

Exercise 1.11 – The moles concept

Q111-01 How many times bigger is a carbon atom than a helium atom?

Q111-02 If 1 mole of magnesium atoms have a mass of 24g and 1 mole of helium atoms have a mass of 4g, how many times bigger is a magnesium atom than a helium atom?

Q111-03 sulphur atoms have a relative mass of 32. What is the mass of one sulphur atom in grams?

Q111-04 Iron atoms have a relative mass of 56. What is the mass in grams of one iron atom?

Q111-05 If 1 sodium atom has a mass = 3.8×10^{-23} g, calculate the mass of 1 mole of sodium atoms.

Q111-06 If 1 potassium atom has a mass = 6.48×10^{-23} g, calculate the mass of 1 mole of potassium atoms.

Q111-07 How many atoms are present in 0.1 moles of iron?

Q111-08 Calculate the number of atoms in 0.025 moles of silver.

Q111-09 Calculate the mass of 3.01×10^{22} carbon atoms.

Q111-10 Calculate the mass of 7.525×10^{22} lead atoms
