

SUVA SANGAM COLLEGE

YEAR 12

CHEMISTRY

WORKSHEET 2

Question 1

Complete the table given below.

Molecule	Electron group geometry	Molecular Geometry (Shape)
CO₂	Linear	i. _____
BF₃	ii. _____	Trigonal Planar
NH₃	iii. _____	iv. _____
CH₄	v. _____	Tetrahedral

Question 2

Explain the following properties using structure and bonding.

- i. Diamond is extremely hard.
- ii. Copper is a good conductor of electricity.
- iii. Potassium iodide does not conduct electricity.

Question 3

When copper carbonate is heated, it decomposes. The reaction is:



- i. How many **moles** of copper (II) oxide forms when 247 g of copper carbonate is completely decomposed?

- ii. How many **moles of copper carbonate** must be decomposed to produce 11 g of carbon dioxide?
- iii. If 318 g of copper (II) oxide is produced, what **mass of carbon dioxide** is liberated?