

WORKSHEET

Full marks 33

Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 33

[4]

Column A		Column B
1. xylem	☐	a. stores urine
2. phloem	☐	b. tiny air sacs in the lungs where gases are exchanged
3. transpiration	☐	c. carries urine from the kidneys to the bladder
4. guttation	☐	d. holes along an insect's body through which air enters
5. urinary bladder	☐	e. water leaving a plant as vapor through the stomata
6. spiracles	☐	f. small openings in the bark of woody stems
7. alveoli	☐	g. water leaving a leaf as drops through hydathodes
8. lenticels	☐	h. carries food made in the leaves, up and down
		i. carries water and minerals up from the roots

[5]

Choose the correct option for each of the following questions.

- i. In which process do the body's waste products reach the excretory organs? [1]
 - a. respiration
 - b. transportation
 - c. excretion
 - d. reproduction
- ii. Which of these is the respiratory organ of insects? [1]
 - a. stomata
 - b. spiracle
 - c. lenticels
 - d. skin
- iii. Which statement is true about the excretion of extra water by plants? [1]
 - a. Plants excrete extra water only as vapor.
 - b. Plants excrete extra water only as drops.
 - c. Plants excrete extra water both as a gas (vapor) and as a liquid (drops).
 - d. Plants excrete extra water in all three states: solid, liquid and gas.
- iv. Which life process does this word equation describe? [1]

glucose + oxygen $\rightarrow$ water + carbon dioxide + energy

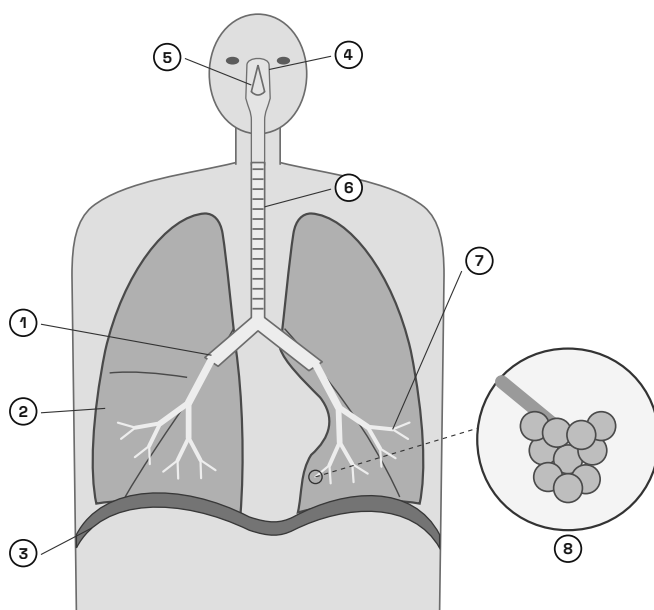
 - a. digestion
 - b. transportation
 - c. excretion
 - d. respiration
- v. How does transportation take place in many-celled animals like Sycon and other sponges? [1]
 - a. through a canal system
 - b. through special tissues
 - c. through the cell membrane
 - d. through the coelenteron



3 Label the diagram

[4]

The diagram shows the human respiratory system. Write the names of the parts numbered 1 to 8. Each carries 0.5 mark.



- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |

4 Very short answers

[4]

Write very short answers to the following questions.

a. Write the word equation of respiration.

[1]

b. Name the organ through which a fish takes in oxygen.

[1]

c. What do the kidneys remove from the blood as urine? Name any one substance.

[1]

d. Through which openings does a sponge let water out?

[1]



5 Short answers

[10]

Write short answers to the following questions.

- a. Write any two differences between respiration and breathing.

[2]

- b. How do unicellular animals excrete?

[2]

- c. Write any two differences between respiration in insects and in fish.

[2]

- d. Give a reason: germinating seeds, not dry seeds, are used to show that plants give out carbon dioxide.

[2]

- e. Give a reason: a potted plant that is always kept too wet can die.

[2]

6 Long answer

[4]

Write a long answer to the following question.

Describe excretion in the human body in short.



7 Think

[2]

Think, then answer.

Why do both breathing and the heartbeat speed up while running? Explain.

8 Activity: Colored water climbs a stem (Activity 5.1)

(not marked)

Stand a white flower on its stalk (a white rose, carnation or sayapatri) in a glass of water with a few drops of ink. Look at the petals at the times in the table.

Time	What the petals look like
at the start	
after half an hour	
after a few hours	
the next morning	

Which tissue of the stalk carried the colored water up?

