

- 38** When  $\alpha$ -particles are fired at a thin metal foil, most of the particles pass straight through but a few are deflected by a large angle.

Which change would increase the **proportion** of  $\alpha$ -particles deflected by a large angle?

- A** using  $\alpha$ -particles with greater kinetic energy
- B** using a double thickness foil
- C** using a foil made of a metal with fewer protons in its nuclei
- D** using a source emitting more  $\alpha$ -particles per unit time