

What Goes Up, Must Come Down!

Objective: Demonstrate the major processes of the water cycle: evaporation, condensation, and precipitation.

Materials: Hot plate, 2 pans (1 aluminum, 1 heat safe), water, ice cubes

Vocabulary: Evaporation, Condensation, Precipitation, Evapotranspiration, Transpiration, Run-off, water vapor, percolation.

Grades: 3-6

Activity:

1. *Evaporation* Pour some water into the heat safe pan and place onto the hot plate. Bring the water to a boil. The steam rising from the pan is evaporated water.
2. *Condensation* Put ice cubes in the aluminum pan and hold it over the steam rising from the boiling water. Soon, drops of water will form on the bottom of the aluminum pan. These drops are condensed water.
3. *Precipitation* As more condensed water accumulates on the bottom of the pan and the pan gets warmer, the drops will get larger. When they are heavy enough, the drops will fall back into the first pan. This is precipitation.

Questions

1. Discuss and define the following words with students:
Evaporation, Condensation and Precipitation.
Then discuss and define some new terms:
Evapotranspiration, Transpiration, Run-off, Water vapor, Percolation.
How do these words relate to what the students have just observed?
2. What happens to water when it evaporates from the surface of the ocean?
Where does it go?
3. Why do we say we are using the same water as the dinosaurs?

