

43 HOW MUCH AIR IS IN YOUR ROOM?

Investigate the volume of air in one of the rooms in your home.

- 1 Find the volume of the room you have chosen.
- 2 Find the volume of the large items of furniture in the room.
- 3 Add the volumes of all the furniture together. You could stack some of the furniture together, estimate the volume of the stack, and then use multiplicative thinking to estimate the volume of all the furniture in the room.
- 4 Work out the difference between the volume of the room and the total volume of furniture. This is the volume of air in the room.

- 5 20% or $\frac{1}{5}$ of the air is made up of oxygen. How much oxygen is in your room?

- 6 The mass of 1 m^3 of air is 1.165 kg. How heavy is the air in your room?



43 HOW MUCH AIR IS IN YOUR ROOM?

Investigate the volume of air in one of the rooms in your home.

- 1 Find the volume of the room you have chosen.
- 2 Find the volume of the large items of furniture in the room.
- 3 Add the volumes of all the furniture together. You could stack some of the furniture together, estimate the volume of the stack, and then use multiplicative thinking to estimate the volume of all the furniture in the room.
- 4 Work out the difference between the volume of the room and the total volume of furniture. This is the volume of air in the room.

- 5 20% or $\frac{1}{5}$ of the air is made up of oxygen. How much oxygen is in your room?

- 6 The mass of 1 m^3 of air is 1.165 kg. How heavy is the air in your room?

