



SUBJECT: SCIENCE

**REVISION SHEET
CLASS-VIII**

TERM 1

Chapter-2: The Invisible Living World: Beyond Our Naked Eye

1. Choose the correct option:

- i. Since ancient times 'X' has been used for the large-scale production of alcohol or wine. The conversion of sugar to alcohol is known as 'Y'? What is 'X'?
a) Lactobacillus b) Streptococcus c) Yeast d) Penicillin
- ii. A slice of bread is accidentally left uncovered on a kitchen table during the rainy season. After a few days, patches of greyish-white mould appear on its surface. Which of the following factors most likely contributed to the rapid growth of the fungus on the bread?
I. Availability of nutrients from the bread
II. Warm and humid environmental conditions
III. Lack of moisture on the bread surface
a) Only I b) I and II c) II and III d) I, II and III

2. In each of the following questions, two statements are given one labelled. Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions the codes (a), (b), (c) and (d) as given below:

a) Both A and R are true, and R is correct explanation of the assertion.

b) Both A and R are true, but R is not the correct explanation of the assertion

c) A is true, but R is false

d) A is false, but R is true.

- i. **Assertion:** Rhizobium bacteria play a significant role in naturally enhancing the nitrogen content of soil, thereby improving its fertility and supporting better crop yield.

Reason: These bacteria live in specialized structures called foot nodules found in the roots of cereal crops such as wheat and rice.

- ii. **Assertion:** The cell wall is present in animal cell.

Reason: The cell wall gives strength and rigidity to the plant cell.

3. Answer the following questions.

1. How does Rhizobium benefit legume plants?
2. How does temperature affect the growth of microorganisms? Support your answer with example from curd making.
3. Explain the importance of microorganisms in agriculture, medicine, food industry, and the environment.
4. (a) Draw any two protozoa and write their names.
(b) Any two human cells and write their names.

4. Answer the following case study-based question:

A farmer decides to stop using chemical fertilizers and instead uses a compost pit made from kitchen waste, vegetable peels, and dry leaves. He also starts planting leguminous crops such as gram and beans between cereal crop seasons. Over time, he notices improved soil fertility and better plant growth.

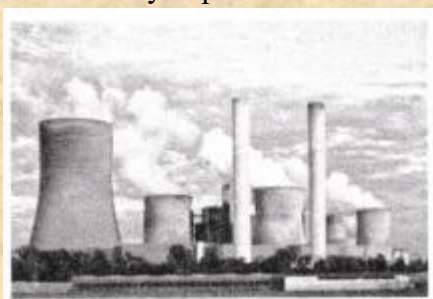


- (i) Which types of microorganisms are responsible for breaking down kitchen waste in the compost pit?
- (ii) Why is it important to add both dry and wet waste to the compost pit?
- (iii) What environmental benefit does composting offer over using synthetic fertilizers?

Chapter-3: Health: The Ultimate Treasure

1. Choose the correct option:

- i. Which factor commonly increases risk of NCDs?
 - a) Playing outdoors
 - b) Balanced diet
 - c) Longer lifespans and less physical activity
 - d) Handwashing
- ii. A person notices that whenever walking near an industrial area, breathing feels difficult and eyes start to water. What is the most likely explanation?



- a) Clean air in industrial zones contains extra moisture
 - b) Factories release pollutants that irritate the respiratory system
 - c) Dust in clean air causes discomfort
 - d) Fresh air increases sensitivity to smells
2. In each of the following questions, two statements are given one labelled. Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions the codes (a), (b), (c) and (d) as given below:
- a) Both A and R are true, and R is correct explanation of the assertion.
 - b) Both A and R are true, but R is not the correct explanation of the assertion

c) A is true, but R is false

d) A is false, but R is true.

i. **Assertion:** Typhoid is a non-communicable disease.

Reason: Typhoid mainly spreads through contaminated food and water.

ii. **Assertion:** Wearing masks in crowded places cannot help prevent the spread of diseases.

Reason: Masks stop germs from spreading through the air when a person coughs or sneezes.

3. Answer the following questions.

1. What does the Air Quality Index (AQI) tell us?
2. Describe two ways to prevent the spread of the flu.
3. How do antibiotics work, and why is it important to complete the prescribed course of antibiotics?
4. Explain any four communicable diseases that spread through air, mentioning their casual agents, site of infection and preventive measures.

4. Answer the following case study-based question:

Aryan recently learned that health is more than just the absence of disease. It involves feeling good physically, mentally, and socially. He understood that physical health includes eating nutritious food, exercising, and getting enough sleep. Mental health means managing stress, staying positive, and having a good mindset. Social health is about having healthy relationships with friends and family. Aryan realized that to truly be healthy, he needed to focus on all these areas, not just on physical health. Aryan's friend, Rohan, however, often looked stressed, complained of tiredness, and had trouble focusing. Rohan was always glued to his phone, skipped meals, and had trouble sleeping. Aryan wondered how he could help Rohan achieve a better balance for better health.

- (i) What does WHO mean by health being a state of complete physical, mental, and social well-being?
- (ii) How do lifestyle choices, like diet and exercise, affect physical health?
- (iii) How could Aryan help Rohan adopt a healthier lifestyle to improve his mental and physical health?

Chapter-4: Electricity: magnetic and Heating effects

1. Choose the correct option:

- i. What happens to the compass needle when the switch is turned on an electric current rose to the wire?
 - a) The needle disappears
 - b) The needle points to the south
 - c) The needle deflects from its original position
 - d) The needle breaks
- ii. Which change will increase the strength of an electromagnet?
 - a) Using fewer turns of wire
 - b) Reducing current
 - c) Inserting a soft iron core
 - d) Removing the battery

2. In each of the following questions, two statements are given one labelled. Assertion

(A) and the other labelled Reason (R). Select the correct answer to these questions the codes (a), (b), (c) and (d) as given below:

a) Both A and R are true, and R is correct explanation of the assertion.

b) Both A and R are true, but R is not the correct explanation of the assertion

c) A is true, but R is false

d) A is false, but R is true.

i. **Assertion:** A dry cell is preferred over voltaic cell for use in portable electric devices.

Reason: The dry cell uses a thick paste like electrolyte and is easier to carry.

ii. **Assertion:** An electromagnet loses its magnetism permanently if electricity is stopped once.

Reason: When current flows through a conducting coil it acts like a magnet. If current stops it stops acting like a magnet and if current starts flowing again then it turns into a magnet.

3. Answer the following questions.

1. State Oersted's finding and its importance.

2. How can you make a simple electromagnet at home?

3. Mention two ways to increase the heat produced in a wire.

4. How can you light an LED with lemons? Explain with diagram.

4. Answer the following case study-based question:

While experimenting in the lab, Aakarsh noticed that the wire in the electric heater he was testing became warm. He learned that this is due to the heating effect of electric current, which occurs when current flows through a conductor and some of the electrical energy is converted into heat energy. Aakarsh was amazed to find that many household appliances like electric stoves, irons, and kettles use this heating effect to perform their functions.

(i) What is the heating effect of electric current, and why does it happen?

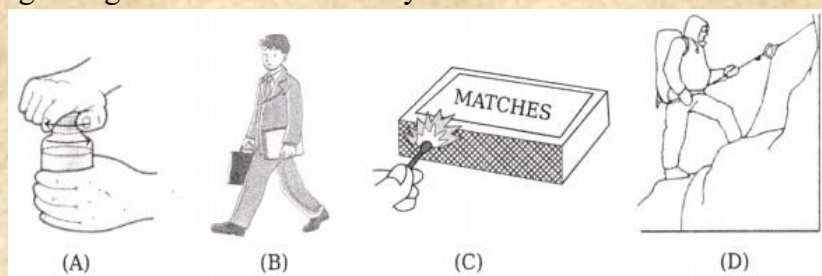
(ii) What factors affect the amount of heat produced in a conductor?

(iii) Describe how the heating effect of electric current is used in appliances like electric heaters and irons.

Chapter-5: Exploring forces

1. Choose the correct option:

i. Study the diagrams given below. How many of these actions involve the use of friction?



a) only A and C

b) only C

c) only B and D

d) all of them

ii. When you stretch a rubber band which force are you applying?

a) magnetic force

b) frictional force

c) muscular force

d) gravitational force

2. In each of the following questions, two statements are given one labelled. Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions the codes (a), (b), (c) and (d) as given below:

- a) Both A and R are true, and R is correct explanation of the assertion.**
- b) Both A and R are true, but R is not the correct explanation of the assertion**
- c) A is true, but R is false**
- d) A is false, but R is true.**

- i. **Assertion:** A magnet repels plastic because it is non-metallic.
Reason: Magnetic force acts only on magnetic materials like iron, cobalt, and nickel,
- ii. **Assertion:** A positively charged body attracts and other positive charged body
Reason: Objects fall towards the Earth because it pulls them.

3. Answer the following questions.

- 1. How does friction depend on the nature of surfaces?
- 2. A 1 kg object has a weight of about 10 N on Earth. What will be its weight on the Moon
- 3. Describe working of spring balance with the help of diagram.
- 4. Which force helps objects float on water? Explain with an activity and name the principle behind it.

4. Answer the following case study-based question:

A student noticed a large cardboard box lying on the classroom floor. He tried to move it by pushing, pulling, and lifting it. He realized that sometimes the box moved easily, and sometimes it barely moved, depending on how much effort he applied.



- (i) What common scientific term describes all these actions?
- (ii) Mention two effects of force seen in this situation.
- (iii) Can force exist without interaction between two objects? Give reasoning.

Chapter-6: Pressure, Winds, Storms, and Cyclones

1. Choose the correct option:

- i. Wind is mainly caused by:
 - a) Difference in air pressure
 - b) Gravity
 - c) Rainfall
 - d) Clouds
- ii. Lightning is produced when:
 - a) Sun heats clouds
 - b) Charges in clouds and ground discharge suddenly
 - c) Wind speed becomes zero
 - d) Air becomes very cold

2. In each of the following questions, two statements are given one labelled. Assertion

(A) and the other labelled Reason (R). Select the correct answer to these questions the codes (a), (b), (c) and (d) as given below:

- a) Both A and R are true, and R is correct explanation of the assertion.
- b) Both A and R are true, but R is not the correct explanation of the assertion
- c) A is true, but R is false
- d) A is false, but R is true.

- i. **Assertion:** Atmospheric pressure acts only downward.
Reason: Air exerts pressure in all directions.
- ii. **Assertion:** It is safer to keep doors and windows closed during a storm.
Reason: Keeping doors and windows open reduces the pressure difference between the inside and outside of the house preventing the roof from blowing off.

3. Answer the following questions.

- 1. How do high-speed winds cause roofs to fly away?
- 2. How does a sea breeze form? Explain.
- 3. How does lightning form inside storm clouds?
- 4. Describe in detail the formation of a cyclone. Give a suitable diagram to explain the phenomenon.

4. Answer the following case study-based question:

During a thunderstorm Priya noticed strong winds blowing accompanied by lightning and heavy rainfall she saw three branches swaying and some rooftops being damaged she recalled her teacher's advice and stayed indoors away from electric appliances.

- (i) What kind of storm was Priya experiencing?
- (ii) Why should electrical appliances not be used during lightning?
- (iii) What signs of damage did Priya observe during the thunderstorm?

Chapter-7: Electricity: magnetic and Heating effects

1. Choose the correct option:

- i. Which of the following statements is not correct for liquid state?
 - a) Particles are loosely packed in the liquid state
 - b) Fluidity is the maximum in the liquid state
 - c) Liquids can be compressed
 - d) Liquids take up the shape of any container in which these are placed
- ii. What happens when you compress the air inside a syringe by pushing the plunger?
 - a) The particles move farther apart
 - b) the volume increases
 - c) The particles stop moving
 - d) The particles come closer together

2. In each of the following questions, two statements are given one labelled. Assertion

(A) and the other labelled Reason (R). Select the correct answer to these questions the codes (a), (b), (c) and (d) as given below:

- a) Both A and R are true, and R is correct explanation of the assertion.
 - b) Both A and R are true, but R is not the correct explanation of the assertion
 - c) A is true, but R is false
 - d) A is false, but R is true.
- i. **Assertion:** We can move our finger through water without permanently breaking it.
Reason: Interparticle attractions in liquids are stronger than in solids.
 - ii. **Assertion:** When sugar dissolves in water the water level does not rise much.
Reason: Sugar particles occupy the spaces between water particles.

3. Answer the following questions.

1. How do interparticle forces differ in solids, liquids, and gases?
2. How does soap help in removing oil stains from clothes?
3. Explain how the thermal energy of particles effects the physical state of matter.
4. The melting point of ice is 273.15 K. What does this mean? Explain in detail.

4. Answer the following case study-based question:

Amanpour 200 ML of water into a glass then he transferred the water into a bowl and finally into a flat dish he noticed that the water took the shape of each container but the amount of water remained the same.

- (i) Which state of matter is being described here?
- (ii) Why did the volume of the water not change in different containers?
- (iii) If this experiment is repeated with honey in place of water than what would be the observations?