

Name _____ Class _____ Date _____

Use the data from this table to answer Questions 1–3.

Material	Melting point (°C)	Conductor of electricity	Covalent bonding	Long chains
A	1534	Yes	No	No
B	–56	No	Yes	No
C	113	No	Yes	Yes
D	0	No	Yes	No

- 1 Use the information in the table to predict which materials (A–D) are:
- simple molecules _____
 - polymers _____
 - neither simple molecules nor polymers. _____
- 2 Materials B, C and D do not conduct electricity well. Using information from the table, explain how this might support the idea that these materials contain **covalent bonds**.

- 3 Materials B and D have low boiling points and low melting points. Use your knowledge of the forces between molecules to explain why this might be the case.

- 4 Polymers are long molecular chains made from small molecules called **monomers** joined together by chemical **bonds**. Use this information to explain the differences and similarities between a polymer and its monomers in terms of their structure, properties and **intermolecular forces**.

5 **a Structure**

Monomers and their polymers are different because _____

They are similar in structure because _____

b Properties

Monomers and their polymers are different because _____

They are similar in properties because _____

c Intermolecular forces

Monomers and their polymers are different because _____

They are similar because _____