Overview:
During this activity, students will use the Global Climate DVD to help them learn about the hydrologic (water) cycle.

Objectives:
The student will use information technology skills to learn about the hydrologic cycle by interacting with the Global Climate DVD.

GLEs Addressed:

**Science**
- [5-8]SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.
- [6]SB3.1 The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by recognizing that most substances can exist as a solid, liquid, or gas depending on temperature.
- [7]SB3.1 The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by recognizing that most substances can exist as a solid, liquid, or gas depending on the motion of their particles.
- [6]SD1.2 The student demonstrates an understanding of geochemical cycles by identifying the physical properties of water within the stages of the water cycle.

Materials:
- Global Climate Change CD-ROM
- Computer
- STUDENT WORKSHEET: “Hydrologic Cycle Scavenger Hunt”

Activity Procedure:
Distribute the STUDENT WORKSHEET: “Hydrologic Cycle Scavenger Hunt” and ask students to research the answers to the worksheet questions by navigating the Global Climate DVD.

Answers to Student Worksheet:

1. True 6. liquid 11. transpiration
2. solid (ice), liquid, vapor 7. evaporation 12. sublimation
3. energy 8. melting 13. precipitation
4. vapor 9. freezing
5. solid 10. condensation
Hydrologic Cycle Scavenger Hunt
Student Worksheet

Directions: Find answers to the questions by navigating the Global Climate DVD.

1. True or False: Earth is the only planet in the solar system where water can exist in three phases at once.

2. What are the three phases of water? 1._____________________________  
   2._____________________________  
   3._____________________________

3. Fill in the blank: The amount of_____________________________ in water determines its phase.

4. In what phase do water molecules move fast and sometimes collide? ____________________________

5. In what phase do water molecules move slowly and line up? ____________________________

6. In what phase do water molecules move freely past each other at medium speed? ________________

7. What process takes place when the sun warms the surface of a large body of water, causing the water to become vapor? __________________________________________

8. What process takes place when ice becomes liquid water? _______________________________________

9. What process takes place when liquid water becomes ice? _______________________________________

10. What process takes place when water vapor molecules in the atmosphere stick to tiny particles floating in the air, and become a liquid? __________________________________________

11. What process takes place when water trapped underground is added to the atmosphere as vapor, released through the leaves of plants? __________________________________________

12. What process takes place when solid ice changes directly into water vapor? ______________________

13. What process takes place when cloud droplets become too large to float in the air, so they fall as rain or snow? ____________________________

Name: ______________________________________