

3.4 Respiration

Name:

1. Use the space below to draw a diagram of the lungs. Label it using the words provided.

windpipe

bronchus

bronchiole

air sac

diaphragm

2. Match each part of the lungs with its function.

windpipe (i)

(a) Gas exchange

diaphragm (ii)

(b) Brings gas into and out of the lungs

air sac (iii)

(c) Brings gas from windpipe to bronchioles

bronchus (iv)

(d) Carries gas into air sacs

bronchiole (v)

(e) Muscle at the bottom of the lungs that pulls down to draw air into the lungs

3. Using the words below, complete the equation for respiration.

energy

carbon dioxide

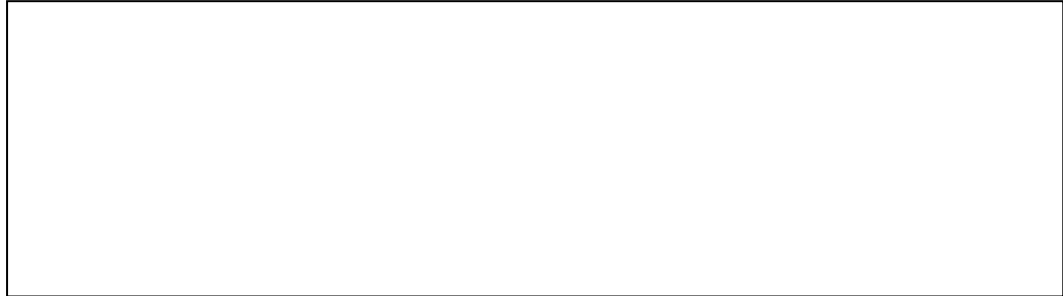
oxygen

Food + _____ → _____ + _____ + water vapour

4. Using a blank page, create an (i) information leaflet, (ii) poster **or** (iii) song to warn people of the dangers of smoking.

5. Describe what happens during gas exchange.

6. Using a diagram to show your idea, design an experiment to test the effects of smoking different brands of cigarette on lungs (Hint: You can use tissue paper instead of lung tissue).



(a) List what you need:

(b) What measurements will you make?

(c) Predict what will happen in your experiment?

(d) How accurate do you think your method will be?
