

OBHS Core Questions:

Subject: Science

Year and Term: Year 9 Autumn Term

Topic: C1 Periodic Table and Elements



Learn these questions to build a strong foundation of knowledge for this half-term. Ask family or friends to test you regularly, or practise on your own using the 'Look, Say, Cover, Write' method.

Question		Answer
1. What is the name given to the smallest part of an element that can exist?		Atom
2. What name is given to two or more elements chemically combined in fixed proportions?		Compound
3. What name is given to two or more elements or compounds not chemically combined?		Mixture
4. What are filtration, crystallisation, simple distillation, fractional distillation and chromatography all used for?		Separating mixtures
5. What name is given to an early but incorrect model of the atom that suggested atoms are a ball of positive charge with negative electrons embedded in them?		Plum Pudding Model
6. What was James Chadwick able to provide evidence for the existence of?		Neutrons in the atom
7. What is the charge of an electron?		Negative
8. What is the charge of a neutron?		Neutral
9. What is the charge of a proton?		Proton
10. What is the mass of a proton?		1
11. What is the mass of an electron?		1/1863 or very small
12. What is the mass of a neutron?		1
13. What is the mass number of an element the sum of?		The protons and neutrons in an atom
14. Sodium is shown below. How many protons, electrons and neutrons does it have?	<div>23 Na sodium 11</div>	P = 11 E = 11 N = 12
15. Oxygen is shown below. How many protons, electrons and neutrons does it have?	<div>16 O oxygen 8</div>	P = 8 E = 8 N = 8

16. What is the name of atoms of the same element that have different numbers of neutrons?	Isotopes
17. What are elements in the periodic table arranged in order of?	Atomic number
18. What do elements in the same group of the periodic table have in common?	The same number of electrons in the outer shell and similar properties
19. How did Mendeleev overcome problems with ordering the elements?	He left gaps for undiscovered elements
20. The elements of which group of the periodic table are unreactive (inert) and do not easily form molecules?	Group 0 (Noble gases)
21. Which group of the periodic table is known as the halogens?	Group 7
22. Which group of the periodic table is known as the alkali metals?	Group 1
23. Does reactivity increase or decrease going down group 1?	Increase
24. Does reactivity increase or decrease going down group 7?	Decrease
25. What are the rows across the periodic table called?	Periods