

0 1 . 1

Complete the table below to show the relative masses of the particles in atoms: [2 marks]

Name of particle	Relative mass
Proton1.....
Neutron	1
Electron	very small (0 or 1/1800 or 1/2000)

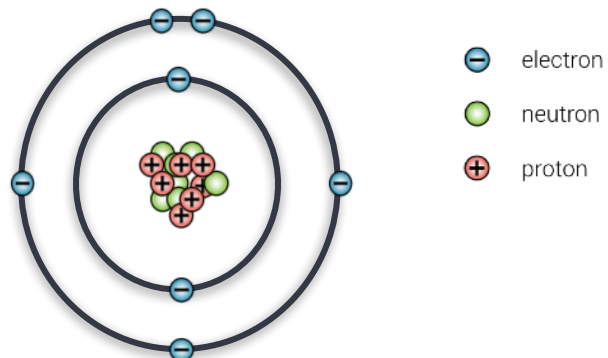
0 1 . 2

Complete the sentences:

- (a) The atomic number of an atom is the number of [1 mark]
protons [1]
 (allow "protons or electrons", but do not allow "protons and electrons")
- (b) The mass number of an atom is the number of [1 mark]
protons and neutrons

0 1 . 3

The diagram shows the structure of a non-metal atom.



What is the chemical symbol for this atom?

[1 mark]

Tick **one** box.

- | | |
|---|-------------------------------------|
| C | <input type="checkbox"/> |
| N | <input checked="" type="checkbox"/> |
| O | <input type="checkbox"/> |
| P | <input type="checkbox"/> |

0	1	.	4
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Explain why an atom has no overall charge.
Use the relative electrical charges of sub-atomic particles in your explanation.

[2 marks]

because the relative electrical charges are $-(1)$ for an electron and $+(1)$ for a proton [1]

allow electrons are negative and protons are positive

and the number of electrons is equal to the number of protons [1]

if no other mark awarded, allow 1 mark for the charges cancel out

(Total 7 marks)

End