

**30** A laser emits light of power  $P$ . The light consists of photons of frequency  $f$ .

The Planck constant is  $h$  and the speed of light is  $c$ .

How many of these photons are contained in a one metre length of the laser beam?

**A**  $\frac{P}{c}$

**B**  $\frac{P}{hf}$

**C**  $\frac{Pc}{hf}$

**D**  $\frac{P}{chf}$