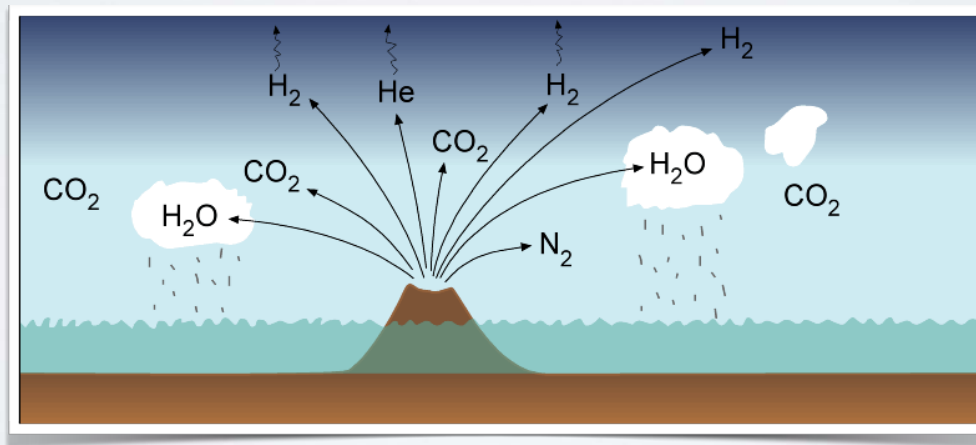


THE WATER CYCLE



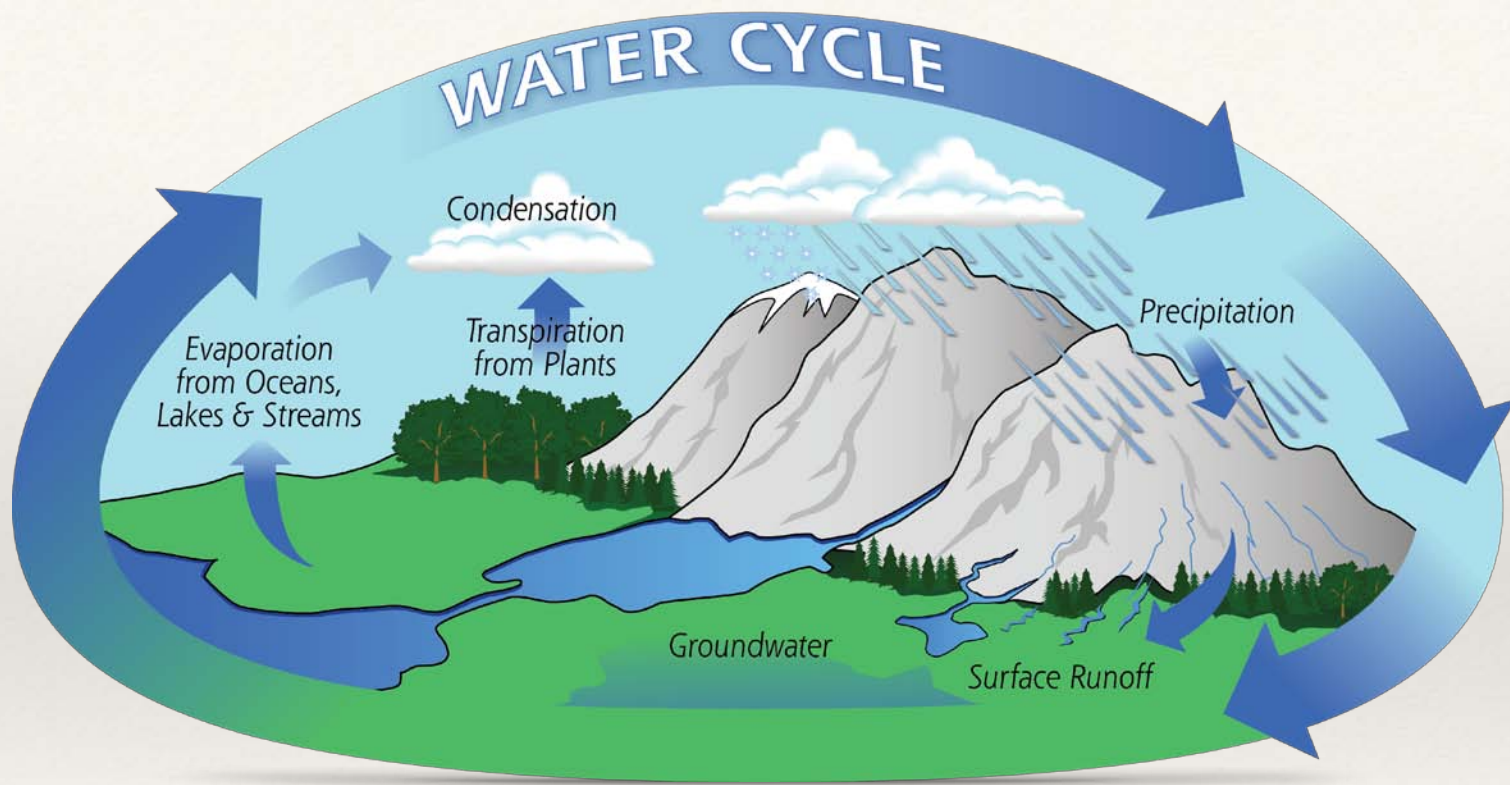
THE WATER CYCLE

- Ever since the outgassing of water vapor 4 billion years ago, Earth has been recycling its water supply
 - Earth's has not gained or lost water since



THE WATER CYCLE

- The Water Cycle - the model used to illustrate the movement and the phase changes of water at or near Earth's surface
 - The water cycle is fueled by solar energy [insolation] and gravity



The Water Cycle



The Water Cycle

THE WATER CYCLE

- Evaporation - when the Sun warms up liquid water and turns it into water vapor
- Condensation - when water vapor turns into liquid water



THE WATER CYCLE

- Transpiration - the process of water moving through a plant and changing to vapor before being released into the atmosphere



THE WATER CYCLE

- Precipitation - the product of the condensation that falls from the sky
 - Examples: rain, snow, sleet and hail

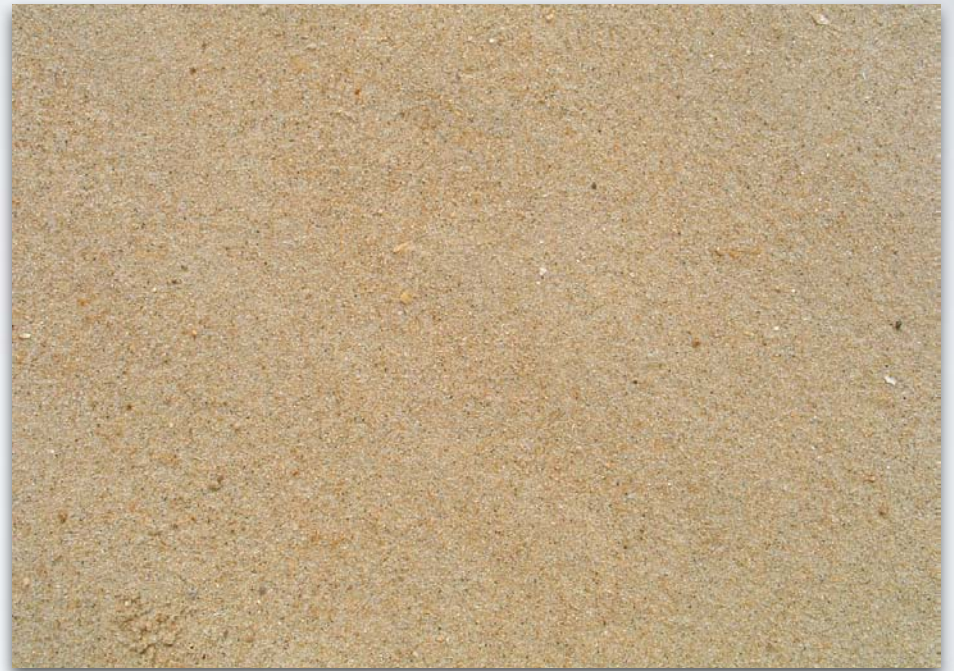


THE WATER CYCLE

- When precipitation falls it can:
 - Be stored on land surfaces as ice and snow
 - Infiltrate into the upper parts of the lithosphere
 - Flow over Earth's surface as runoff
 - Be evaporated or undergo transpiration

THE WATER CYCLE

- Infiltration - the process by which water enters a substance



THE WATER CYCLE

- Factors Affecting Infiltration:
 1. Slope of the Land - steeper slopes do not give time for water to infiltrate the ground



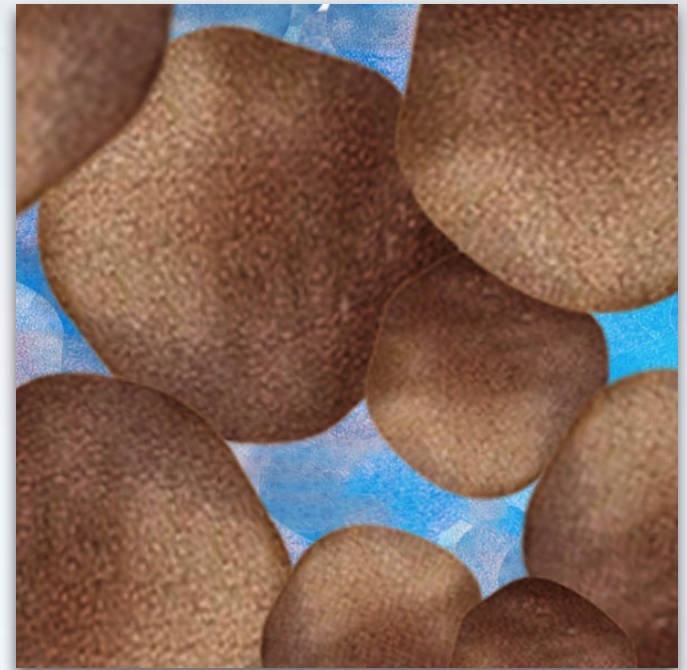
THE WATER CYCLE

- Factors Affecting Infiltration:
 2. Degree of Saturation - the amount of water already in the ground



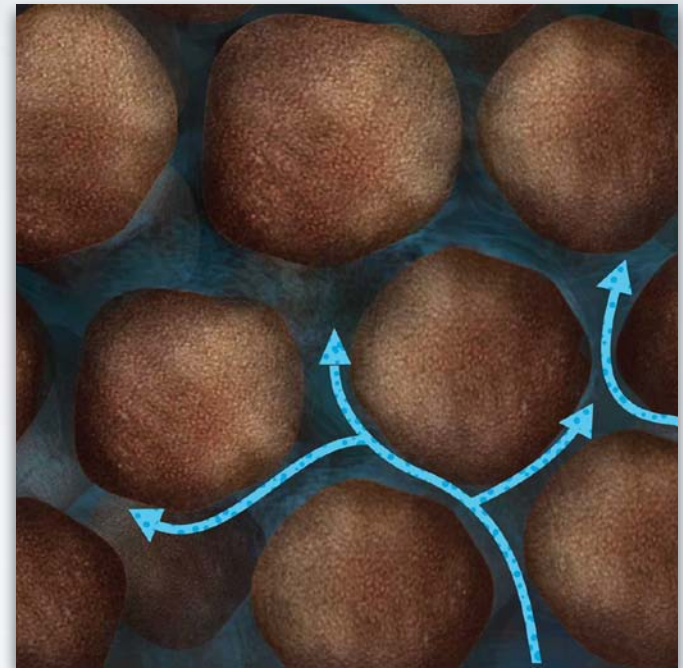
THE WATER CYCLE

- Factors Affecting Infiltration:
 3. Porosity - the percentage of open space [pores and cracks] in the ground



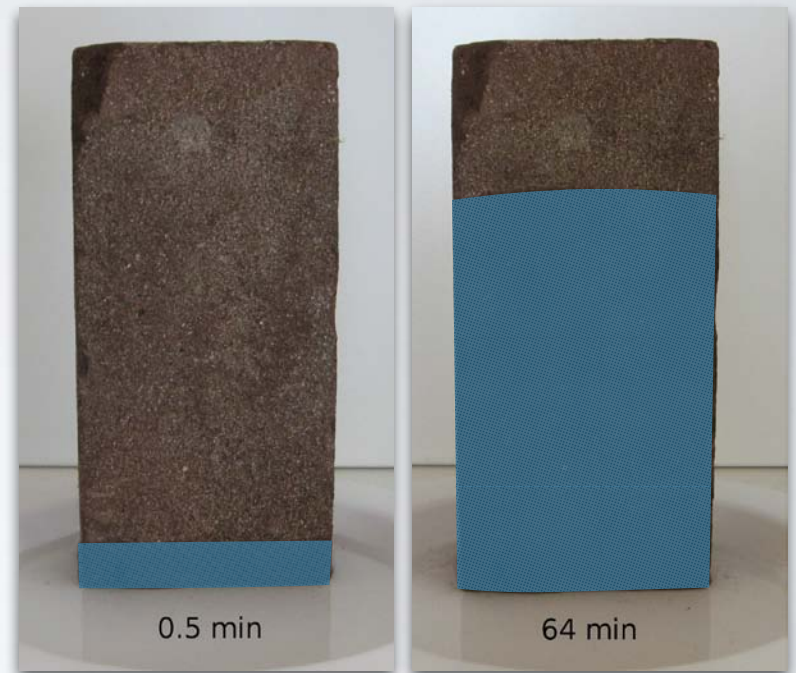
THE WATER CYCLE

- Factors Affecting Infiltration:
 4. Permeability - a measure of how easily fluid flows through a porous solid



THE WATER CYCLE

- Factors Affecting Infiltration:
 5. Capillarity - the action by which water moves against the downward pull of gravity



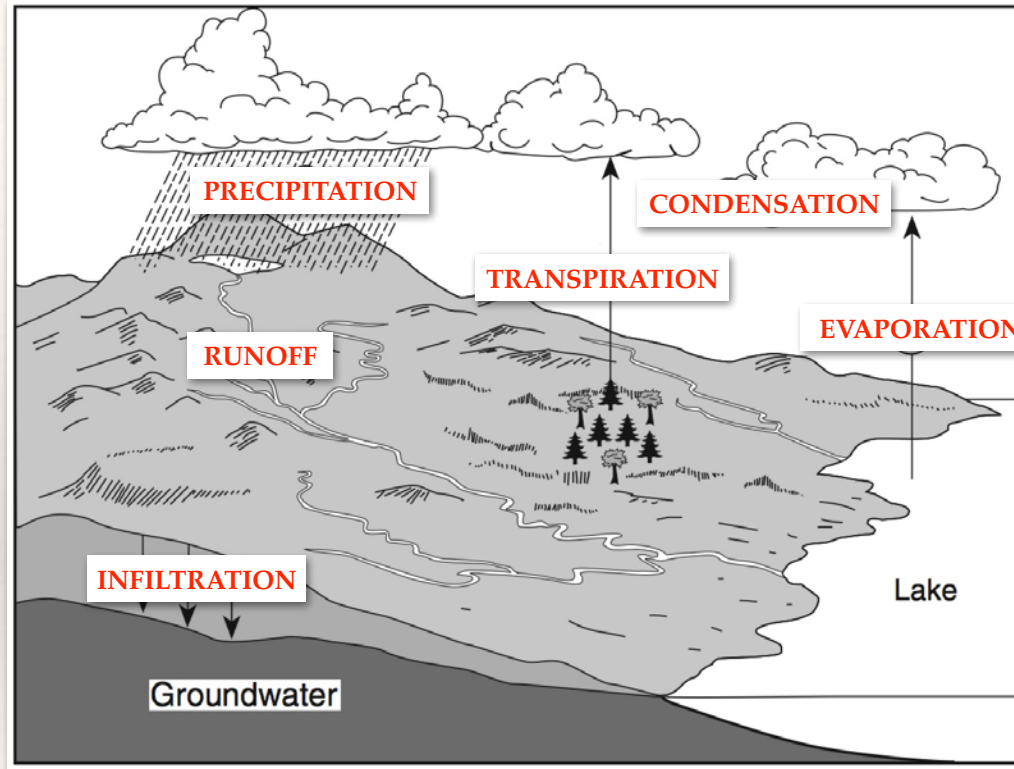


Capillarity

THE WATER CYCLE

- Vegetation - plants absorb water from the ground





The Water Cycle