

Name: _____

Date: _____

Class 8 Atomic Structure

Worksheet

List the three main subatomic particles found in an atom.
What are their charges?

What are isotopes and how do they differ from each other?

True or False – Evaluate the Statements:

- Atoms are most stable when their outermost shell is full. (_____)
- Neutrons have a positive charge. (_____.)

Which of the following is NOT true about isotopes?

- A) Isotopes of an element have different numbers of neutrons.
- B) Isotopes of an element have different atomic numbers.
- C) Isotopes of an element have nearly identical chemical properties

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Worksheet Answer Key

List the three main subatomic particles found in an atom.

What are their charges?

Proton (positive charge), Neutron (no charge), Electron (negative charge).

What are isotopes and how do they differ from each other?

Isotopes are variants of the same chemical element that have the same number of protons but a different number of neutrons, which affects their mass but not their basic chemical properties.

True or False – Evaluate the Statements:

- Atoms are most stable when their outermost shell is full. (**True: Atoms are most stable when their outermost shell is full.**)
- Neutrons have a positive charge. (**False: Neutrons have a neutral charge, not positive.**)

Which of the following is NOT true about isotopes?

A) Isotopes of an element have different numbers of neutrons.

B) Isotopes of an element have different atomic numbers.

C) Isotopes of an element have nearly identical chemical properties