



# SUBSTANCES & PARTICLES 2

For each of the following substances, identify the structure type of the particles it contains.

Substance	Formula	Structure type					Particles
		Monatomic	Simple molecular	Giant covalent	Ionic	Metallic	
hydrogen	H <sub>2</sub>		✓				molecules
nitrous oxide	N <sub>2</sub> O		✓				molecules
hydrazine	N <sub>2</sub> H <sub>4</sub>		✓				molecules
aluminium oxide	Al <sub>2</sub> O <sub>3</sub>				✓		ions
copper sulfate	CuSO <sub>4</sub>				✓		ions
carbon dioxide	CO <sub>2</sub>		✓				molecules
lead	Pb					✓	ions & delocalised electrons
radon	Rn	✓					atoms
sodium bromide	NaBr				✓		ions
tin	Sn					✓	ions & delocalised electrons
sulfur trioxide	SO <sub>3</sub>		✓				molecules
nickel	Ni					✓	ions & delocalised electrons
potassium oxide	K <sub>2</sub> O				✓		ions
propane	C <sub>3</sub> H <sub>8</sub>		✓				molecules
potassium nitrate	KNO <sub>3</sub>				✓		ions
calcium chloride	CaCl <sub>2</sub>				✓		ions
chloroethene	C <sub>2</sub> H <sub>3</sub> Cl		✓				molecules
phosphorus	P <sub>4</sub>		✓				molecules
krypton	Kr	✓					atoms
silicon	Si			✓			atoms
nickel nitrate	Ni(NO <sub>3</sub> ) <sub>2</sub>				✓		ions
calcium hydroxide	Ca(OH) <sub>2</sub>				✓		ions
ethylamine	C <sub>2</sub> H <sub>5</sub> NH <sub>2</sub>		✓				molecules
calcium carbonate	CaCO <sub>3</sub>				✓		ions
magnesium fluoride	MgF <sub>2</sub>				✓		ions
bismuth	Bi					✓	ions & delocalised electrons
sucrose	C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>		✓				molecules
molybdenum	Mo					✓	ions & delocalised electrons
astatine	At <sub>2</sub>		✓				molecules