

0	1
---	---

The diagram shows an atom of carbon.

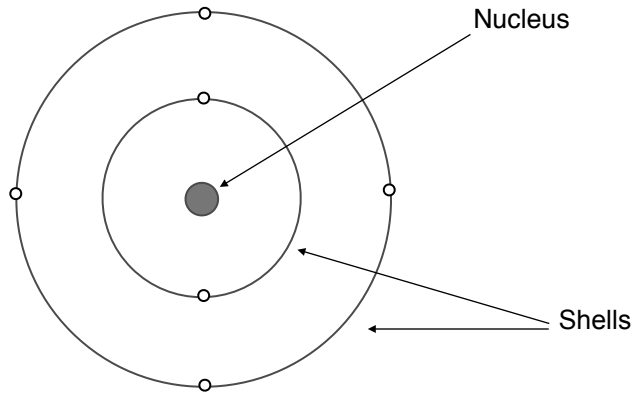


Table 1 shows the sub atomic particles that are present in an atom of carbon.

Table 1

Particle	Location	Charge
Electron	Shells/orbitals/energy levels [1]	-1 [1]
Neutron	Nucleus	Neutral or no charge or 0 [1]
Proton	Nucleus [1]	+1

0	1	.	1
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Complete the table.

[4 marks]

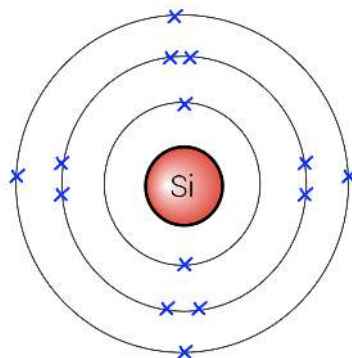
0	2	.	1
---	---	---	---

A silicon atom has 14 electrons.

Draw the electronic structure of a silicon atom on the template below:
Complete the diagram below.

[1 mark]

TOP TIP : Where the electrons are on the shell doesn't matter. You don't have to use crosses for this question but generally you should use either a cross (x) or a dot (o).



0	2	.	2
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Write out the electronic structure of silicon atom in numbers:

[1 mark]

..... **2, 8, 4**

(Total 6 marks)

End