

## Chemguide – questions

### WORKING OUT THE TYPE OF STRUCTURE

For each of the labelled substances in the table, use the information to work out which type of structure it has – ionic, giant covalent, metallic or molecular. See what else you can deduce as well.

	<b>M. Pt (°C)</b>	<b>B. Pt (°C)</b>	<b>effect of water</b>	<b>effect of electricity</b>	<b>other</b>
<b>A</b>	98	890	Violent reaction giving a colourless solution and a gas	conducts electricity	soft shiny solid, tarnishing rapidly in air
<b>B</b>	3730 (sublimes)		insoluble; no reaction	conducts electricity	dark grey, flaky solid
<b>C</b>	-117	78	soluble	non-conductor	
<b>D</b>	5.5	80	insoluble; no reaction	non-conductor	soluble in organic solvents like hexane
<b>E</b>	747	1390	soluble	solid is non-conductor; molten E undergoes electrolysis	brittle crystals
<b>F</b>	44	280	insoluble; no reaction	non-conductor	soft yellowish solid
<b>G</b>	1610	2230	insoluble; no reaction	non-conductor under any conditions	
<b>H</b>	186	-	soluble	non-conductor	white solid; chars on heating above M. Pt
<b>I</b>	373	916	insoluble; no reaction	solid is non-conductor; molten I undergoes electrolysis	white powder
<b>J</b>	-39	357	insoluble; no reaction	conducts electricity	