

**0 7**

This question is about calcium.

**0 7****. 1**

What type of compound is calcium oxide?

**[1 mark]**Tick **one** box.An acid A base A carbonate A salt **0 7****. 2**

Ionic compounds, such as calcium oxide, have high melting points.

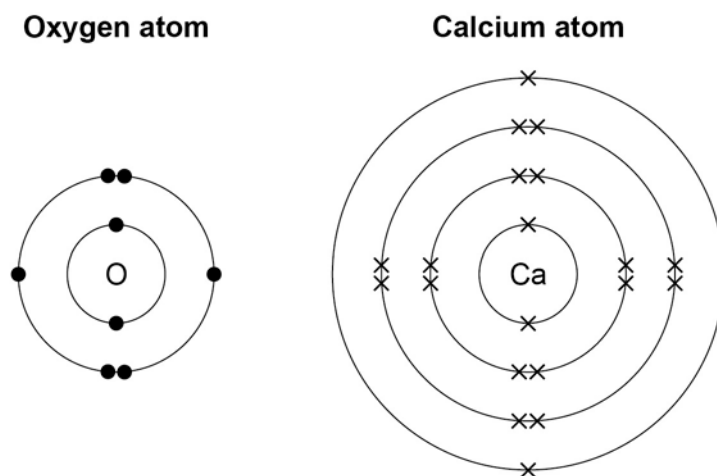
Complete the sentences. Use words from the box.

**[1 mark]****bonds****forces****ions****layers**

Calcium oxide has a giant ionic lattice in which there are strong electrostatic \_\_\_\_\_ of attraction in all directions.

**0 7 . 3** Figure 10 shows the electronic structure of an oxygen atom and a calcium atom.

Figure 10



Describe how the calcium atom and the oxygen atom forms calcium oxide.

You should give the charge on each ion formed.

[4 marks]

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Turn over for the next question

## Question 7

Question	Answers	Extra information	Mark	AO / Spec. Ref.
07.1	A base		1	AO1/1 5.4.2.2
07.2	forces		1	AO1/1 5.2.1.3 5.2.2.3
07.3	calcium loses electrons and oxygen gains electrons two electrons are transferred calcium has a 2 <sup>+</sup> charge oxide has a 2 <sup>-</sup> charge	max 3 for incorrect reference to atom/ion or to oxygen / oxide	1	AO1/1
			1	AO2/1
			1	AO2/1
			1	AO2/1 5.1.1.7 5.2.1.2
<b>Total</b>			<b>6</b>	