

**39** A uranium-238 nucleus,  $^{238}_{92}\text{U}$ , undergoes a series of nuclear decays to form uranium-234,  $^{234}_{92}\text{U}$ .

Which series of decays could give this result?

- A** emission of four  $\beta^-$  particles
- B** emission of four  $\gamma$ -rays
- C** emission of one  $\alpha$ -particle and two  $\beta^-$  particles
- D** emission of two  $\alpha$ -particles and eight  $\beta^-$  particles