

- 38** An experiment in which α -particles were deflected by a gold foil produced new insights into the structure of the atom.

Which conclusion can be drawn from the results of the experiment?

- A** Atomic nuclei occupy a very small fraction of the volume of an atom.
- B** Electrons orbit the atomic nucleus.
- C** Some atoms of the same element contain different numbers of neutrons.
- D** The atomic nucleus contains protons and neutrons.

- 39** A radioactive substance contains a number of identical nuclei that emit β particles