

**29** In the Rutherford scattering experiment, most  $\alpha$ -particles passed through the foil undeflected.

Which one of the following is a correct conclusion from this result?

- A**  $\alpha$ -particles were helium nuclei.
- B** The nucleus has a positive charge.
- C** Most of the mass of an atom is within the nucleus.
- D** The diameter of the nucleus is much less than the diameter of the atom.