

KS3 Chemistry: The Atom

Priority Learning

Worksheet

Name: _____ Date: _____

| | | | | | | | | | |
|-----------|---|---|---|---|---|----|----|---|-------|
| Question: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Total |
| Marks: | 1 | 8 | 1 | 2 | 3 | 22 | 10 | 5 | 52 |
| Score: | | | | | | | | | |

Aims of this worksheet:

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1. What is all matter made of? (1 mark)

.....

2. Complete the table (8 marks)

| Particle | Relative mass | Relative charge | Position |
|----------|---------------|-----------------|----------|
| _____ | _____ | 1 | _____ |
| Neutron | _____ | _____ | _____ |
| _____ | 1/1836 | _____ | Shells |

3. How many electrons are in the first and second shell of an atom? (1 mark)

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4. (a) Where are protons and neutrons located in an atom? (1 mark)

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(b) How many protons does chlorine have? (1 mark)

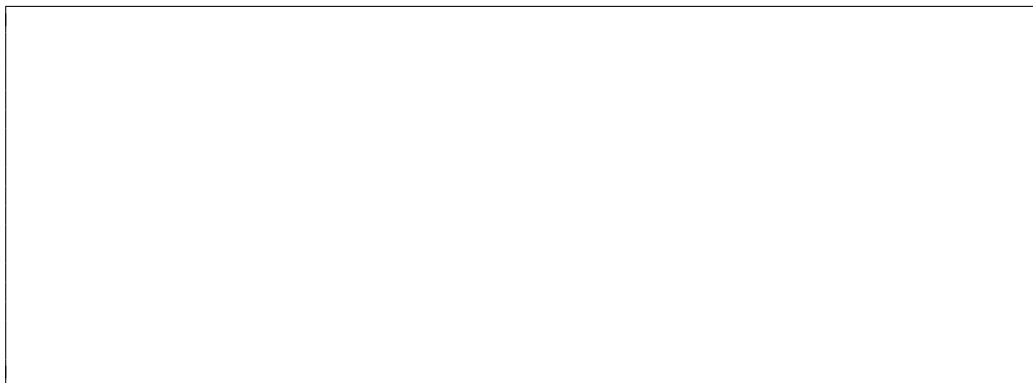
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5. If a atom has only one proton and one electron but no neutrons.

(a) What is the name of the atom? (1 mark)

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(b) Draw this atom. (1 mark)



(c) Complete the following sentence. *Sometimes, a hydrogen atom has a neutron in the nucleus as well as a proton. This atom is known as heavy hydrogen. Heavy hydrogen is an _____ of hydrogen.* (1 mark)

6. What is the atomic number and symbol of (2 marks)

(a) Nitrogen

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(b) Boron (2 marks)

.....

(c) Argon (2 marks)

.....

(d) Sodium (2 marks)

.....

(e) Oxygen (2 marks)

.....

(f) Iron (2 marks)

.....

(g) Uranium (2 marks)

.....

(h) Gold (2 marks)

.....

(i) Silver (2 marks)

.....

(j) Aluminium (2 marks)

.....

(k) Magnesium (2 marks)

.....

7. To the nearest whole number, state the relative atomic mass and chemical symbols of the following elements.

(a) Sulphur (2 marks)

.....

(b) Krypton (2 marks)

.....

(c) Radium (2 marks)

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(d) Radon (2 marks)

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