

13 Excretion and the kidneys – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	Write it 3 times (English)		
Excretion	_____	_____	_____
carbon dioxide	_____	_____	_____
respiration	_____	_____	_____
lungs	_____	_____	_____
urea	_____	_____	_____
liver	_____	_____	_____
kidneys	_____	_____	_____
ions	_____	_____	_____
urine	_____	_____	_____
ureters	_____	_____	_____
bladder	_____	_____	_____
urethra	_____	_____	_____

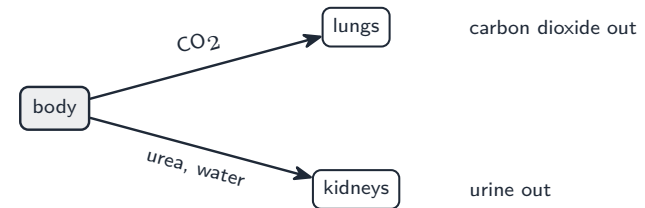
Recall

Excretion is removing the waste products your body's reactions make, and any substances in excess.

New ideas

Read these first, then do the Practice.

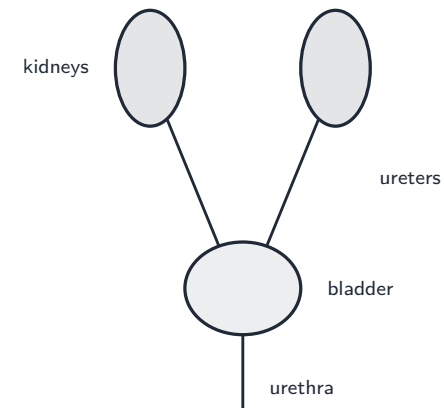
1 Two main wastes



- **carbon dioxide** – made in **respiration**, breathed out through the **lungs**;
- **urea** – made in the **liver**, removed by the **kidneys** with excess water and **ions**.

2 The urinary system

The kidneys clean the blood and make **urine**:



kidneys → **ureters** → **bladder** → **urethra** → out.

Watch out: **excretion** removes waste the body *makes* (carbon dioxide, urea) – it is not the same as egestion (undigested food). Carbon dioxide leaves through the **lungs**; urea is made in the **liver** but removed by the **kidneys**.

Practice

Try these in order.

13.1 What is *excretion*? [1]

13.2 Which waste gas leaves the body through the lungs? [1]

13.3 Where in the body is urea made? [1]

13.4 Which organs remove urea from the blood? [1]

13.5 Put these in order, from kidney to outside: bladder, urethra, ureter, kidney. [2]

13.6 Challenge. Carbon dioxide and urea are both excreted, but leave by different organs. State the organ that removes each, and where each waste is made. [3]