

9 Gas exchange – Part 1 — Answers

Answers

Work through these after trying the questions yourself.

9.1 trachea → bronchi → bronchioles → alveoli.

9.2 They hold the airway open so it does not collapse when you breathe in.

9.3 The goblet cells make mucus that traps dust and microbes; the cilia beat to sweep the dirty mucus up to the throat to be swallowed.

9.4 The alveoli.

9.5 It makes the airway narrower.

9.6 With the cilia damaged, mucus (with trapped dust and microbes) is not swept away, so it builds up and the person coughs to clear it.

9.7 A non-smoker's cilia sweep the trapped dust and microbes out of the lungs in mucus. A smoker's cilia are damaged and cannot do this, so the dirt and microbes stay in the lungs, where they can cause infections and damage the tissue.