Isotopes

Apprentice Difficulty Level:

Question Group 1

Question 1

The atomic number of an isotope refers to the _____.

number of neutrons present in an atom
number of electrons present in an atom
number of protons present in an atom
number of protons and neutrons present in an atom
number of protons and electrons present in an atom

Question Group 2

Question 2

The mass number of an isotope refers to the _____.

number of protons present in an atom
number of neutrons present in an atom
number of electrons present in an atom
number of protons and neutrons present in an atom
number of protons and electrons present in an atom

Question Group 3

Question 3

The protons of an atom are located _____.

in the nucleus and are neutral.
in the nucleus and are positively-charged.
in the nucleus and are negatively-charged.
outside the nucleus and are positively-charged.
outside the nucleus and are negatively-charged.

Question Group 4

Question 4

The neutrons of an atom are located _____.

in the nucleus and are neutral.
in the nucleus and are positively-charged.
in the nucleus and are negatively-charged.
outside the nucleus and are positively-charged.
outside the nucleus and are negatively-charged.

Question Group 5
Question 5
The electrons of an atom are located _____.
in the nucleus and are neutral.
in the nucleus and are positively-charged.
in the nucleus and are negatively-charged.
outside the nucleus and are positively-charged.
outside the nucleus and are negatively-charged.

Question Group 6
Question 6
The charge of an ion is equal to _____.
the number of neutrons
the number of electrons
the number of protons minus the number of neutrons
the number of protons minus the number of electrons
the number of neutrons minus the number of electrons

Master Difficulty Level:
Question Group 7
Question 7
An isotope contains 6 protons and 8 neutrons. Construct the symbol for the isotope.

Question 8
An isotope contains 8 protons and 10 neutrons. Construct the symbol for the isotope.

Question 9
An isotope contains 9 protons and 10 neutrons. Construct the symbol for the isotope.

Question Group 8
Question 10
An isotope contains 11 protons and 12 neutrons. Construct the symbol for the isotope.

Question 11
An isotope contains 12 protons and 14 neutrons. Construct the symbol for the isotope.

Question 12
An isotope contains 19 protons and 18 neutrons. Construct the symbol for the isotope.

Question Group 9
Question 13
An isotope of hydrogen contains 2 neutrons. Construct the symbol for the isotope.

Question 14
An isotope of lithium contains 3 neutrons. Construct the symbol for the isotope.

Question 15
An isotope of beryllium contains 4 neutrons. Construct the symbol for the isotope.

Question Group 10
Question 16
An isotope of aluminum contains 15 neutrons. Construct the symbol for the isotope.

Question 17
An isotope of silicon contains 16 neutrons. Construct the symbol for the isotope.

Question 18
An isotope of phosphorus contains 19 neutrons. Construct the symbol for the isotope.

Question Group 11
Question 19
An isotope has an atomic number of 51 and contains 70 neutrons. Construct the symbol for the isotope.

Question 20
An isotope has an atomic number of 53 and contains 76 neutrons. Construct the symbol for the isotope.

Question 21
An isotope has an atomic number of 50 and contains 68 neutrons. Construct the symbol for the isotope.

Question Group 12
Question 22
An isotope contains 22 protons and has a mass number of 48. Construct the symbol for the isotope.

Question 23

An isotope contains 26 protons and has a mass number of 58. Construct the symbol for the isotope.

Question 24
An isotope contains 30 protons and has a mass number of 68. Construct the symbol for the isotope.

Wizard Difficulty Level:
Question Group 13
Question 25
An isotope contains 21 protons, 23 neutrons, and 18 electrons. Construct the symbol for the isotope.

Question 26
An isotope contains 23 protons, 27 neutrons, and 20 electrons. Construct the symbol for the isotope.

Question 27
An isotope contains 25 protons, 30 neutrons, and 23 electrons. Construct the symbol for the isotope.

Question Group 14
Question 28
An isotope contains 37 protons, 46 neutrons, and 36 electrons. Construct the symbol for the isotope.

Question 29
An isotope contains 38 protons, 50 neutrons, and 36 electrons. Construct the symbol for the isotope.

Question 30
An isotope contains 47 protons, 61 neutrons, and 46 electrons. Construct the symbol for the isotope.

Question Group 15
Question 31
An isotope contains 15 protons, 17 neutrons, and 18 electrons. Construct the symbol for the isotope.

Question 32
An isotope contains 16 protons, 19 neutrons, and 18 electrons. Construct the symbol for the isotope.

Question 33
An isotope contains 17 protons, 20 neutrons, and 18 electrons. Construct the symbol for the isotope.

Question Group 16
Question 34
An isotope of gallium contains 37 neutrons and 28 electrons. Construct the symbol for the isotope.

Question 35
An isotope of bromine contains 44 neutrons and 36 electrons. Construct the symbol for the isotope.

Question 36
An isotope of iodine contains 63 neutrons and 54 electrons. Construct the symbol for the isotope.

Question Group 17
Question 37
An isotope of zirconium contains 52 neutrons and 38 electrons. Construct the symbol for the isotope.

Question 38
An isotope of nickel contains 31 neutrons and 26 electrons. Construct the symbol for the isotope.

Question 39
An isotope of zinc contains 35 neutrons and 28 electrons. Construct the symbol for the isotope.

Question Group 18
Question 40
An isotope of zirconium contains 52 neutrons and 38 electrons. Construct the symbol for the isotope.

Question 41
An isotope of chromium contains 28 neutrons and 21 electrons. Construct the symbol for the isotope.

Question 42

An isotope of cobalt contains 33 neutrons and 25 electrons. Construct the symbol for the isotope.