

Chapter 15

Text Pages 422-431

STUDY GUIDE**• What Is Weather?**

In the word search puzzle, find and circle the word that completes each sentence. Write the word on the line.

- The present state of the atmosphere is the _____.
- _____ is the amount of water vapor in the air.
- Air is _____ when it is holding all the moisture it can at a certain temperature.
- The temperature at which air is saturated and condensation begins is the _____ point.
- _____ humidity is the amount of water vapor in air compared to the amount of water vapor air can hold at a certain temperature.
- A _____ is an instrument that measures relative humidity.
- When millions of tiny drops of water around dust particles form from condensed humid air, a _____ forms.
- A stratus cloud that forms near the ground is _____.
- Water droplets that become too heavy to remain suspended in the air fall out of the clouds as _____.
- _____ forms when water drops freeze in layers around small nuclei of ice.
- Water drops that fall when the temperature is above freezing fall as _____.
- Water drops that fall when the temperature is below freezing fall as _____.
- When snow passes through warm air, melts, and refreezes near the ground, it becomes _____.

T S A T U R A T E D F Q Y M B
 B N O P S Y C H R O M E T E R
 Y O W Q L N W G A V H R L F I
 A W P R E C I P I T A T I O N
 J D B C E I T C N U I L N G A
 R E L A T I V E X C L O U D C
 K W U B L H U M I D I T Y U V
 Y J W E A T H E R G M R O M A

Chapter 14

Text Pages 402-409

STUDY GUIDE**• Energy from the Sun**

Use the words in the box to fill in the blanks.

heat	life	absorb	radiation
sun	lower	reflects	density
waves	current	contact	conduction
sinks	campfire	environment	temperature
space	surfaces	atmosphere	convection

The _____ is the source of all energy in our atmosphere. When Earth receives this energy, some energy escapes back into _____, some is absorbed by the _____, and some is absorbed by land and water

_____. The balance among these three help the atmosphere support _____ . Energy reaches Earth in the form of radiant energy, or

_____. This process is the transfer of energy by _____ .

You experience radiation when you sit by a _____ and your skin becomes warm. The molecules of your skin _____ the energy and you feel

_____. Heat is the transfer of energy from an object with a higher _____ to an object with a _____ temperature. Some radiation isn't absorbed by the atmosphere or surface objects; it _____ off the atmosphere or surface.

_____ is the transfer of energy that occurs when molecules bump into one another and heat is transferred through direct _____ .

_____ is the transfer of heat that occurs because of _____ differences in the air. Because cold air has a higher density than warm air, cold air _____—this pushes up the warm air. This rise and fall of air sets up a circular movement called a convection _____. Convection currents and other processes that transfer energy help provide the _____ we live in.