

Worksheet: Isotopes



Q1: An uncharged atom has an atomic number of 6 and a mass number of 11.



Question Video

► How many protons does that atom have?

A 6

B 5

C 17

D 11

► How many neutrons does that atom have?

A 5

B 6

C 17

D 11

► How many electrons does that atom have?

A 6

B 5

C 17

D 11

Q2: A platinum atom has the chemical symbol ${}^{195}_{78}\text{Pt}$.

► How many protons does the platinum atom have?

A 78

B 195

C 117

D 87

E 273

► How many neutrons does the platinum atom have?

A 117

B 78

C 87

D 273

E 195

Q3: The chemical element symbol for titanium-48 is ${}_{22}^{48}\text{Ti}$.

► What is the atomic number of titanium?

A 48

B 70

C 22

D 26

► What is the mass number of titanium?

A 22

B 26

C 48

D 70

Q4: Two atoms are different isotopes of the same element if they have the same ___ but different ___.

A number of electrons, numbers of protons

B atomic number, mass numbers

C number of neutrons, numbers of electrons

D number of protons, numbers of electrons

E mass number, atomic numbers



Question Video

Q5: All atoms of the same element have the same number of ___.

A neutrons

B protons

C electrons

Q6: A nitrogen atom has the chemical symbol ${}^{14}_7\text{N}$.



Question Video

► How many protons does the nitrogen atom have?

- A 9
- B 14
- C 8
- D 11
- E 7

► How many neutrons does the nitrogen atom have?

- A 8
- B 14
- C 9
- D 11
- E 7

Q7: The mass number of an atom is how many — it has.

- A protons
- B neutrons
- C protons plus electrons
- D electrons
- E protons plus neutrons

Q8: A neon atom has the chemical symbol ${}^{22}_{10}\text{Ne}$.

► How many protons does the neon atom have?

A 22

B 12

C 20

D 10

E 32

► How many neutrons does the neon atom have?

A 10

B 22

C 20

D 12

E 32

Q9: Which of the following is another name for “atomic number?”

A Neutron number

B Proton number

C Mass number

D Nucleon number

E Electron number

Q10: The atomic number of an atom is how many — it has.

A electrons

B protons

C protons plus neutrons

D neutrons

E protons plus electrons