

The Water Cycle Vocabulary List

The Water Cycle: The change and movement of the Earth's water from liquid to vapor to solid. The water cycle is solar powered.

Oceans: store most of the Earth's water. Over 70% of the Earth's surface is ocean; it contains 96.5% of the world's water supply.

Evaporation: occurs when the sun heats water up and it becomes vapor in the air.

Condensation is the opposite of evaporation; it occurs when air cools and the vapor collects into liquid form.

Precipitation: is condensation falling onto land in the form of rain, sleet, hail, snow, and mist. Only 10% of water evaporated falls as precipitation.

Sublimation: occurs when snow or ice (considered the solid form of water) changes directly into vapor (dry ice).

Desublimation: is the opposite of sublimation; it occurs when the vapor turns directly into solid ice or snow.

Evapotranspiration: occurs when water is discharged as vapor into the atmosphere as a result of evaporation from the soil and transpiration by plants. Transpiration is how water is carried through the plants from the roots. The stomata on the underside of leaves allows water to escape into the air. Factors that affect transpiration include temperature, humidity, wind, soil moisture, and type of plant.

Plant Uptake: is how much water the plant absorbs and uses.

Surface Runoff: is when precipitation travels over the soil surface to the nearest stream channel. When rain hits saturated or impervious ground, it will flow downhill. It is affected by topographic, geographic, and geologic factors.

Snowmelt runoff to streams: is when snow and ice melt into surface water and move across the soil surface into streams.

Stream flow: is the movement of water in a natural channel such as a river. The amount of water flowing in the stream is affected by the watershed's surface runoff, springs, and groundwater discharge.

Infiltration: is the downward movement of water from the land surface into the soil or porous rock. Ground water begins as precipitation. Once water infiltrates the soil it can move vertically and horizontally through the soil.

Groundwater Storage: is the water that exists for long periods below the Earth's surface.

Groundwater Discharge: is the movement of water out of the ground.

Spring: is an example of a groundwater discharge. It is usually formed when the side of a hill, a valley bottom, or other excavation intersects at or below the local water table, below which the substrate is saturated. It is most prevalent in limestone and dolomite, which fracture easily and can be dissolved by rainfall.

Freshwater Storage: includes wetlands, lakes, ponds, and large rivers that hold freshwater.

Water Storage in the Atmosphere Water is stored as vapor such as clouds and humidity. The atmosphere is full of water. It is the superhighway used to move water around the globe. However, it is a poor storage area holding only .001% of the Earth's water. An evaporated water molecule spends an average of 10 days in the atmosphere.