Abbreviations	**Conversions**
atm - atmosphere	K = °C + 273
mm Hg - millimeters of mercury	1 cm^3 (cubic centimeter) = 1 mL (milliliter)
torr - another name for mm Hg	1 dm^3 (cubic decimeter) = 1 L (liter) = 1000 mL
Pa - Pascal (kPa = kilo Pascal)	**Standard Conditions**
K - Kelvin	0.00 °C = 273 K
°C - degrees Celsius	1.00 atm = 760.0 mm Hg = 101.325 kPa = 101,325 Pa

Charles' Law Worksheet

1) The temperature inside my refrigerator is about 4^{o} Celsius. If I place a balloon in my fridge that initially has a temperature of 22^{o} C and a volume of 0.5 liters, what will be the volume of the balloon when it is fully cooled by my refrigerator?

2) A man heats a balloon in the oven. If the balloon initially has a volume of 0.4 liters and a temperature of 20 ^{o}C, what will the volume of the balloon be after he heats it to a temperature of 250 ^{o}C?

3) On hot days, you may have noticed that potato chip bags seem to "inflate", even though they have not been opened. If I have a 250 mL bag at a temperature of 19 ^{o}C, and I leave it in my car which has a temperature of 60^{o} C, what will the new volume of the bag be?

4) A soda bottle is flexible enough that the volume of the bottle can change even without opening it. If you have an empty soda bottle (volume of 2 L) at room temperature (25 ^{o}C), what will the new volume be if you put it in your freezer (-4 ^{o}C)?