

DIFFERENT CLIMATE REGIONS

Age Level: Grade 3

Subject(s) Area: Science

Materials Needed: technology with internet and word access, empty shoeboxes, scissors, glue, construction paper, tape, other creative materials needed to construct a diorama

Standards:

3-ESS2-2 Obtain and combine information to describe climates in different regions of the world

Objectives:

TLW identify different terms in relation to climates around the world. (Knowledge)

TLW discover that different regions of the world have different climates. (Understand)

TLW construct a diorama of one climate region. (Apply)

Learning Activities:

Technology: laptop, computer, or some type of internet accessible technology (Kahoot!, and research)

Required Vocabulary: region, climate, tropical, continental, tundra, polar

Opening Element: In a large group, have the students take out a laptop or computer and go to kahoot.com. Once everyone is on the website, tell the students that they will be taking a knowledge quiz to see if they know the different climates and climate regions. The quiz will not be graded. It is simply a measure of prior knowledge. Next, give the students the code and have them take the quiz. Review the answers to the quiz and introduce new vocabulary to the students. Then, have the students turn and talk to each other to discuss the definitions of the new vocabulary in their own words.

Instructional Methods:

Guided Practice Strategies: Introduce to the students that they will be doing a short research project on different climate regions. Review the different climate regions (Polar, temperate, arid, tropical, Mediterranean, and mountain) and their characteristics with the students. Next, split the students into groups of 3-4 using a grouping method such as picking craft sticks that have the student's names. Assign each group one of the six different climate regions and instruct the groups to use the computers to discover information about each climate region. The students can find climate type, where it occurs, temperatures, how people cope, seasonal changes, etc. Tell the students that they must compare information from different websites with each other in order to find the best information. Ex. The best way to go about this is to have one student look at one website, one look at another, and then compare and contrast their findings to choose the best one.

Independent Concrete Practice/Application: Once the students have completed their research, they must then create a diorama of their given climate region (ex. polar would have snow, cold temperatures, etc.). Students can also add animals that live in the climate region or other props for a more realistic description of the region. They will also be asked to type up a paragraph to represent their climate region and what they learned about it.

Differentiation: This lesson accommodates for different learners in a variety of ways. Auditory learners can learn through the climate region presentations and through group discussion and collaboration.

Visual learners can learn through the climate region presentations, information seen in research. Tactile/kinesthetic learners can learn through creating the diorama. If the projects are too hard for a learner, they will be encouraged to ask their group members for help and/or clarification about the different climate regions. They will also get a chance to learn about the regions through the presentations. If the projects are too easy for a learner, they will be asked to help their group understand the differences and similarities in the climate regions.

Reflective Questions: What does the climate region look like? What is the climate? How is the regions climate similar to the climate where you live? How is it different? What are the differences and similarities between two climate regions? (Ex. polar and tropical) What do you think would happen to animals that live in a polar climate if the temperature would warm up? Which climate region has a cold climate?

Wrap-Up: When the students finish creating their diorama, they will present it to the class. Here they will state their region, where it can be found, temperatures, animals, and any other interesting facts about their climate region. Students in the class will also be encouraged to ask questions to the presenters. Once the presentations are finished, the teacher will ask if there are any questions or comments and answer accordingly.

Assessment:

Formative- The students will be assessed on participation, how accurately their diorama depicts a climate region, and their presentation of their diorama. The students will also be assessed on their ability to distinguish different terms in relation to different climate regions.

Summative: At the end of learning, students will be assessed on their knowledge of the different climate regions (polar, tropical, temperate, etc.) and their ability to provide distinguishing characteristics of each region (ex. temperature, animals, etc.).

Reflection: