

Atoms, Elements & Compounds

1. What is an atom?

.....

.....

.....

2. What is an element?

.....

.....

.....

3. What is a compound?

.....

.....

.....

4. In an element, do atoms have the same number of protons or a different number?

.....

.....

5. Why are copper, oxygen and iron different examples of elements?

.....

.....

.....

.....

.....

6. Why is copper oxide an example of a compound?

.....

.....

.....

.....

7. Draw labelled particle diagrams to represent an atom, element and compound:

Atom:

.....

.....

.....

.....

Element:

.....

.....

.....

.....

Compound:

.....

.....

.....

.....

Atomic Structure

1. What is the relative mass of a proton?

.....

2. What is the relative mass of an electron?

.....

3. What is the relative mass of a neutron?

.....

4. What is the relative charge of a proton?

.....

5. What is the relative charge of an electron?

.....

6. What is the relative charge of a neutron?

.....

7. What is the central part of an atom called?

.....

8. Where are protons and neutrons found in an atom?

.....

9. Where are electrons found in an atom?

.....

10. Why do atoms have no overall charge?

.....

.....

.....

11. What is the mass number?

.....

12. What is the atomic number?

.....

13. How do you calculate the number of neutrons in an atom?

.....

.....

14. Why does a sodium atom have an atomic number of 11 and a mass number of 23?

.....

.....

.....

15. In terms of sub-atomic particles, what is the structure of: carbon-12 and carbon-14?

.....

.....

.....

Dalton's Atomic Theory

1. What was the name of the ancient Greek philosopher who came up with the word "atom"?

.....

2. What is an atom?

.....
.....
.....
.....

3. Define an element

.....
.....
.....
.....

4. Describe Dalton's atomic theory

.....
.....
.....
.....
.....
.....
.....

Thomson's Plum Pudding Model

1. What is a plum pudding?

.....
.....

2. Draw a diagram to show how Thomson used a plum pudding to explain the structure of the atom



3. Explain the structure of the atom in Thomson plum pudding model

.....
.....
.....
.....
.....
.....
.....

