

Question 1

Helium gas consists of single helium atoms. Each helium atom has two protons, two neutrons and two electrons. A balloon hold exactly three moles of Helium gas.

How many moles of electrons does the gas in the balloon contain?

1. 1 mole.
2. 2 moles.
3. 3 moles.
4. 6 moles.
5. 18 moles.

Question 2

Determine the number of moles in 880 g of CO_2 . The molar mass of carbon is 12 g and that of oxygen is 16 g.

Which of the following best represents the number of moles?

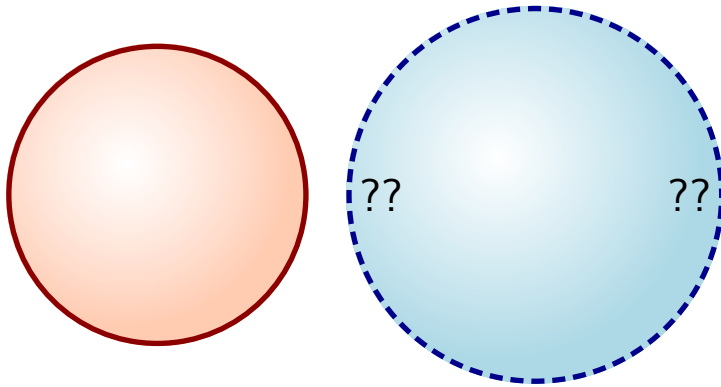
1. 2
2. 20
3. 31
4. 44
5. 880

Question 3

A balloon contains helium gas, whose molar mass is 4 g. Another balloon is filled with an equal number of argon molecules at the same temperature and pressure. Argon is a gas whose molar mass is 40 g.

He gas

Ar gas



Which of the following is true of the volume occupied by the Argon gas?

1. The same as that of the helium.
2. Ten times that of the helium.
3. One-tenth of that of the helium.
4. Larger than the helium but less than ten times as larger.