

**39** A nucleus Q has the notation  ${}^y_x\text{Q}$ .

Which of the following is an isotope of Q?

**A**  ${}^{y-1}_x\text{Q}$

**B**  ${}^y_{x-1}\text{Q}$

**C**  ${}^y_{x+1}\text{Q}$

**D**  ${}^{y-1}_{x+1}\text{Q}$

**40** In  $\beta^-$  decay, a neutron inside a nucleus changes to a proton.