



Give the marks for the points in the marking scheme; an answer in other words that says the same is right.

1 Key words

1. nutrition
2. excretion
3. reproduction
4. photosynthesis
5. stomata
6. autotrophs

K • 3

Each carries 0.5 mark.

2 Label the diagram

1. air in: oxygen
2. air out: carbon dioxide

3. lungs
4. energy

U • 2

Each carries 0.5 mark.

3 Multiple choice

- i. a. spiracles

K • 1

Insects take in air through **spiracles**, tiny holes along their sides.

- ii. d. excretion

K • 1

Excretion is getting rid of wastes.

- iii. d. a cat

U • 1

A cat is a mammal. It gives birth to kittens. Birds, crocodiles and most snakes lay eggs.

- iv. d. to get energy from food

U • 1

Oxygen breaks down food in the body to **give energy**.

- v. c. a mustard plant

A • 1

A **mustard plant** is green. It makes its own food, so it is an autotroph. The mushroom, the goat and the tiger take food from others: they are heterotrophs.

4 Correct or wrong?

MARKING SCHEME

U • 4

- ✓ i. Correct, ✓ (oxygen breaks down food to give energy).
- ✓ ii. Wrong, X (in respiration they take in oxygen and give out carbon dioxide; the other way round is photosynthesis).
- ✓ iii. Correct, ✓ (with their gills).
- ✓ iv. Wrong, X (mostly from the stem and its bark).

5 How do they breathe?

1. fish → c. gills
2. human → d. lungs
3. grasshopper → a. spiracles
4. earthworm → e. skin

K • 2

Each carries 0.5 mark.



6 Very short answers

a. MARKING SCHEME

K · 1

- ✓ Chlorophyll.

b. MARKING SCHEME

U · 1

- ✓ "Is eaten by" (the food goes from the grass to the deer to the lion).

7 Short answers

a. MARKING SCHEME

U · 2

- ✓ Autotrophs make their own food; heterotrophs can't, and take food from others.
- ✓ Any second difference, e.g. autotrophs have green chlorophyll and heterotrophs have none; autotrophs are green plants (mango, grass), heterotrophs are animals and mushrooms.

b. MARKING SCHEME

U · 2

- ✓ Breathing is taking in oxygen and giving out carbon dioxide, in the breathing organs (lungs).
- ✓ Respiration is breaking down food with oxygen to get energy, in every part of the body.

8 Think

ANSWER

HA · 2

Transportation. The medicine dissolves in the stomach and passes into the blood. The heart pumps the blood all round the body. So the medicine reaches every part, including the part that hurts, such as the head.

MARKING SCHEME

- ✓ Transportation.
- ✓ The medicine passes from the stomach into the blood, and the heart pumps the blood all round the body, so it reaches the part that hurts.

9 Activity: Leaves give off water (Activity 5.5)

(not marked)

WHAT STUDENTS SHOULD FIND

The inside of the bag turns misty, because the leaves give off water vapor. Then drops of water form inside it, because the vapor cools on the plastic and turns into water. This is transpiration.

Marks by level	Knowledge	Understanding	Application	Higher ability	Total
Marks	8	13	1	2	24

