



Class:

Describe what you would see if damp, blue litmus paper is placed into chlorine gas.

F

Mass number:

Give the electronic configuration of this fluorine atom.

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A student investigates the decomposition of calcium carbonate by heating it strongly. The balanced chemical equation is:



The student starts with 5.0 g of calcium carbonate (CaCO_3). He heats it until it has all reacted. Relative Atomic Masses (A_r): Ca = 40, C = 12, O = 16)

Calculate the volume of carbon dioxide gas (CO_2) produced in this reaction.

Give your answer in dm^3 .

volume of carbon dioxide gas = ...

Graphite conducts electricity. Explain why.

State the ion which causes a solution to be acidic.

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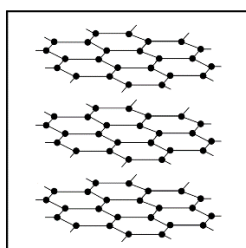
Calcium phosphate is used in fertilisers. The bonding in calcium phosphate is ionic. Calcium phosphate contains the phosphate ion, PO_4^{3-} . What is ionic bonding?

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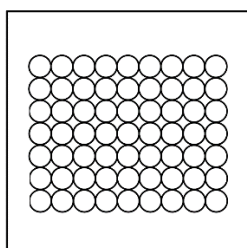
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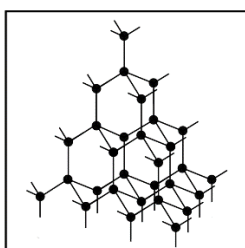
Which diagram, A, B or C, shows the structure of graphite? Circle the correct letter.



A



B



C

What type of bonding is present in graphite and diamond?

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