

Name _____ Period _____ Date _____

The Gas Laws

1. The gas left in a used aerosol can is at a pressure of 1 atm at 27°C. If this can is thrown into a fire, what is the internal pressure of the gas when its temperature reaches 927°C?

GIVEN	GAS LAW	WORK
	FORMULA	
ANSWER:		

2. A sample of carbon dioxide occupies a volume of 3.50 L at 125 kPa. What pressure would the gas exert if the volume were decreased to 2.00 L?

GIVEN	GAS LAW	WORK
	FORMULA	
ANSWER:		

3. A sample of propane occupies 250.0 L at 125 kPa and 38°C. Find its volume at 100.0 kPa and 95°C.

GIVEN	GAS LAW	WORK
	FORMULA	
ANSWER:		

4. Oxygen gas is at a temperature of 40°C when it occupies a volume of 2.3 L. To what temperature **in Celsius** should it be raised to occupy a volume of 6.5 L?

GIVEN	GAS LAW	WORK
	FORMULA	
ANSWER:		

5. Fluorine exerts a pressure of 900. torr. When the pressure is changed to 1.5 atm, its volume is 250. mL. What was the original volume?

GIVEN	GAS LAW	WORK
	FORMULA	
ANSWER:		

6. The volume of a gas is 200.0 mL at 275 K and 92.1 kPa. Find its volume at STP.

GIVEN	GAS LAW	WORK
	FORMULA	
ANSWER:		

7. A sample of N₂ occupies a volume of 250 mL at 25°C. What volume will it occupy at 95°C?

GIVEN	GAS LAW	WORK
	FORMULA	
ANSWER:		