



Lesson 2

ANSWER KEYS

Reading Checks

 **READING CHECK** Determine Conclusions Suppose the two thermometers on a sling psychrometer show almost identical readings. Was the psychrometer more likely used on a Florida beach or in an Arizona desert? Explain your answer.

On a Florida beach because close temperature readings indicate high humidity

 **READING CHECK** Determine Central Ideas How are snow and rain formation similar? How are they different?

Both start as water vapor. Snow forms when water vapor in the air freezes into ice crystals, while rain starts as small droplets. In both processes, gravity causes precipitation when the ice crystals or water drops become too heavy.

 **READING CHECK** Summarize Text What role does energy play in the water cycle?

Energy from the sun heats molecules in bodies of water, causing the water molecules to gain energy and be released into the atmosphere.

Figures 2 & 4

and particles.

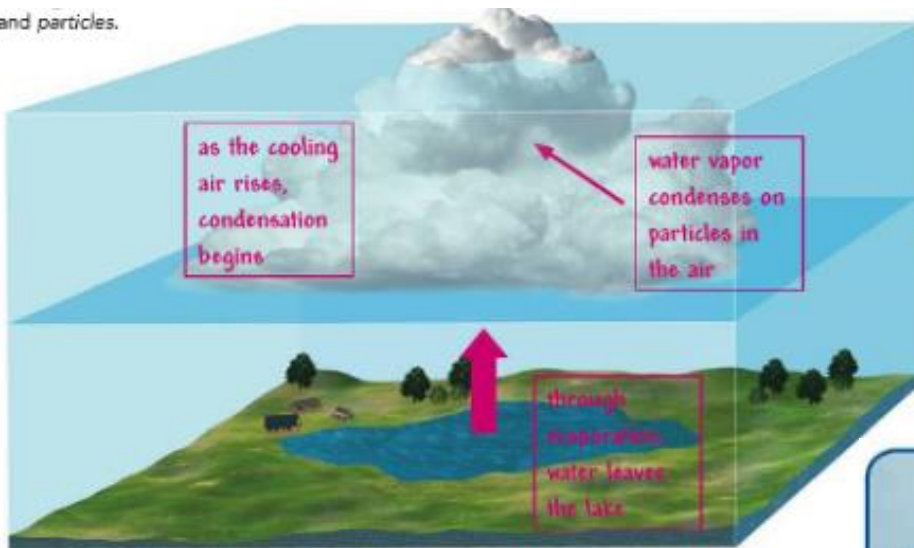


Figure 5

Freezing Precipitation

Figure 5 Draw a check mark on the photos showing the precipitation that occurs when the air temperature is above 0°C and the ground temperature is below 0°C. Draw an X on the photos showing the precipitation that occurs when the air temperature is below 0°C and the ground temperature is above 0°C. Draw a triangle on the photos showing the precipitation that occurs when both air and ground temperature are below 0°C.



Freezing Rain Raindrops sometimes freeze when they hit a cold surface. This kind of precipitation is called freezing rain.



Hail A hailstone is a round pellet of ice at least 5 millimeters in diameter. Hail starts as an ice pellet inside a cold region of a cloud. Strong updrafts of wind carry the hailstone up through the cold region many times, adding ice in layers to the outside of the hailstone. Eventually the hailstone becomes heavy enough for gravity to pull it to the ground.



Sleet Raindrops that fall through a layer of air below 0°C freeze into solid particles of ice before they hit the ground. Ice particles smaller than hailstones are called sleet.



Snow Snow forms when water vapor in a cloud is converted directly into ice crystals that clump together. The clumps fall in the form of ice crystals called snowflakes.

Figure 6

