A landform that rises very high above the surrounding land</td>
<td>Himalayan Mountain Range</td>
</tr>
<tr>
<td>Canyon</td>
<td>Long narrow valley with steep sides</td>
<td>Grand Canyon</td>
</tr>
<tr>
<td>Desert</td>
<td>A region that doesn’t receive much precipitation</td>
<td>Sahara Desert</td>
</tr>
<tr>
<td>Sea</td>
<td>A large body of salt water</td>
<td>Mediterranean Sea</td>
</tr>
<tr>
<td>Lake</td>
<td>A body of water surrounded on all sides by land</td>
<td>Great Lakes</td>
</tr>
<tr>
<td>Plain</td>
<td>Treeless area of broad, flat land</td>
<td>Great Plains</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North America</td>
</tr>
</tbody>
</table>
Check for Understanding
  • Landform Quiz

Strategy 3: Extending and Refining (How the Earth Changes)

Think/Pair/Share - Hold up an orange and show a globe to the class. Ask the students “How is an orange like the earth?” Each individual student takes approximately one minute to think about an answer. The student then pairs up with another student and they discuss their answers. The whole class reports in partners what their answers are. Answers can be recorded on the board. The majority of the responses will probably be that they are both round or they are both shaped like a sphere.

Demonstration – Students will now learn another way an orange and the earth are similar. This activity can be done as a teacher demonstration or the teacher can give each child an orange to peel for themselves. Peel the orange so that there are many different pieces of the peel. Ask the students what they notice about the orange peel. (Students might say it is broken into a lot of pieces, the pieces fit together like a puzzle, the peel was on the outside and the rest of the orange is on the inside, etc…) Tell students that the earth is just like that orange. The outside of the earth is broken into many pieces called “plates” and they fit together like a giant puzzle and then the rest of the earth is on the inside.

Print a copy of a plate tectonic map for each child.
http://earthquake.usgs.gov/learn/kids/coloring/platemap.gif
http://2.bp.blogspot.com/_ypalM7eSBEQ/SdzT_ajylVI/AAAAAAAAbM/XNB1-z6lvKg/s1600-h/tectonic_map.jpg

Students color the continents green and the oceans blue. NOTE: Make sure students color lightly in order to see the plate boundaries. Once the map is colored, students will use scissors to cut along the plate boundaries. Students will then try to put the “puzzle” back together again. The map puzzle can be kept in plastic bags and revisited throughout the unit.

View different fault lines using Google Earth (free download). Some of the best ones are in the Atlantic Ocean (Mid-Atlantic Ridge), the Pacific Ocean near Asia (Marianas Trench), and in the middle of the Red Sea. You can also view pictures on line of the San Andreas Fault Line.
  • http://lacreekfreak.files.wordpress.com/2008/11/wsci_03_img0412-san-andreas-fault1.jpg
  • http://earthquake.usgs.gov/regional/nca/kap/
  • http://www.environmentalgraffiti.com/featured/san-andreas-fault-from-above/12603

Continuing on Google Earth, view the continent of Asia. On the side bar labeled “layers” – uncheck all the boxes, including borders. Now, you should see just the physical map of Asia and the Indian Ocean. Point out the Himalayan Mountain Range and have the students compare this location to their world puzzle. Ask the students if this is the location of where two plates meet. They should notice that it is. Tell students to take out their salt dough from the previous lessons. Students will be working with a partner for this activity. Each student should flatten their salt dough into the shape of a rectangle approximately 1 inch thick. Working with a partner, students place their rectangular “plates” side by side and push them together. Partners discuss what happens to their “plates” and then draw a diagram of what happened. Students should notice that the two pieces of dough have been pushed up. “What type of landform does this look like?” Explain that the Himalayan
Mountain Range was formed because two plates were being pushed together and that they are still growing higher each year. Add this interesting fact to the Landforms booklet.

**Think/Pair/Share** – “What do you think it would feel like if you were near a plate when it started to move? What do you think you might see if you were near a plate when it started to move?” Each individual student takes approximately 1 minute to think about an answer. The student then pairs up with another student and they discuss their answers. The whole class reports in partners.

**Read** a book or **watch** a video clip about Volcanoes or Earthquakes. See Resources for ideas.

From United Streaming
- A Closer Look at Space: Earth
- Junior Geologist: How Does Land Build Up?

Play the song The Face of the Earth. It is about the Earth and that it changes everyday. [http://www.kidsknowit.com/educational-songs/play-educational-song.php?song=The%20Face%20of%20the%20Earth](http://www.kidsknowit.com/educational-songs/play-educational-song.php?song=The%20Face%20of%20the%20Earth)

Erosion Lessons - [http://geologyonline.museum.state.il.us/tools/lessons/1.2/lesson.html](http://geologyonline.museum.state.il.us/tools/lessons/1.2/lesson.html)

Print a copy of the **recording sheet** for each student.

**Water Erosion** – For this activity, you will need 2 bars of soap (one bar for the experiment and one for comparison). Put the bar of soap on top of a sponge to keep it in place. Draw a picture of the soap on the recording sheet. Run water using a moderate flow on soap for at least 60 minutes. Draw a picture of the soap on the recording sheet after the 60 minutes.

- Watch a video clip or read a book from the Resources Section

**Ice Erosion** – For this activity, you will need ice cubes, sand, and a piece of clay or play dough. Rub the ice cube over clay – what happened? Draw a picture on the recording sheet. Add sand to the ice cube by letting the ice cube sit on a pile of sand for about 5-10 minutes. Rub the sandy ice cube over clay again, what did you notice? Draw a picture on the recording sheet.

- Watch a video clip or read a book from the Resources Section

Human Changes Lessons - **Categorization**

Give a set of **Human Change photos** to each group of students. Tell students to put them into groups, to categorize them. After students have them categorized, tell the students to give each group a label or title. Ask students:

- “Why did you give that category that label?”
- “Why did you put that picture in that group?”
- “What do these pictures have in common?”

Some categories could be roads, buildings, walking paths, pollution. If students put roads and paths together, you could ask them if they could be split into two different categories. This is not necessary, just another way to look at the pictures.
Each group will report to the class what labels they gave their photographs and why they chose that label.

Ask students, “What or who was responsible for changing the landforms in each of the pictures?” Students should report that people are responsible for the change.

**Check for Understanding**

**Cause and Effect Worksheet**

**Strategy 4: Application (Houses and Homes)**

Show pictures of Bangladesh during the monsoon season.

[http://www.idrc.ca/panasia/ev-9982-201-1-DO_TOPIC.html](http://www.idrc.ca/panasia/ev-9982-201-1-DO_TOPIC.html)

Students work in small groups to design a house that would be located in this region of the world. Encourage the students to think about the landforms in this region and the types of resources that are available to design their house. When houses are completed, take a walking tour of the students’ work. All students stand and walk slowly around the room, looking at each others design. Ask each group why they chose that design based on the landforms and the resources.

**Watch** the video called Easy Like Water (4:16) on Teacher Tube. This is a video of Bangladesh. Schools and homes are being destroyed by the flooding waters and an architect is designing floating schools for children.

**Think/Pair/Share** – “What type of activities would you and your family do if you lived here? Think about the landforms when brainstorming your ideas.” Each individual student takes approximately 1 minute to think about an answer. The student then pairs up with another student and they discuss their answers. The whole class reports in partners.

Show a picture of the Atlas Mountains in Morocco


Students work in small groups to design a house that would be located in this region of the world. Encourage the students to think about the landforms in this region and the types of resources that are available to design their house. When houses are completed, take a walking tour of the students’ work. All students stand and walk slowly around the room, looking at each others design. Ask each group why they chose that design based on the landforms and the resources.

Show pictures of the houses that are located in this region using the above website.

**Think/Pair/Share** – “What type of activities would you and your family do if you lived here? Think about the landforms when brainstorming your ideas.” Each individual student takes approximately 1 minute to think about an answer. The student then pairs up with another student and they discuss their answers. The whole class reports in partners.

Look at different pictures of houses from around the world by either reading a book from the resources section or visiting the websites provided. Point out the landforms and the types of materials that are used to build the houses.

**Check for Understanding**
Complete the second column of the Anticipation Guide.
Lesson Two: Climate

- How do differences in climate across the earth affect how and where people live?

Background

Students should be able to recognize that climate is not the same in all parts of the world. They should be able to distinguish differences between tropical, temperate and high-latitude cold climates, and between areas with moisture deficits and areas with moisture surpluses. A detailed understanding of climatic causation is not expected but students should be able to grasp the general concept that the sun heats the earth more in the equatorial regions and less towards the poles.

Delaware Social Studies Standards
Integrated in the Instructional Strategies

Instructional Strategies

Strategy 1: Gathering Information (Climate Regions)

As a lead into this lesson, show the power point presentation of different climate regions. The point of doing this is to get the students to try to figure out what the lesson will be about. Don’t tell them the word “climate” yet.

Students watch the power point without talking. After the power point is finished, students talk to their partner about what word was the common thought throughout the power point. Partners then report to the class what the word of the lesson is. Many of the students will say the word “weather.” This is perfect because it is a lead into the concept of climate. Climate is how hot or cold, wet or dry a place is over a long period of time. Add the word “climate” to the word wall.

Print the World Climate Map and the Climate Chart for each student. These copies can be back to back.

Deserts – Read a book or watch a video clip about Deserts. When finished, ask students to describe the common characteristics of a desert region based on the information they have just heard. (very dry, little precipitation, some are hot, some are cold, not many plants, prickly plants, nocturnal animals) Record these characteristics on the Climate Chart. Next, show a map of the desert climate regions around the world. Students will record these regions on their personal world climate map using the color yellow. Students will also color in the box beside the word Desert Region in the Map Key.

High-Altitude – Read a book or watch a video clip about High-Altitude Climates. When finished, ask students to describe the common characteristics of a high-altitude region based on the information they have just heard. (the higher you go up, the colder it gets, cold, snow topped mountains) Record these characteristics on the Climate Chart. Next, students record these regions on their personal world climate map using the color purple. Students will color the mountains on the map only and then color in the box beside the word High-Altitude Region in the Map Key.

Tropic – Read a book or watch a video clip about the Tropics. When finished, ask students to describe the common characteristics of a tropic region based on the information they have just heard. (hot, wet, lots of plants, green, steamy, muggy, lush) Record these
characteristics on the Climate Chart. Next, students record these regions on their personal world climate map using the color red. Students will be coloring around the equator between the Tropic of Cancer and the Tropic of Capricorn. Color in the box beside the word Tropic Region in the Map Key.

**Temperate** – Read a book or watch a video clip about the Temperate Region. When finished, ask students to describe the common characteristics of a tropic region based on the information they have just heard. (seasons – summer, fall, winter, spring; hot, cold, rainy, snowy, sunny, warm, cool, windy) Record these characteristics on the Climate Chart. Next, students record these regions on their personal world climate map using the color green. Students will be coloring between the Tropic of Cancer and the Arctic Circle and then between the Tropic of Capricorn and the Antarctic Circle. Color in the box beside the word Temperate Region in the Map Key.

**Polar** – Read a book or watch a video clip about the Polar Regions. When finished, ask students to describe the common characteristics of a polar region based on the information they have just heard. (cold, freezing, ice, snow, icebergs, chilly, white) Record these characteristics on the Climate Chart. Next, students record these regions on their personal world climate map using the color blue. Students will be above the Arctic Circle and below the Antarctic Circle. Color in the box beside the word Polar Region in the Map Key.

**Check for Understanding**
- Climate Matching worksheet
- Climate Quiz

**Check for Understanding – Exit Ticket**
- The closer you get to the equator the ____________ (hotter/colder) it gets.
- The closer you get to the poles the ____________ (hotter/colder) it gets.
- The higher you go up a mountain the ____________ (hotter/colder) it gets.

**Strategy 2: Extending and Refining (Pack a Bag)**

Explain to the students that they will be given a place to visit. Once they are given their place, they will need to locate it on a map, decide what climate region it is located in by using their climate map and then plan the clothes they will need to pack if they were to go there and what activities they could do once they were there.

**(NOTE: This activity can be done in small groups, partners, or individually. There is a worksheet labeled “My Vacation Trunk” that can be used or you can also use pizza boxes or folders to keep track of your items. Another variation of the activity would be for the students to cut out pictures from magazines instead of drawing pictures themselves.)**

**Model** your vacation trunk by choosing your hometown. Delaware is located in the Temperate Climate Region so we have 4 different seasons to pack for. You can choose to pack for all 4 seasons and plan activities for each or choose one season. Model first and then assign different places around the world to your students. Make sure all climate regions are included.

**Present** – When completed, students can present their vacation trunks to the class. As part of the presentation, students can locate their place on a world map, describe the climate in that region and then identify the clothes and activities they were planning on.
Places around the world to visit: (These are just some examples, you can choose your own if you would like.)

Polar:
New Siberian Islands, North of Russia (Asia)
Reykjavik, Iceland
Victoria Island, Canada (North America)
Anchorage, Alaska (North America)

Temperate: (NOTE: You may want to specify a season for the temperate region places)
Tokyo, Japan (Asia)
Falkland Islands (South America)
Rome, Italy (Europe)
Cape Town, South Africa (Africa)

Tropic:
Lake Victoria (Africa)
Casablanca, Morocco (Africa)
Puerto Rico, South of Florida (North America)
Bangkok, Thailand (Asia)

High-Altitude:
Salt Lake City, Utah (North America)
Chur, Switzerland (Europe)
Santiago, Chile (South America)
Paro, Bhutan (Asia)

Desert:
Gordon Downs, Australia
Al-Jawf, Saudia Arabia (Asia)
Araouane, Mali (Africa)
Las Vegas, Nevada (North America)

Check for Understanding
- Error Analysis

Strategy 3: Application (Human Interactions)

People build houses based on their needs. Many houses are built based on the climate in the region they live in and the resources they have available. Look at different houses around the world. Use a Venn Diagram to compare 2 types of houses. Locate each place on a world map. You can look through the different books and at different websites. Choose one of the houses and build with your partner or by yourself.

Watch this Slide Show of different houses around the world as an example of student work: http://www.slideworld.com/slideshow.aspx/Houses-Around-the-World-ppt-614471

Show the students different types of houses
- http://www.hgpho.to/wfest/house/house-e.html (Very good site)
• [http://www.shelterpub.com/wonderful_houses/wh-toc.html](http://www.shelterpub.com/wonderful_houses/wh-toc.html) (This is my favorite website)

**Check for Understanding**

- Anticipation Guide

**Resources and Teaching Tips**

- A variety of resources are included (texts, print, media, web links).
- Help in identifying and correcting student misunderstandings and weaknesses.


National Geographic World Atlas for Young Readers 0-7922-7341-9

[http://worldlandforms.com/](http://worldlandforms.com/) - this website shows a variety of landforms. It gives characteristics of the landform, a picture, and where it can be found.

Continents:

- [http://www.totally3rdgrade.com/continents.html](http://www.totally3rdgrade.com/continents.html) - continents song, worksheet, matching activity
- [http://continents.pppst.com/index.html](http://continents.pppst.com/index.html) - free power points about continents
- [http://www.playkidsgames.com/games/continentNames/default.htm](http://www.playkidsgames.com/games/continentNames/default.htm) - name the continents game
- [http://www.playkidsgames.com/games/continentNames/default.htm](http://www.playkidsgames.com/games/continentNames/default.htm) - game

Oceans:

- [http://www.totally3rdgrade.com/oceans.html](http://www.totally3rdgrade.com/oceans.html) - ocean song, worksheet, etc...
- [http://www.funtrivia.com/trivia-quiz/ForChildren/Oceans-for-Kids-67330.html](http://www.funtrivia.com/trivia-quiz/ForChildren/Oceans-for-Kids-67330.html) - ocean quiz
- [http://www.sciencekids.co.nz/sciencefacts/earth/oceans.html](http://www.sciencekids.co.nz/sciencefacts/earth/oceans.html) - Ocean facts
- A Journey into the Ocean by By Rebecca L. Johnson

Landforms:

- [http://www.totally3rdgrade.com/landforms.html](http://www.totally3rdgrade.com/landforms.html) - landform song, worksheet, etc...
- [http://www.singtolearn.com/singtolearn/landforms.html](http://www.singtolearn.com/singtolearn/landforms.html) - Landforms song by Obie Leff

- Landform by Mary Evans 1-58273-570

Volcano
• http://kids.discovery.com/games/pompeii/pompeii.html
• http://www.pbs.org/wnet/savageearth/animations/volcanoes/
• Magic School Bus Blows Its Top
• Volcanoes Mountains The Blow Their Tops by Nicholas Nirgiotis ISBN 0-590-02561-9 (Reading Level 2 – plate tectonics)
• Volcanoes and Earthquakes by Patricia Lauber ISBN 0-590-42592-7
• Volcanoes by Franklyn M. Branley 0-06-445059-7
• http://www.sciencekids.co.nz/sciencefacts/earth/volcano.html - Volcano Facts
• http://volcano.oregonstate.edu/education/models/index.html - 12 ways to make a model of a volcano

Valley
• http://science.nationalgeographic.com/science/earth/surface-of-the-earth/valleys-article/ - information and picture
• Unitedstreaming.com
  o Video – Landforms: Number One (Segment – Valleys 0:48)

River
• http://www.woodlands-junior.kent.sch.uk/Homework/egypt/nile.htm - Nile River
• http://www.sciencekids.co.nz/sciencefacts/earth/rivers.html - Facts about rivers
• A Journey into a River by By Rebecca L. Johnson
• Unitedstreaming.com
  o Video – Landforms: Number One (Segment – Bodies of Water 1:05)

Island
• http://library.thinkquest.org/5410/ - How the Hawaiian Islands were formed
• Unitedstreaming.com
  o Video – Landforms: Number One (Segment – Land Near Water 2:15)
  o Video – Seahouse: The Moving Island 5:00
  o Video – Geographically Speaking: A Learning Adventure of Geographical Terms (Segment – Islands, and How They Are Formed 0:47)

Peninsula
• Unitedstreaming.com
  o Video – Geographically Speaking: A Learning Adventure of Geographical Terms (Segment – Identifying Capes and Peninsulas 0:49)
  o Video – Geographical Features: Landforms (Segment – Land Near Water 3:05)
Mountain Range

- Life in the Mountains 1-58728-569-X
- [http://www.sciencekids.co.nz/sciencefacts/earth/highestmountainsbycontinent.html](http://www.sciencekids.co.nz/sciencefacts/earth/highestmountainsbycontinent.html) - Highest mountains on each continent
- [http://www.mountain.org/education/](http://www.mountain.org/education/) - Mountain information
- Unitedstreaming.com
  - Video – Geographical Features: Landforms (Segment – Mountains 3:03)
  - Video – Landforms: Number One (Segment – Mountains 2:46)
  - Video – Geography of the World: Europe: Land and Resources (Segment – Landforms 5:47)

Canyon

- Unitedstreaming.com
  - Video – Geographical Features: Landforms (Segment – Valleys and Canyons 2:15)
  - Video – Natural Phenomena: Spectacular Canyons 15:24

Desert

- Deserts by Lisa Benjamin ISBN 1-4007-3690-0
- The Desert is Their Home by Byrd Baylor
- A Walk in the Desert By Rebecca L. Johnson
- Desert Maps
  - [http://www.blueplanetbiomes.org/images/desert_location_map001.gif](http://www.blueplanetbiomes.org/images/desert_location_map001.gif)
- Unitedstreaming.com
  - Video – Geography for Everyone (Segment – Deserts 1:08)

Sea

- [http://www.worldatlas.com/aatlas/newart/locator/majorsea.htm](http://www.worldatlas.com/aatlas/newart/locator/majorsea.htm) - major seas of the world

Lake

- A Journey into a Lake by By Rebecca L. Johnson
- Unitedstreaming.com
  - Video – Landforms: Number One (Segment – Lakes 1:15)

Plain
- Unitedstreaming.com
  - Video – Landforms: Number One (Segment – Plains 1:05)

**Plate Tectonics**

- [http://www.answersincreation.org/curriculum/geology/geology_chapter_9.htm](http://www.answersincreation.org/curriculum/geology/geology_chapter_9.htm)
- [http://vulcan.wr.usgs.gov/Glossary/PlateTectonics/Maps/map_plate_tectonics_world.html](http://vulcan.wr.usgs.gov/Glossary/PlateTectonics/Maps/map_plate_tectonics_world.html)
- [http://www.nature.nps.gov/geology/usgsnps/pltec/scplseqai.html](http://www.nature.nps.gov/geology/usgsnps/pltec/scplseqai.html)
  - Unitedstreaming.com
    - Video – A First Look: Earth (Segment – Continental Drift 1:40)
    - Video – Junior Geologist: How Does the Land Build Up? (Segment – Plate Tectonics 2:37)

**Earthquakes**

- Unitedstreaming.com
  - Video – A First Look: Earth (Segment – Earthquakes 0:57)
  - Video – Junior Geologist: How Does the Land Build Up? (Segment – Earthquakes 1:29)

**Climates:**

- Weather Words and What They Mean by Gail Gibbons
- What Will the Weather Be Like Today? By Paul Rogers
- Weather and Climate by Barbara Taylor
- Weather and Climate 0-7534-5509-9

**Polar**

- Life in the Polar Lands by Monica Byles
- Antarctic Journal by Jennifer Owings Dewey
- Life in the Polar Regions by Melvin Berger
- Welcome to the Ice House by Jane Yolen
- North Pole, South Pole by Nancy Levinson 0-439-58745-X
• Life in the Polar Lands 1-58728-572-X
• Life in the Polar Regions by Melvin Berger 1-56784-235-6
• A Tale of Antarctica by Ulco Glimmerveen 0-590-43359-8
• Arctic Son by Jean Craighead George 0-590-81014-6
• Arctic Spring by Sue Vyner 0-670-84934-0
• A Walk in the Tundra by By Rebecca L. Johnson

Rain Forest
• Wonders of the Rain Forest by Janet Craig ISBN 0-8167-1764-8
• The Great Kapok Tree by Lynne Cherry
• Life in the Rain Forests by Lucy Baker
• At Home in the Rain Forest by Diane Willow
• Here is the Tropical Rain Forest by Madelein Dunphy
• Welcome to the Green House by Jane Yolen
• A North American Rainforest Scrapbook by Virginia Wright-Frierson 0-8027-7651-5
• Life in the Rain Forest 1-58728-573-8
• Tropical Rainforest 0-382-24869-4
• A Walk through a Rain Forest by David and Mark Jenike 0-531-15721-0
• The Rain Forest 0-590-47728-5
• Here is the Tropical Rain Forest by Maeleine Dunphy 1-56282-636-0
• A Walk in the Rain Forest by By Rebecca L. Johnson

Temperate
• Temperate Climates by Keith Lye
• Unitedstreaming.com
  • Video – Geography for Everyone (Segment – Temperate Zones 1:19)

Houses:
• Houses created by Gallimard Jeunesse and Jean-Pierre Verdet ISBN 0-590-38152-0
• Houses and Homes by Ann Morris ISBN 0-688-13578-1
• This is My House by Arthur Dorros ISBN 0-590-45302-5
• Homes in Hot Places by Alan James ISBN 0-8225-2132-6
• http://www.hgpho.to/wfest/house/house-e.html
• http://www.slideshare.net/RichardH/housing-around-the-world
Weathering and Erosion

- Weathering and Erosion by Christina Wilsdon 0-7367-1909-1
- The Usborne Introduction to Weather and Climate Change 0-439-68682-2
- Unitedstreaming.com
  - Video – Geography Basics: Landforms and Living Patterns (Segment – Erosion 2:29)
  - Video – A First Look: Earth (Segment – Mountains, Erosion, and Weathering 3:45)

Kids Discover Magazine

- Earth
- Rain Forests
- Antarctica
- Climate
- Volcanoes
- Deserts
- Lakes
- Forests
- Oceans
- Wetlands

Salt Dough Recipe:

2 cups flour
1 cup salt
½ cup water
1 teaspoon oil
Food Coloring if desired

Mix the salt and flour in a large bowl and then add the water and oil. Knead the mixture until it becomes smooth and elastic. Store in plastic bags. NOTE: I had to add a little more water to the recipe. Recipe makes about 8 golf ball size spheres.

Photos from Power Point and Human Change Photos

- http://www.freedigitalphotos.net/
- http://www.freephotos.com/
- http://www.freefoto.com
- http://www.morguefile.com
Differentiation

- Stage 2 and 3 allow students to demonstrate understanding with choices, options, and/or variety in the products and performances without compromising the expectations of the Content Standards.
- Instruction is varied to address differences in readiness, interest, and/or learning profiles.
- Accommodations and differentiation strategies are incorporated in the design of Stage 2 and 3.

Design Principles for Unit Development
At least one of the design principles below is embedded within unit design

- **International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures in order to provide cross-cultural communicative competence.

- **Universal Design for Learning** - the ability to provide multiple means of representation, expression, and engagement to give learners various ways to acquire and demonstrate knowledge.

- **21st Century Learning** – the ability to use skills, resources, and tools to meet the demands of the global community and tomorrow’s workplace. (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL, 2007)

(Briefly explain how design principle(s) are embedded within the unit design.)

Technology Integration
The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

- **8th Grade Technology Literacy** – the ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning in all subject areas and to acquire lifelong knowledge and skills in the 21st Century. (SETDA, 2003)

Content Connections
Content Standards integrated within instructional strategies