

**2** For which quantity is the magnitude a reasonable estimate?

**A** frequency of a radio wave      500 pHz

**B** mass of an atom      500  $\mu\text{g}$

**C** the Young modulus of a metal      500 kPa

**D** wavelength of green light      500 nm

**3** A vector has magnitude  $R$  and perpendicular components  $P$  and  $Q$ , as shown in the diagram.