Name _____

SECTION 2 Properties of the Atmosphere

MAIN IDEA | **DETAILS**

Read *the title of Section 2. Predict what you think the section might be about.*

_____

_____

_____

Review Vocabulary

Use your text to define the following term.

density _____

New Vocabulary

In the left margin, write the terms defined below.

_____ *increase in temperature with elevation*

_____ *amount of water vapor in air*

_____ *occurs when a volume of air reaches the maximum amount of water vapor*

_____ *ratio of water vapor in air to how much water vapor that volume of air is capable of holding*

_____ *temperature to which air must be cooled at constant pressure to reach saturation*

_____ *extra thermal energy contained in water vapor compared to liquid water*

Academic Vocabulary

Define the following term.

exert _____

_____

Name _____

SECTION 2 Properties of the Atmosphere

MAIN IDEA	DETAILS
Measuring Temperature *Use with page 289.*	**Distinguish** *between temperature scales by completing the following sentences.* There are three temperature scales in use today, the _____ scale is used primarily in the United States. The _____ point of water is 32° on this scale. The SI scale used mainly in science is the _____ scale. _____ on this scale is the lowest temperature any substance can have. The third scale is the _____ scale, sometimes called the centigrade scale because the distance between the freezing and boiling points of water is ____. Fill in the boiling point of water for each scale; F° ____ , C°____ , K ____. Water was chosen as the standard because it is a common substance that exists in all three states of matter at normal temperatures.
Air Pressure and Density *Use with page 290–291.*	**Predict** *whether water would boil on top of a mountain at a higher or lower temperature than at sea level. Explain.* _____ _____ _____ _____ _____
Temperature Inversion *Use with page 292.*	**Draw** *a vertical representation of a temperature inversion.*

Name _____

SECTION 2 Properties of the Atmosphere

MAIN IDEA	DETAILS
Temperature Inversion *Use with pages 292.*	**Sequence** *the steps in the formation of temperature inversions* **1.** Cool, clear winter night when the wind is calm ↓ **2.** ↓ **3.** ↓ **4.**
Wind *Use with page 293.*	**Describe** *how wind is created by completing the paragraph below.* Cool air _____. This creates an area of_____. Warm air _____. This creates an area of _____. Air masses move from areas of _____ to _____. This is what creates _____.
Relative Humidity *Use with page 294.*	**Write** *one sentence to explain why climate zones near the equator are more humid than climate zones closer to the poles.* _____ _____ _____

SYNTHESIZE

You are at the beach and notice that in the afternoon there is a cool breeze blowing onto the beach from the ocean. At night, the wind is blowing from the land out to sea. How would you explain to someone why this occurs?

_____

_____

_____

_____