Name _____ Date _____ Class _____

Directed Reading for Content Mastery

Section 3 ▪ Behavior of Gases

Directions: *Complete the paragraphs by using the words listed below to fill in the blanks.*

force	**increase**	**kinetic**	**pressure**	**volume**
particles	**Charles's**	**size**	**boiling**	**kilopascals**
Boyle's	**absolute**	**decrease**	**larger**	**temperature**
constantly	**liquids**	**pressure**	**decrease**	**increased**

Gases in Earth's atmosphere exert **1.** _____ on everything. According to the **2.** _____ theory, the particles of a gas are **3.** _____ moving. Every time gas particles hit something and bounce off, they exert a tiny force. Pressure is this amount of **4.** _____ exerted per unit of area. Air pressure at sea level is 101.3 **5.** _____.

The amount of force exerted by a gas depends on the **6.** _____ of its container. **7.** _____ law states that if a sample of gas is kept at constant **8.** _____, decreasing the volume will **9.** _____ the pressure the gas exerts. If you increase the volume, the pressure will **10.** _____. According to the kinetic theory, if you do not change the amount of gas or its temperature but **11.** _____ the size of the container, the particles will strike the walls more often and the pressure will rise. When the size of the container is **12.** _____, the pressure is smaller because the **13.** _____ hit the walls less often.

According to **14.** _____ law, if a sample of gas is kept at constant **15.** _____, the volume increases if the temperature is **16.** _____. Charles's measurements suggested that the **17.** _____ of a gas would become zero at a temperature of -273° C. The temperature -273° C is called **18.** _____ zero. All gases become **19.** _____ when cooled to their **20.** _____ points.

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