

The Maths And Science Tutor

KS3 Physics Questions - Atomic Structure

Date: 30 November 2024

KS3 Physics - Atomic Structure Questions

Total marks: 31

Write your answers in the spaces provided.

1. Name the three particles found in atoms.

[3 marks]

2. Where in the atom would you find:

a) Protons

b) Electrons

[2 marks]

3. Complete the table for each particle:

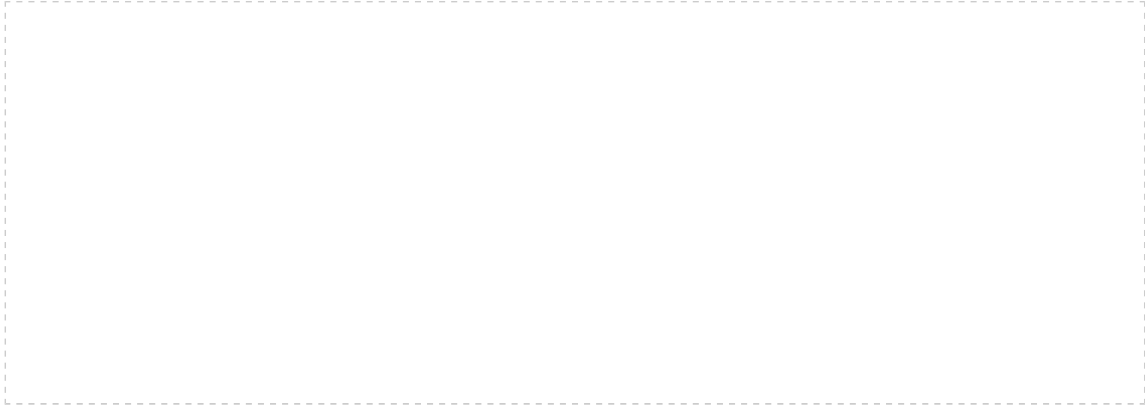
Particle	Charge
Proton	
Neutron	
Electron	

[3 marks]

4. Explain why atoms have no overall charge.

[2 marks]

5. Draw and label a simple diagram of an atom. Show where the protons, neutrons, and electrons are located.



[4 marks]

6. What happens to an atom when it:

a) Gains an electron

b) Loses an electron



[2 marks]

7. Write a paragraph explaining what you know about atoms. Include at least 4 facts.

[4 marks]

8. State whether these statements are true or false:

a) Atoms can be seen with a microscope

b) Most of an atom is empty space

c) All atoms are charged

[3 marks]

9. An atom has 6 protons. How many electrons does it have if it is neutral?

[1 mark]

10. Why can atoms of the same element have different masses?

[2 marks]

11. Match these atomic particles with their location in the atom:

Particles: Proton, Neutron, Electron

Locations: Nucleus, Orbits, Nucleus

[3 marks]

12. Explain why the nucleus of an atom:

a) Has a positive charge

b) Contains most of the atom's mass

[2 marks]

End of Questions

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