

## ChemThink: Behavior of Gases Notes

The speed of atoms depends on temperature. True or False

As the temperature increases, the gas particles (speed up or slow down).

Different types of atoms move at \_\_\_\_\_ speeds even at the same temperature. Heavier atoms move \_\_\_\_\_.

Do all particles of the same substance move at the same speed?

▪ This is why we use \_\_\_\_\_ speed.

What is pressure?

Unit of pressure:

What causes atmospheric pressure?

How do gases cause pressure?

What is the relationship between pressure and temperature?

Sketch the graph of temperature v pressure.

As the temperature increases, the pressure increases because:

1.

2.

Draw the diagram relating temperature and pressure

What is the relationship between pressure and number of atoms present?

Sketch the graph of atoms present v pressure.

As the number of atoms increases, the pressure increases because:

The more \_\_\_\_\_, the higher the \_\_\_\_\_.

Draw the diagram relating number of atoms and pressure

What is the relationship between pressure and volume?

Sketch the graph of volume v pressure.

As the volume decreases, the pressure increases because:

The more \_\_\_\_\_, the higher the \_\_\_\_\_.

Draw the diagram relating volume and pressure

What is the relationship between pressure and number of atoms present?

Sketch the graph of atoms present v pressure.

As the number of atoms increases, the pressure increases because:

The more \_\_\_\_\_, the higher the \_\_\_\_\_.

Draw the diagram relating number of atoms and pressure

What is the relationship between pressure and volume?

Sketch the graph of volume v pressure.

As the volume decreases, the pressure increases because:

The more \_\_\_\_\_, the higher the \_\_\_\_\_.

Draw the diagram relating volume and pressure