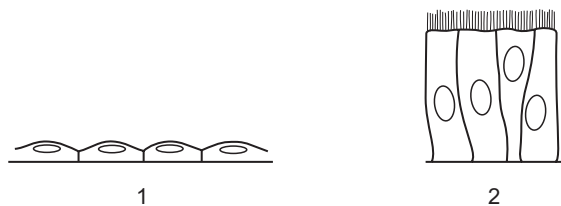


34 Two types of epithelial cells, 1 and 2, occur in the mammalian gas exchange system in a healthy human.



Which row shows the function and distribution of these types of epithelial cells?

	cell type 1	cell type 2
A	absorption in bronchi	secrete mucus in alveoli
B	exchange surface in alveoli	secrete mucus in bronchi
C	absorption in bronchi	move mucus in alveoli
D	exchange surface in alveoli	move mucus in bronchi

35 Which tissues would be seen in a photomicrograph of the wall of the trachea?

	elastic fibres	smooth muscle
A	x	✓
B	✓	x
C	✓	✓
D	x	x

key
 ✓ = present
 x = not present

36 The diagram shows parts of the gas exchange system in humans and the associated cells or structures.

alveolus	ciliated cells
bronchiole	squamous epithelial cells
bronchus	C-shaped rings of cartilage
trachea	ciliated cells and goblet cells

Which diagram shows the lines that correctly match the parts to their cells or structures?

A

B

C

D

37 The photomicrograph shows the wall of a bronchus as seen with a light microscope.

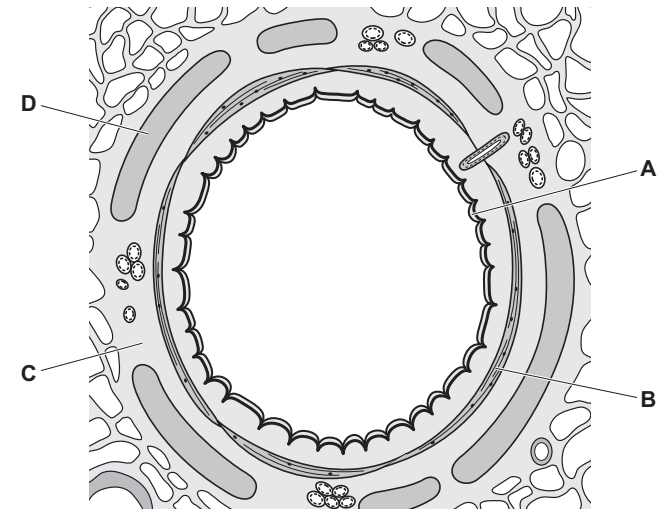


Which row correctly identifies the structures labelled?

	X	Y	Z
A	epithelium	elastic fibres	bronchiole
B	endothelium	smooth muscle	bronchiole
C	epithelium	smooth muscle	blood vessel
D	endothelium	elastic fibres	blood vessel

34 The diagram shows a transverse section through a human bronchus.

Which labelled tissue is the cartilage?

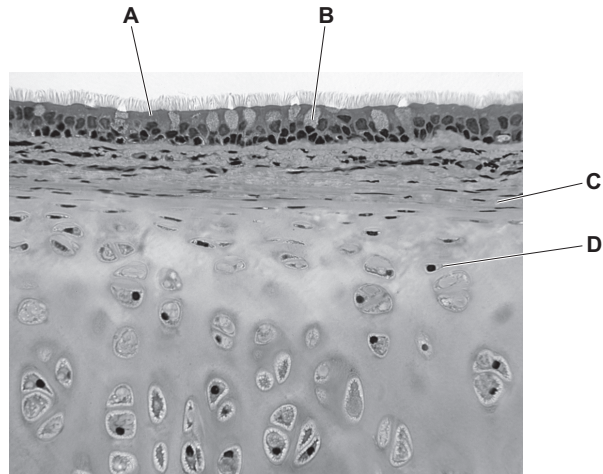


35 What helps to maintain a concentration gradient between blood and the air in the alveolus?

- A the flow of blood through the lungs
- B the presence of haemoglobin in blood cells
- C the single-celled alveolar walls
- D the squamous epithelium of capillaries

35 The photomicrograph shows a transverse section of part of the human gas exchange system.

Which row shows the correct name and function of one of the labelled structures in the photomicrograph?



	name	function
A	ciliated epithelial cell	traps particles
B	goblet cell	secretes mucus
C	cartilage	prevents collapse of trachea
D	smooth muscle	contracts to expand airways