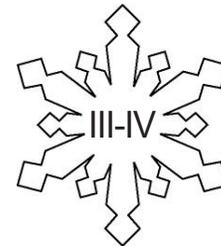


Earth's Systems Scavenger Hunt

Levels



Grades 5-8

Overview:

Students identify key information about Earth's systems by navigating the *Global Climate* DVD and searching for answers to systems-related questions.

Objectives:

The student will:

- interact with the *Global Climate* DVD;
- complete fill-in-the-blank and short-answer questions; and
- draw a Venn diagram related to Earth's systems.

Materials:

- *Global Climate* DVD
- STUDENT WORKSHEET: "Earth's Systems Scavenger Hunt"

Activity Procedure:

1. Distribute the *Global Climate* DVD and the STUDENT WORKSHEET: "Earth's Systems Scavenger Hunt." Ask students to complete the worksheet by navigating through the DVD.

Critical Thinking Activity: Venn Diagram: Draw a large Venn diagram, with two circles; label one circle natural and the other man-made. Ask students to name aerosols (desert dust, fire soot, sea salt, volcanic dust, black carbon, sulfur, etc.) and assign whether they are natural, man-made or both.

Answers:

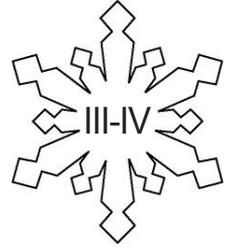
1. *Earth's Systems:*
 - a. includes the troposphere, where most of Earth's weather occurs
 - b. Earth's water including saltwater, freshwater, and clouds
 - c. Earth's ice, snow, and permafrost
 - d. all living things
 - e. Earth's solid surface, rocks, and soil
2. *Weather measures short-term changes, while climate measures long-term affects of weather.*
3.
 - a. Answers will vary but should list an example of weather, and correctly explain why the example demonstrates weather and not climate.
 - b. Answers will vary but should list an example of climate, and correctly explain why the example demonstrates climate and not weather.
4. *cirrus*
5. *"Great Ocean Conveyor Belt"*
6. *answers will vary but include any living organism*
7. *high, low*

Name: _____

Student Worksheet (page 1 of 2)

Earth's Systems Scavenger Hunt

Levels



Directions: Explore the “Earth’s Systems” section of the *Global Climate* DVD. Next, answer the following questions.

1. Match the name of each of Earth’s spheres with its description by drawing a line to connect them.

Earth’s Systems	Description
a. Atmosphere	Earth’s ice, snow, and permafrost
b. Hydrosphere	Earth’s solid surface, rocks, and soil
c. Cryosphere	Earth’s water including saltwater, freshwater, and clouds
d. Biosphere	includes the troposphere, where most of Earth’s weather occurs
e. Lithosphere	all living things

2. How is climate different than weather? _____

3. a. List one example of weather and explain how it demonstrates weather and not climate.

- b. List one example of climate and explain how it demonstrates climate and not weather.

4. _____ clouds let sunlight through to warm the ground.
5. The ocean moves heat around the globe in a pattern called the _____
_____.
6. Name three things in Earth’s biosphere. _____,
_____ and _____.
7. Fresh snow, glaciers, and sea ice have _____ albedos, while the ocean, dirt, and tundra have _____ albedos.