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Physical Geography [9th grade]

Meghan Harrington
Trinity University, mharrin1@trinity.edu

Kyle Anderson
Trinity University, kanders1@trinity.edu

UbD Template 2.0

Stage 1 – Desired Results

WG.22C use geographic terminology correctly

WG.3B describe the physical processes that affect the environments of regions, including weather, tectonic forces, erosion, and soil building processes

WG.3C examine the physical processes that affect the lithosphere, atmosphere, hydrosphere, and biosphere

WG.8B describe the interaction between humans and the physical environment and analyze the consequences of extreme weather and other natural disasters such as El Nino, floods, tsunamis, and volcanoes

WG.4B describe different landforms and the physical processes that cause

Transfer

Students will independently use their learning to…

Create a society that would exist in a region with predetermined physical characteristics. Students will use their knowledge of physical geography (specifically physical features, weather, and climate) to create a map that accurately represents the physical characteristics of their region, region X. They will then make inferences about how people might live/interact with the land in their hypothetical region, ultimately reflecting on the question *"How does the physical geography of a region limit or enhance a society?"*

Meaning

Understandings

Students will understand that….

Humans are influenced by their environment in a variety of ways

There is an ongoing and fluid relationship between the lithosphere, atmosphere, hydrosphere, and biosphere

Physical geography can enhance or limit the ability of societies to thrive

The environment is constantly being altered by external forces

Essential Questions

How does the physical world shape societies?

In what ways does the physical geography of a region limit or enhance a society?

Acquisition

Knowledge

Students will know…

Different landforms and the processes that have created them

- Tectonic forces
- Erosion
- Soil building processes

The difference between the hydrosphere, biosphere, lithosphere and atmosphere

Skills

Students will be able to…

Use an atlas to locate important physical features on a map

Analyze charts, graphs, and maps including:

- Climographs
- Maps of climate/biome zones
- Physical maps

Make inferences about the social and

their development WG.4A explain how elevation, latitude, wind systems, ocean currents, position on a continent, and mountain barriers influence temperature, precipitation, and distribution of climate regions WG.4C explain the influence of climate on the distribution of biomes in different regions	The causes and consequences of extreme weather events - El Nino - floods - tsunamis - volcanoes The factors that affect climate - latitude - elevation - wind systems - ocean currents - position on a continent - mountain barriers The distribution of climate regions and biomes throughout the world and their characteristics	cultural structures of societies by interpreting climographs, climate maps, and the presence of physical features Use map keys to locate different physical characteristics of the Earth such as climate zones and physical features. Create a climograph

Stage 2 – Evidence

CODE (M or T)	**Evaluative Criteria** (for rubric)	
M, T	*See rubric*	Performance Task(s) *Students will demonstrate meaning-making and transfer by…* Create a society that would exist in a region with predetermined physical characteristics. Students will use their knowledge of physical geography (specifically physical features, weather, and climate) to create a map that accurately represents the physical characteristics of their region, region X. They will then make inferences about how people might live/interact with the land in their hypothetical region, ultimately reflecting on the question *"How does the physical geography of a region limit or enhance a society?"* --- Other Evidence (e.g., formative) Sticky note activity Student worksheet Gallery walk monitoring Chalk talk Exit tickets

		Weather report Weather Worksheet Q&A section Climograph Factors of climate map Final project handout Peer evaluations Group Map Sticky note activity
Stage 3 – Learning Plan		
CODE (A, M, T)	Pre-Assessment *How will you check students' prior knowledge, skill levels, and potential misconceptions?* Class sticky note activity where students demonstrate their prior knowledge of physical geography	
	Learning Activities	Progress Monitoring (e.g., formative data)
A	**Day 1: Introduction to Physical Geography** Warm Up: "Where would you like to travel and why?" - Follow with discussion and note similarities Hook Activity: Agree/Disagree 1. A tsunami is more destructive than a tornado. 2. I would rather go skiing than go to the beach. 3. I would rather live in the rainforest than live in the desert 4. Volcanic eruptions are easier to predict than earthquakes 5. People often choose where to live based on the environment Pre-Test: S gets several sticky notes and writes down what they know about physical geography. After students cannot think of anything else they know, they will put their sticky notes on chart paper. Each class will have their own piece of chart paper.	Sticky note activity
A, M	**Day 2 & 3: Physical Features/Physical Processes that Shape the Earth** Students will be in cooperative learning groups of 4. Every student will get one physical feature with a description and fill out his or her worksheet (*Physical features part 1 and 2, natural formations worksheet*). Each student will then teach his or her group about the physical feature, and locate the feature on the group map. Students will then do a gallery walk to fill out the rest of their worksheets. Two students will stay at their table	Student worksheet

	and teach the information to the new group while the other two students rotate through each station. Once all rotations have been completed, groups will gather together once more and the two students who rotated through the stations will teach the two members who stayed behind. Once the gallery walk is finished, the teacher will discuss *external forces that shape the earth (PowerPoint)* and will help students connect these forces to the physical features they learned about.	Gallery walk monitoring
A, M	**Day 4: The 4 Spheres** Through direct instruction, the class will learn about and discuss how the 4 spheres contribute to physical geography (*4 Spheres PowerPoint*). To demonstrate their knowledge, students will share and broaden their understanding of the interactions between spheres and how they contribute to formation of the physical features through a chalk talk. Class will close with an exit ticket. Chalk talk questions: 1) How do the four spheres interact? Draw diagrams of their interaction. 2) How does their interaction affect our lives on a daily basis? 3) Where do we see this interaction happening? 4) Why are the 4 spheres important? Exit ticket: Of the 4 spheres, which do you think is most important and why?	Chalk talk Exit ticket
A, M	**Day 5: Extreme Weather** In groups of 3-4, students will learn about extreme weather through class presentations of a weather report. Each group will get one type of weather, and they will fill out a worksheet (*Weather Report*) to gather the necessary information. Every group will then prepare to give a 1-minute "weather report" to teach the other groups about their type of extreme weather. The students watching will take notes on their worksheet, and their will be a 2 minute question and answer section to ensure that every student got the correct information and understanding.	Weather report Worksheet Q&A section
	Day 6 & 7: Climographs and Climate Zones Students will take notes on the climographs, climate zones/regions, and the factors of weather (*Climate PowerPoint*). After discussing climographs and how to analyze and interpret them, student will create their own climographs using	

A, M	information provided by the teacher (guided practice before as a class will be helpful). Students will return to note taking on climate zones/regions and will end class with an exit ticket. Give students a diagram of an imaginary continent—have them glue this into their notebook. Students will learn about the factors of climate (*Climate PowerPoint*) and will take notes in their notebooks using the map provided.	Climograph Exit ticket Factors of climate Map
M, T	**Day 8 & 9 & 10: Transfer Task** Introduce the transfer activity. Students will work in groups of 4 and will randomly select one card from each category of physical characteristics (*Final Project characteristics*) These will be the characteristics of their hypothetical region. Give each student a copy of the *Final Project Instructions* and a piece of chart paper/poster to create their map. Students will have 1-2 days to complete their project. *(Rubric, peer evaluation)* Once projects are complete, groups will meet with the teacher to explain their project and demonstrate their understanding of the connection between physical geography and societies. Students will then revisit their pre-assessment from Day 1 (chart with sticky notes) and will correct incorrect information and add new information they learned.	Final project handout Peer evaluations Group Map Sticky note activity