

- 1 The kidneys filter blood, separate useful molecules from excretory wastes and control the water content of the blood.

Diagram **A** is of a kidney tubule and associated blood vessels. The arrows show the direction of blood flow.

Diagram **B** is a drawing of a vertical section through a cell from the lining of region 2 of the tubule.

diagram A

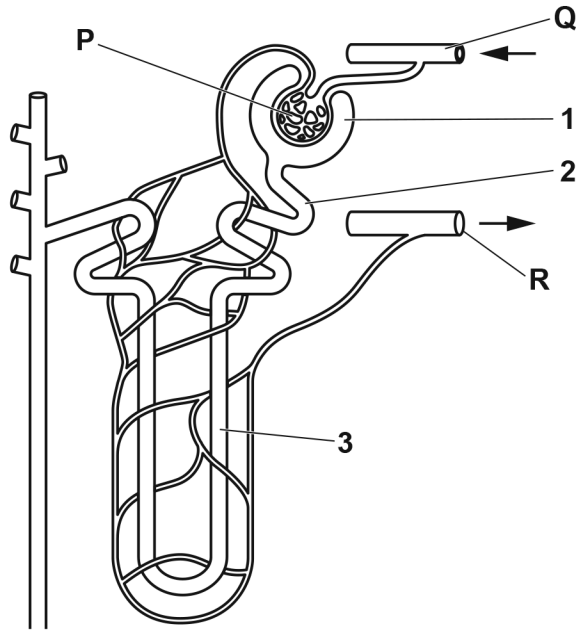
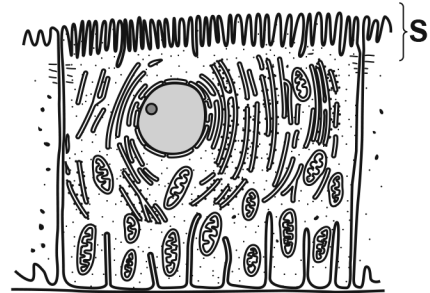


diagram B



The structures labelled **S** on **diagram B** are microvilli.

Explain the importance of the microvilli on the surface of these cells.

.....

.....

.....

.....

.....

[2]

[Total: 2]

2 The kidney filters the blood and produces a liquid called urine.

State **three** substances that are found in the urine of a healthy person.

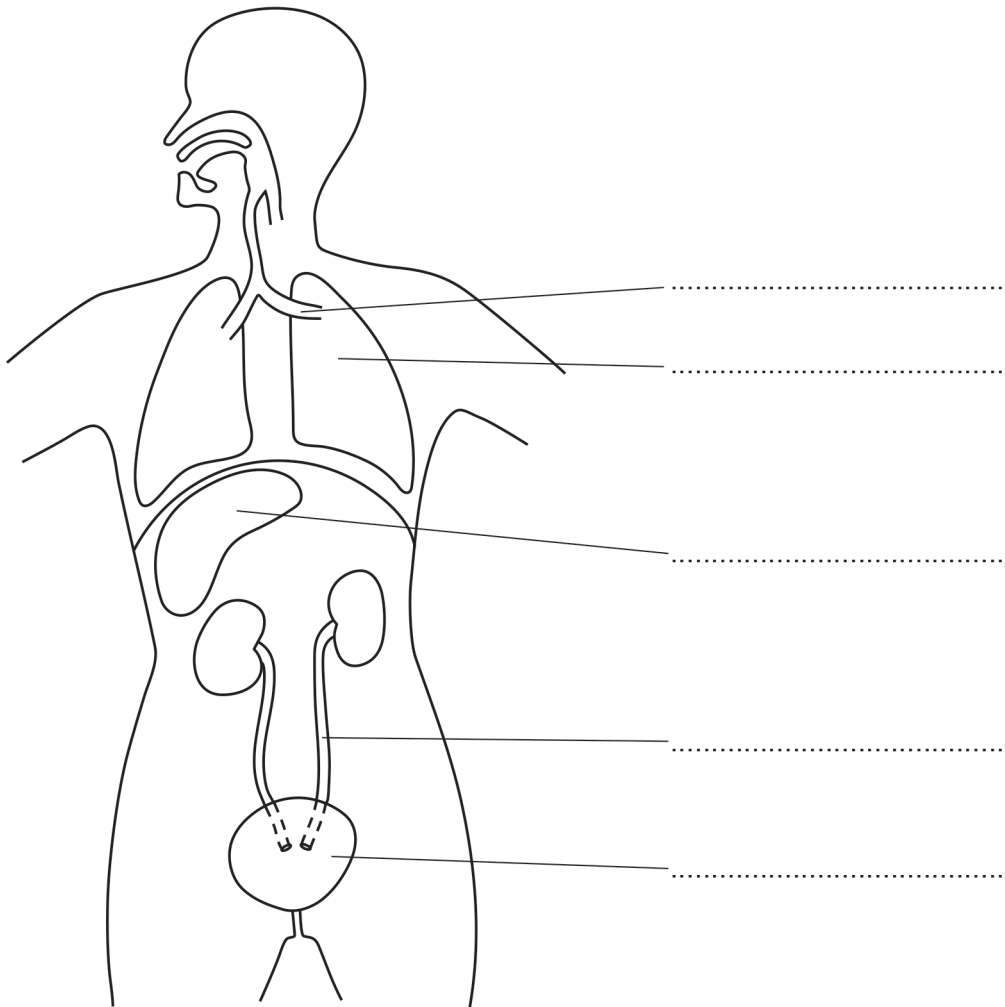
1

2

3 [3]

[Total: 3]

3 The diagram shows some of the structures involved in excretion.



Complete the diagram by labelling the structures in the spaces provided.

Choose structures from the list:

bladder bronchus heart liver lung

pancreas trachea ureter urethra

[5]

[Total: 5]

4 Kidneys are important for excretion.

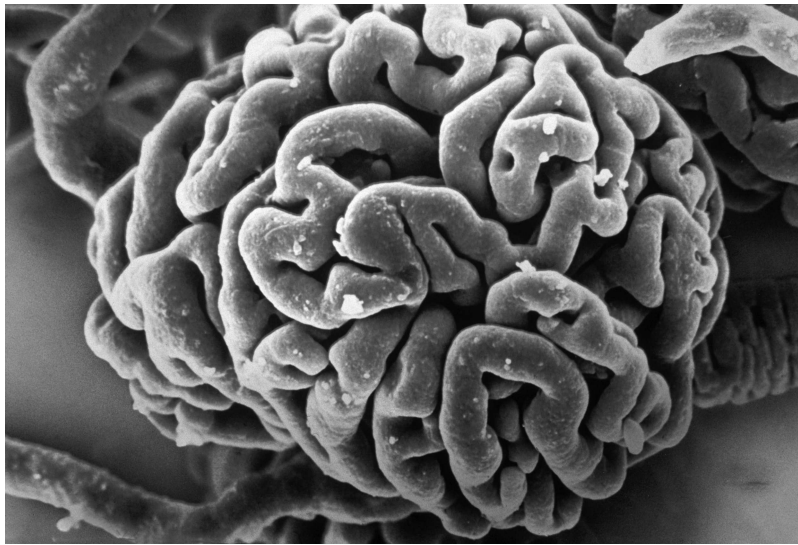
Explain the purpose of excretion.

.....
.....
.....

[2]

[Total: 2]

5 The photomicrograph is of a glomerulus in a kidney.



Describe the structure of a glomerulus.

You may refer to the photomicrograph in your answer.

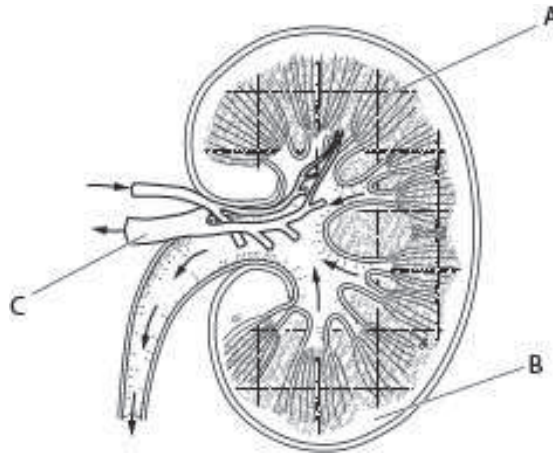
.....
.....
.....
.....
.....

[2]

[Total: 2]

6 One of the roles of the kidney is to filter the blood.

The diagram shows a section of a kidney.



State the name of the parts labelled **A**, **B** and **C** on the diagram.

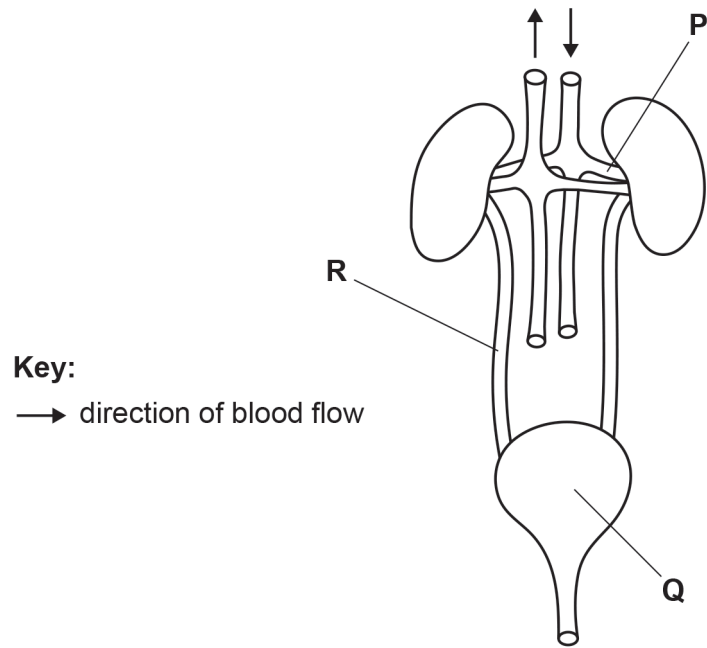
A

B

C [3]

[Total: 3]

7 The diagram is of part of the human excretory system and associated blood vessels.



State the names of parts **P**, **Q** and **R** in the diagram.

P

Q

R [3]

[Total: 3]