

- 38** The first artificial radioactive substance was made by bombarding aluminium,  $^{27}_{13}\text{Al}$ , with  $\alpha$ -particles. This produced an unstable isotope of phosphorus,  $^{30}_{15}\text{P}$ .

What was the by-product of this reaction?

- A** an  $\alpha$ -particle
- B** a  $\beta$ -particle
- C** a  $\gamma$ -ray
- D** a neutron

**Space for working**