

<p>What is an allotrope?</p>	<p>Why is diamond hard and has a high melting point?</p>
<p>Why does graphite conduct electricity?</p>	<p>Why does diamond not conduct electricity?</p>
<p>Why is graphite slippery?</p>	<p>What are the potential uses of fullerenes?</p>
<p>Why are nanotubes used in sports equipment?</p>	<p>Why are metals malleable?</p>

<p>It has many strong covalent bonds</p>	<p>Different forms of the same element (different arrangement of atoms)</p>
<p>It has no delocalised electrons</p>	<p>It has delocalised electrons</p>
<p>Drug delivery around the body, an industrial lubricant</p>	<p>Weak forces between the layers so they can slide over each other</p>
<p>The layers of positive ions can slide over each other</p>	<p>They are strong</p>

<p>How big is a nanometre?</p>	<p>Why do nanoparticles have special properties?</p>
<p>Why are nanoparticles effective catalysts?</p>	<p>What are potential uses of nanoparticles?</p>
<p>What problem might the very small size of nanoparticles cause?</p>	<p>Why is graphene almost transparent?</p>
<p>Why does graphite have a high melting point?</p>	<p>How many covalent bonds does carbon normally form?</p>

<p>They have a large surface area to volume ratio</p>	<p>$1 \times 10^{-9} \text{ m}$</p>
<p>Catalysts, self-cleaning windows</p>	<p>Larger surface area</p>
<p>It is a single layer of graphite</p>	<p>They can be inhaled and absorbed through the skin so may be harmful</p>
<p>4</p>	<p>Many strong covalent bonds need to be broken</p>