Breathing

Answers

KS3 science quick questions

This topic online

Activate 1: Structure and function of body systems | Exploring Science 8C

Q	Answer	Remember
1	lungs	Your lungs sit inside the rib cage, either side of your heart.
2	trachea	Rings of cartilage keep the trachea open, like the ridges on a vacuum cleaner hose.
3	bronchus	One bronchus, two bronchi.
4	bronchioles	The airways branch like an upside-down tree.
5	alveoli	Alveoli look like bunches of tiny grapes. This is where gases swap over.
6	oxygen	Oxygen goes in, carbon dioxide comes out.
7	carbon dioxide	Carbon dioxide is made by respiration in your cells.
8	diffusion	Each gas moves from where there is more of it to where there is less.
9	diaphragm	The diaphragm is dome-shaped when relaxed and flattens when it contracts.
10	intercostal muscles	Inter means between and costal means ribs.
11	increases	Ribs up and out, diaphragm down: more space inside the chest.
12	decreases	Bigger space means lower pressure, so air rushes in from outside.
13	exhaling	Breathing in is inhaling, breathing out is exhaling.
14	asthma	An inhaler relaxes the muscles around the airways so they open up.
15	tar	Tar also contains chemicals that can cause cancer.
16	7 litres	0.5 × 14 = 7 litres.
17	3200 cm3	1 litre = 1000 cm^3, so multiply by 1000.
18	cilia	With no working cilia, mucus builds up, which is why smokers cough.
19	They give a very large surface area, so lots of oxygen can diffuse into the blood quickly.	Spread out flat, your alveoli would cover about half a tennis court.
20	Your muscles respire faster, so you need more oxygen in and more carbon dioxide out.	Fitter people can take deeper breaths, so they need fewer of them.

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