

Answer **all** the questions in the spaces provided.

- 1 Make reasonable estimates of the following quantities.

- (a) the frequency of an audible sound wave

frequency = Hz [1]

- (b) the wavelength, in nm, of ultraviolet radiation

wavelength = nm [1]

- (c) the mass of a plastic 30 cm ruler

mass = g [1]

- (d) the density of air at atmospheric pressure

density = kg m⁻³ [1]