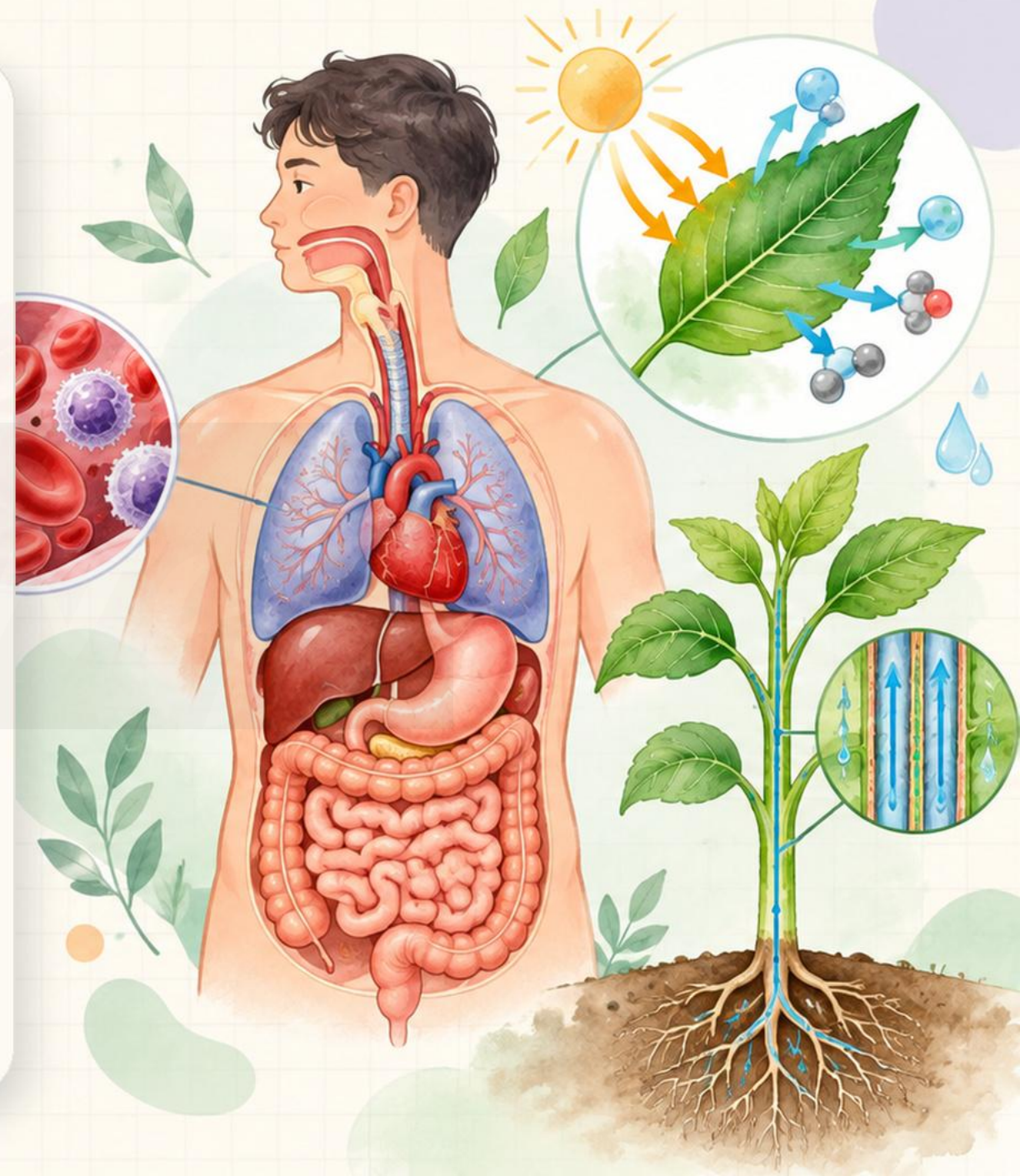


SCIENCE • CLASS 10

CHAPTER 5

Life Processes

NCERT SOLUTIONS



EXCRETION AND WATER TRANSPORT

Exercise 1 — The kidneys in human beings are part of the system for:

- | | |
|---------------|--------------------|
| (a) Nutrition | (b) Respiration |
| (c) Excretion | (d) Transportation |

Answer: (c) Excretion.

Kidneys remove dissolved nitrogenous wastes and excess water and salts from blood to form urine.

Exercise 2 — Xylem in plants is responsible for:

- | | |
|------------------------------|-------------------------|
| (a) Transport of water | (b) Transport of food |
| (c) Transport of amino acids | (d) Transport of oxygen |

Answer: (a) Transport of water.

Xylem carries water and dissolved minerals from roots to other parts of the plant.

NUTRITION AND RESPIRATION

Exercise 3

The autotrophic mode of nutrition requires:

- (a) Carbon dioxide and water
- (b) Chlorophyll
- (c) Sunlight
- (d) All of the above

Answer: (d) All of the above.

Green plants use sunlight trapped by chlorophyll to make food from carbon dioxide and water.

Exercise 4

Breakdown of pyruvate to give carbon dioxide, water and energy takes place in:

- (a) Cytoplasm
- (b) Mitochondria
- (c) Chloroplast
- (d) Nucleus

Answer: (b) Mitochondria.

In aerobic respiration, pyruvate is broken down in mitochondria using oxygen.

DIGESTION OF FATS

Exercise 5 — How are fats digested in our bodies? Where does this process take place?

Site: Mainly the small intestine.

1. Bile from the liver breaks large fat globules into small droplets. This is emulsification; it increases the surface area for enzymes.
2. Pancreatic and intestinal lipases act on these droplets and break fats into fatty acids and glycerol.



Bile helps digestion but is not a digestive enzyme. Lipase carries out the chemical breakdown of fats.

ROLE OF SALIVA

Exercise 6 — What is the role of saliva in the digestion of food?

- Saliva moistens and softens food. It helps form a bolus that is easier to swallow.
- Salivary amylase begins the chemical digestion of starch in the mouth, breaking it into simpler sugars.

Starch $\xrightarrow{\text{salivary amylase}}$ simpler sugars

This is the beginning of carbohydrate digestion, not the complete digestion of all food.

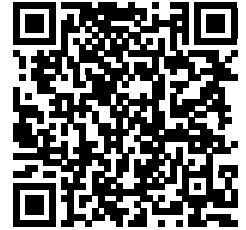


FREE PREVIEW

[Click here to visit our website](#)

SCHOOL NOTES & NCERT SOLUTIONS

Complete notes and
NCERT solutions are
available on
FirstHope app only.



[Scan or click here](#)

Click here to get the app



Available on Google Play

JOIN THE FIRSTHOPE COMMUNITY

Join our Telegram channel

Click here to join Telegram



[Scan or click here](#)

@FirstHope_CBSE_Notes

Instagram

@firsthope.school

[Click here to follow >](#)

YouTube channel

@firsthope.school

[Click here to watch >](#)

FirstHope website

firsthope.co.in

[Click here to visit our website >](#)

CBSE / Class 9 / Class 10 / Class 11 / Class 12

Preview notes and NCERT solutions. Full PDFs in the FirstHope app.