

Q7.

Question Number	Answer	Additional Guidance	Mark
	<p>An explanation that makes reference to the following points:</p> <ul style="list-style-type: none"> • iodine is (simple) molecular • diamond is a giant (covalent / lattice) structure (with 4 covalent bonds per carbon atom) • iodine molecules are held together by weak London forces / dispersion forces / van der Waal's forces / instantaneous induced dipole-dipole attractions • carbon atoms in diamond are held together by (strong) covalent bonds • strong covalent bonds require more energy to break than intermolecular forces 	<p>(1) Allow iodine is made up of (I₂) molecules</p> <p>(1) Do not award diamond molecules</p> <p>(1) Allow weak intermolecular forces</p> <p>(1) Do not award strong intermolecular forces</p> <p>Award converse argument for less energy need to break intermolecular forces</p> <p>Single sentences may contain more than one marking point. For example 'iodine molecules are held together by weak intermolecular forces' scores (2)</p>	(5)