Isotopes and Ions:

1. An isotope of carbon has an 8 neutrons. What is its atomic mass?

2. An isotope of oxygen has 7 neutrons. What is its atomic mass?

3. An isotope of sodium has 11 neutrons. What is its atomic mass?

4. An isotope of calcium has 21 neutrons. What is its atomic mass?

5. An isotope of neon has 3 neutrons. What is its atomic mass?

6. An isotope of copper has 35 neutrons. What is its atomic mass?

7. An isotope of nitrogen has an atomic mass of 15. How many neutrons does it have?

8. An isotope of boron has an atomic mass of 12. How many neutrons does it have?

9. An isotope of iron has an atomic mass of 57. How many neutrons does it have?

10. An isotope of chlorine has an atomic mass of 34. How many neutrons does it have?

11. A nitrogen ion has 8 electrons. What is its charge? Is in an anion or a cation?

12. An oxygen ion has 10 electrons. What is its charge? Is in an anion or a cation?

13. A beryllium ion has 2 electrons. What is its charge? Is in an anion or a cation?

14. A nickel ion has 25 electrons. What is its charge? Is in an anion or a cation?

15. How many electrons are in a fluorine anion with a charge of -1?

16. How many electrons are in a calcium ion with a charge of +2?

17. How many electrons are in Zn2+?

18. How many electrons are in P3-?

19. An atom of manganese-54 has a charge of +4. How many protons, neutrons and electrons does it have?

20. An atom of silicon-29 has a charge of +4. How many protons, neutrons and electrons does it have?

21. An atom of sulphur-33 has a charge of -1. How many protons, neutrons and electrons does it have?

22. What is the name of the element that has 51 protons?

What is its atomic symbol?

How many neutrons does it have?

23. What is the name of the element that has 19 protons?

What is its atomic symbol?

How many neutrons does it have?

24. What is the name of the element that has 2 protons?

What is its atomic symbol?

How many neutrons does it have?

25. What is the name of the element that has 1 proton?

What is its atomic symbol?

How many neutrons does it have?

What is its atomic mass?

26. What is the name of the element that has 99 protons?

What is its atomic symbol?

How many neutrons does it have?

Who was it named in honour of?

27. What is the name of the element with an atomic mass of 190?

What is its atomic symbol?

How many protons does it have?

How many neutrons does it have?

28. What is the name of the element with an atomic mass of 251?

What is its atomic symbol?

How many protons does it have?

How many neutrons does it have?

Where was it discovered?

29. What is the charge of a copper (Cu) ion with 10 electrons?

How many neutrons does a copper ion with 10 electrons have?

30. How many electrons does a sulphur (S) ion have if its charge is -2?

How many neutrons?

31. A zinc atom has a charge of +2. How many protons, neutrons and electrons does it have?