Brain International School

Vikas Puri, New Delhi

REVISION SHEET

SUBJECT: SCIENCE **CLASS-VI** **TERM 1**

Chapter -1: Diversity in the living World

1**. Choose the correct option:**

i. Which of the following is NOT a characteristic of living things?

a) They grow b) They breathe

c) They reproduce d) They do not need food

ii. The ability of living things to respond to changes in their environment is called:

a) Growth b) Respiration

c) Stimulus and Response d) Reproduction

2. In each of the following questions, two statements are given one labeled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from 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) Both assertion and reason are false.

Assertion: Cactus plants have spines instead of leaves.

Reason: Spines help to reduce water loss in desert plants.

3. Answer the following question

1. Give two differences between terrestrial and aquatic animals.
2. Explain three adaptations of desert animals with examples.
3. Differentiate between herb shrub and tree.

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4. How do plants in snowy regions survive? Give examples.

5 Draw the diagrams of the following:

a) Monocotyledon and dicotyledon seed

b) Tap root and fibrous root system

c) Parallel and reticulate venation

4. Answer the following case study-based question

Ravi visited different places during his vacation — a desert, a hilly region, and a pond near his village. In the desert, he saw camels, cactus plants, and some lizards. In the hilly region, he noticed pine trees and yaks. Near the pond, he saw lotus plants, fish, and frogs. When he came back, he told his teacher that animals and plants look different in different places because they are adapted to live in their surroundings.

1. Name two adaptations of cactus that help it survive in the desert.
2. Why do pine trees have needle-like leaves?
3. How do fish breathe in water?
4. Which animal in the case study can live both on land and in water? What is this kind of animal called?
5. Give one adaptation of camels that helps them move easily on sand.

Chapter 2 Mindful Eating a Path to healthy body

1. **Choose the correct option**:
   i. Which of the following is a benefit of mindful eating?
      a) Overeating
      b) Better digestion
      c) Ignoring hunger signals
      d) Eating while watching TV
   ii. Mindful eating means:
      a) Eating as fast as possible
      b) Eating without thinking
      c) Paying full attention to what and how you eat
      d) Skipping meals to stay fit

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 from 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) Both assertion and reason are false.

   Assertion- Eating while watching TV supports mindful eating.

   Reason- Distractions during meals help you enjoy food more.

3. **Answer the following question.**
   1. Why does Balance diet differ with age groups?
   2. Define deficiency diseases with examples.
   3. Enlist an activity to test the presence of fats.
   4. Explain an activity to test the presence of Carbohydrates.
   5. Explain an activity to test the presence of proteins.

4. Case study-based question.

Anita's school organised a "Healthy Food Day" where students were encouraged to bring nutritious and eco-friendly food. Anita brought a traditional millet dish from her home. She told her classmates that millets are healthy, require less water to grow, and are good for the environment. Her friend Rahul brought a fruit salad made with apples and bananas bought from a faraway city. The teacher explained that the distance food travels from farms to our plates is called "food miles," and foods with high food miles can increase pollution because of transport emissions.

1. What are millets, and why are they considered healthy?
2. How do millets benefit the environment compared to other grains?
3. What is meant by "food miles"?
4. Why is it better to eat food that has travelled fewer food miles?

Chapter 3 Measurement of length and Motion

1. Choose the correct option:

i. Which instrument is used to measure the length of a curved line?

a) Ruler b) Measuring tape

c) Meter scale d) Vernier caliper

ii. Which of the following is an example of motion?

a) A tree grow b) A parked car

c) A person sitting still d) A moving train

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 from 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.

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c) A is true, but R is false.

d) Both assertion and reason are false.

Assertion- Motion means an object changes its position with time.

Reason- If an object is at rest, it is also said to be in motion.

3. Answer the following question

1. Why is a measuring tape preferred over a ruler for measuring curved lines?
2. Define reference point.
3. Differentiate between rest and motion.
4. Elucidate with the help of an activity how to measure the length of curved line.

4. Case study-based question.

Rahul was helping his father paint the walls of their house. He needed to measure the length and height of the walls to calculate how much paint was required. Rahul used a measuring tape because the walls had corners and some uneven surfaces.

Later, Rahul's father drove the car from home to school, covering a distance of 45 kilometers in 1.5 hours. Rahul was curious to know how fast the car was moving. He also noticed the wheels of the car rotating as it moved and the hands of a clock moving in a circular motion.

1. Why did Rahul use a measuring tape instead of a ruler to measure the walls?
2. What type of motion do the car wheels show?
3. Define motion with an example from the case study
4. What type of motion do the hands of the clock show?

Chapter 4 Exploring Magnets

1. **Choose the correct option:**

   i. Which of the following materials is attracted by a magnet?

   (a) Plastic (b) Iron

   (c) Wood (d) Glass

   ii. What happens when you break a magnet into two pieces?

   (a) One piece has only a North pole

   (b) One piece has only a South pole

   (c) Both pieces become smaller magnets with North and South poles

   (d) Both pieces lose their magnetism

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 from 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) Both assertion and reason are false.

   Assertion- A magnet has only one pole after it is broken into two pieces.

   Reason- Magnets lose their magnetism when broken.

3. **Answer the following question**

1. Describe two properties of magnets.
2. How can you magnetize a needle using a bar magnet?
3. Describe three uses of magnets in daily life.
4. How can you prepare your own magnet?

4. Case study-based question.

Priya lost her iron key near a grassy patch. She brought a bar magnet and slowly moved it just above the ground. In some places the key didn't move, but near a metal bench the key suddenly slid toward the magnet. Later, she tried picking up an aluminum spoon with the same magnet—nothing happened. She also noticed the magnet felt strongest at its ends.

1. Why did the key move only when the magnet was near it?
2. What are the two ends of a magnet called, and where is a bar magnet strongest?
3. Why didn't the aluminum spoon get attracted to the magnet?
4. If Priya breaks her bar magnet into two pieces, how many poles will each piece have?

Chapter 5 Material around us

1. Choose the correct option

i. Which material is non-magnetic?

a) Iron b) Steel

c) Aluminum d) Nickel

ii. Identify the transparent material.

a) Wood b) Steel

c) chalk d) Glass

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 from 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.

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d) Both assertion and reason are false.

Assertion- Cotton clothes are preferred in summer.

Reason- Cotton clothes conduct electricity.

3. Answer the following question:

1. Why are gold and silver shinier as compared to iron?
2. Differentiate between:

(a) Opaque and transparent materials.

(b) Soluble and insoluble.

(c) Lustrous and non-lustrous.

3. Why can't a tumbler not be made of cloth?

4. Explain the difference between transparent, translucent and opaque objects.

4. Case study-based questions:

A group of students were given the task to design a storage box for keeping food items fresh for a picnic. They tested different materials like wood, glass, metal, plastic, and cloth to see which would be the best.

They observed:

Wood – Strong and opaque, but slightly heavy.

Glass – Transparent and allows you to see the contents, but breaks easily.

Metal – Very strong, shiny, and does not let light pass through.

Plastic – Light, can be transparent or opaque, waterproof.

Cloth – Light, but allows air and water to pass through easily.

They also noticed that the box should be easy to carry, should not react with food, and should prevent moisture from entering.

1. Which property of glass makes it unsuitable for the picnic box?
2. Name two materials from the above list that are opaque?
3. Which material would you suggest for making the picnic box? Give two reasons for your choice?
4. Why is it important for the picnic box to be waterproof?
5. Classify the given materials into transparent, translucent, and opaque.

Chapter 6 Temperature and its Measurment

1. **Choose the correct option**.

   i. Which device is used to measure temperature?

   (a) Barometer (b) Thermometer

   (c) Hydrometer (d) Hygrometer

   ii. The normal human body temperature is:

   (a) 25°C (b) 35°C (c) 50°C (d) 98°C

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 from 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.

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   c) A is true, but R is false.

   d) Both assertion and reason are false.

   Assertion- Mercury is used in thermometers because it expands uniformly with temperature.

   Reason- Mercury has a high boiling point and does not stick to the glass tube of the thermometer.

3. **Answer the following question.**

   1. What precautions should be taken while using a laboratory thermometer?
   2. What precautions should be taken while using a Clinical thermometer?
   3. Why might digital thermometers be preferred over mercury thermometers?
   4. Explain the differences between a clinical thermometer and a laboratory thermometer with the help of a diagram.

4. Case study-based question.

During the school science fair, Anya and Rohan compared how quickly different materials heat up in sunlight.

- They placed a metal cup, a plastic cup, and a glass cup in the sun at 11:00 a.m.
- Using a laboratory thermometer, they measured the temperature of water inside each cup every 5 minutes for 20 minutes.
- They observed that the metal cup's water warmed the fastest, followed by the glass cup, while the plastic cup's water warmed the slowest.
- The thermometer readings were taken carefully, without touching the bulb to the sides of the cups.
- They also learned that temperature is measured in degree Celsius (°C).

1. Why did the water in the metal cup heat up faster than in the plastic cup?
2. Why is it important not to let the thermometer bulb touch the sides of the cup during measurement?
3. Which thermometer is use to measure the weather?
4. Define heat.
5. Why the thermometer should not be hold through the bulb?

Chapter 6 Respiration in Organisms

1. **Choose the correct option.**

   i. **Which gas is essential for aerobic respiration?**

   (a) Carbon dioxide **(b) oxygen**

   (c) Nitrogen **(d) Methane**

   ii. **Which of the following organisms can respire through their skin**

   (a) Frog **(b) Fish**

   (c) Sparrow **(d) Insect**

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 from 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.

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   c) A is true, but R is false.

   d) Both assertion and reason are false.

   Assertion-In non-uniform motion, the slope of the distance–time graph is a straight line.

   Reason- In non-uniform motion, unequal distances are covered in equal intervals of time.

2. **Answer the following questions.**

   1. **Define respiration. How is it different from breathing?**
   2. **Write the word equation for aerobic respiration in humans.**
   3. **Describe the process of breathing in humans, mentioning the role of the diaphragm.**
   4. **Write three adaptations in fish that help them in respiration under water.**
   5. **Differentiate between aerobic and anaerobic respiration based on:**

      (a) Requirement of oxygen

      (b) End products

      (c) Amount of energy released

      (d) Examples

      (e) Location where it occurs in the cell

4. Case Study based question

During the annual sports day, Ananya participated in a 400-metre race. Before the race, her breathing rate was about 16 breaths per minute. After completing the race, her breathing rate increased to 32 breaths per minute. She also experienced muscle cramps in her legs. Later, in the science lab, her teacher explained that this was due to the difference between aerobic and anaerobic respiration in muscles.

1. Why did Ananya's breathing rate increase after the race?
2. What caused the muscle cramps in her legs? Explain the process.
3. Write the word equation for anaerobic respiration in yeast.
4. Write the word equation for anaerobic respiration in muscle cells.
5. Which type of respiration releases more energy – aerobic or anaerobic? Why?