# New Science Power 3

### Living and Nonliving Things

#### **ANSWERS**

#### **Checkpoint 1**

#### Tick ( $\checkmark$ ) the correct answers.

- 1. Which of these is man-made?
  - (a) Sun
  - (c) Bus 🖌
- **2.** Which of these is not a living thing?
  - (a) Cat
  - (c) Rat
- 3. Which of these needs food?
  - (a) Doll
  - (c) Cat 🖌

#### **Checkpoint 2**

#### Fill in the blanks.

- 1. Horses have <u>lungs</u> for breathing.
- 2. When you feel cold, you wear <u>woollen</u> clothes.
- **3.** A <u>cat</u> gives birth to kittens.

#### EXERCISES

- A. Fill in the blanks.
  - 1. Human beings breathe through their <u>lungs</u>.
  - **2.** A baby child grows into an <u>adult</u>.
  - **3.** Birds use their <u>wings</u> to fly.
  - **4.** All living things need <u>food</u> to grow.
  - 5. Birds reproduce by laying <u>eggs</u>.

- (b) Moon
- (d) Stars
- (b) Hat 🖌
- (d) Dog
- (b) Chair
- (d) Table

#### **B.** Write True or False.

	<b>1.</b> Living things move.		True
	<b>2.</b> Nonliving things need food.		False
	<b>3.</b> Green plants use oxygen to make food.		False
	4. When we breathe, we take in carbon diox	kide and give out oxygen.	False
	<b>5.</b> A cat lays eggs.		False
C.	Tick ( $\checkmark$ ) the correct answer.		
	1. Dogs breathe through		
	(a) Gills	(b) Air holes	
	(c) Lungs 🚺	(d) Pores	
	<b>2.</b> This is a sense organ.		
	(a) Hair	(b) Tail	
	(c) Nail	(d) Skin 🖌	
	3. In Bryophyllum, new plants are produced	d through	
	(a) Leaves 🚺	(b) Roots	
	(c) Stem	(d) Buds	
	4. The leaves of this plant fold up when tou	iched.	
	(a) Mango	(b) Banana	
	(c) Touch-me-not 🖌	(d) Rose	
D.	Answer the following questions.		

- 1. Give two examples each of man-made things and natural things.
- Ans. Man-made things: Roads, houses; Natural things: Animals, plants

#### 2. How are living things different from nonliving things?

- Ans. Living things grow, move, breathe, need food, feel their surroundings, excrete and reproduce while nonliving things do not show these features.
  - 3. Why do living things move?
- Ans. Living things move in search of food, water, shelter and to protect themselves from their enemies.

#### 4. Why do living things need food?

**Ans.** Living things need food to live and grow.

5. Name the five sense organs.

**Ans.** Nose, eyes, ears, skin and tongue are five sense organs.

#### E. Complete the word ladder with the help of given clues.

#### Down

- **1.** Snakes and birds lay these.
- **3.** Human beings breathe through these.
- 4. Process of taking in and giving out of air.
- 5. Living things need this to grow.
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- **5.** Fish use these to move.
- 6. More living things of the same kind are produced.
- 7. Small pores on the surface of a leaf.

#### Think Zone

- 1. Give reasons.
  - (a) Your pencil does not cry when you sharpen it with a sharpener.
  - (b) The seed of pea is a living thing.
  - (c) Animals move but plants do not move.
- **Ans.** (a) A pencil is a nonliving thing. Nonliving things do not feel.
  - (b) The seed of pea is a living thing because it grows into a plant. Growing is a feature of living beings.
  - (c) Plants do not move because they remain fixed to the soil.
  - 2. Both plants and animals are living things and show many common features. But, plants are also different from animals in many ways. Think and write at least five ways in which plants are different from animals.

S. No.	Plants	Animals
1. 2.	Plants can make their own food. Most plants are green.	Animals get food from plants. Animals are generally non-green.
3.	Plants cannot move from one place to other.	Animals can move from one place to other.
4.	Plants do not lay eggs.	Some animals lay eggs.
5.	Plants grow their body whole life.	Animals grow only during their young age.

## **Structure and Functions of a Plant**

#### ANSW/ERS

#### **Checkpoint 1**

#### Tick ( $\checkmark$ ) the correct answer.

<b>1.</b> Which of these p	1. Which of these parts of a plant grows under the ground?						
(a) Stem	(b) Leaf	(c) Flower	(d) Root 🖌				
<b>2.</b> Which of these d	o not have fibrous roo	ts?					
(a) Grass	(b) Pea 🖌	(c) Onion	(d) Rice				
3. Which of these plants have roots which store food in them?							
(a) Carrot	(b) Radish	(c) Turnip	(d) All of these $\checkmark$				
Checkpoint 2							

#### Give one example of each of the following:

1. A plant with a soft stemMint2. A plant that stores water in its stemCactus3. A stem that stores foodPotato4. A leaf that stores foodSpinach5. A fruit that has only one seedMango

#### **EXERCISES**

#### A. Fill in the blanks.

- **1.** The two types of roots are <u>taproot</u> and <u>fibrous roots</u>.
- 2. <u>*Cacti*</u> store water in their stem.
- 3. <u>*Leaf*</u> is called the kitchen of the plant.
- **4.** A flower turns into a <u>*fruits*</u>.
- 5. A seed contains a <u>baby plant</u> inside it.

#### **B.** Tick (✓) the correct answer.

1. Which of these parts of a plant prepares food?



2. Which of these helps in the absorption of water and minerals from the soil?



#### C. Write True or False.

1. Carbon dioxide enters the leaves through mid vein.	False
<b>2.</b> A flower is called the kitchen of the plant.	False
3. Roots help to bind the soil particles together.	_True_
4. Some flowers change into fruits.	_True_
5. The flat part of a leaf is called the stomata.	False

#### D. Match the plant parts with their functions.

- **1.** Stem \_\_\_\_\_ (a) It holds the plant in the soil and absorbs water from the soil.
- **2.** Leaf (b) It helps the plant stand up straight.
- **3.** Root / (c) It makes seeds, so we can grow new plants.
- **4.** Flower (d) It makes food from sunlight, carbon dioxide and water.

#### E. Answer the following questions.

- 1. What are the two main systems of a plant?
- Ans. Root system and shoot system are the two main systems of a plant.

#### 2. Name the two kinds of roots.

- Ans. Taproot and the fibrous roots are the two kinds of roots.
  - 3. What is nectar?

Ans.

**Ans.** Nectar is a sweet liquid found at the base of some flowers.

#### 4. Which part is called the food factory of plant?

- Ans. Leaf is called the food factory of plant.
  - 5. What does a seed contain?
- Ans. A seed contains a baby plant inside it.

#### 6. Draw a leaf and label its parts.



#### F. Find five plant parts in the word search and encircle them.

R	E	B	R	Α	N	С	H)	0	F
0	F	D	F	В	E	L	J	D	R
0	Т	K	F	S	Т	E	Μ	Ν	U
Т	X	Α	Р	Ι	R	Α	E	U	Ι
Ζ	Α	J	S	C	G	F	Ν	Η	T
C	V	B	U	D	Ι	W	Η	Μ	Y
L	Ζ	Q	G	F	L	0	W	E	R

#### Think Zone

Ans.

- 1. Priya saw a honeybee on a flower. What was it doing there?
- Ans. The honeybee was drinking nectar from the flower.
  - 2. What do you think would happen if plants are not watered?
- **Ans.** If plants are not watered, they will not get water for photosynthesis. They will wilt and die.

## **Animals and their Feeding Habits**

#### **ANSWERS**

#### **Checkpoint 1**

#### Fill in the blanks.

- 1. <u>Plants</u> make their own food by photosynthesis.
- 2. Animals get <u>energy</u> from food.
- **3.** Herbivores eat only <u>plants</u>.
- 4. Flesh-eating animals are called <u>carnivores</u>.
- 5. <u>Omnivorous</u> animals eat plants and flesh of other animals.

#### **Checkpoint 2**

#### Name two

1.	Insects that suck in food	<u>Butterfly</u>	Moth
2.	Animals that swallow food	<u>Snake</u>	<u>Frog</u>
3.	Animals that chew the cud	Cow	buffalo

#### **EXERCISES**

- A. Tick ( $\checkmark$ ) the correct answer.
  - 1. Which of the following animals chews the cud?











2. Which of the following animals gnaws its food?











3. Which of these animals swallows its food as a whole?



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B. Circle the animal which does not belong to the group.



- C. Answer the following questions.
  - 1. Why do animals eat food?
- Ans. Animals eat food to live and grow.

#### 2. What is (a) a herbivore (b) a carnivore, and (c) an omnivore?

- **Ans.** (a) A plant-eating animal is called a herbivore.
  - (b) A flesh-eating animal is called a carnivore.
  - (c) An animal which eats plants and flesh is called an omnivore.
  - 3. What is a food chain?
- **Ans.** A chain of living things in which herbivores eat plants and themselves are eaten by carnivores is called a food chain.

#### 4. How do the teeth of a herbivore help it to eat food?

Ans. A herbivore has sharp, flat and strong teeth which help it to pluck, bite, grind and chew the plant parts.

#### 5. What type of teeth does a carnivorous animal have?

Ans. A carnivorous animal has long, pointed and curved teeth.

#### 6. What are domestic animals?

Ans. Animals which give us many useful things and help in our work are called domestic animals.

#### D. Complete the given word ladder with the names of animals. Take the help of clues. Across

- 1. I suck in nectar of a flower through a long hollow tube.
- **3.** I do not chew but swallow my food.
- 4. I am the national animal of India.
- 6. A lion eats me.
- **8.** I have a long sticky tongue.
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#### Down

- 2. I have a long trunk.
- 5. I have a long neck to reach the branches of trees.
- 6. I guard your home.
- 7. I am a domestic animal and give milk.

#### Think Zone

#### 1. Why do herbivores not have pointed teeth, whereas carnivores have?

- **Ans.** Pointed teeth of carnivores help them tear the flesh. As herbivores do not eat flesh, they do not have pointed teeth.
  - 2. Snakes do not need teeth to eat. Why?
- Ans. Snakes do not chew their food but swallow it. Therefore, they do not need teeth to eat.
  - 3. Why should we take care of domestic animals?
- **Ans.** We should take care of domestic animals because they give us many useful things and help in our work.

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#### **ANSWERS**

#### **Checkpoint 1**

Tick ( $\checkmark$ ) the correct word.

- **1.** A bird does not have (**wings/eyes/teeth** (✓)).
- **2.** (**Down/Body/Flight** (✓)) feathers are found on wings and tail of a bird.
- **3.** (**Bones/Tail** (✓)/**Beak**) helps the bird to change direction while flying.
- **4.** Ducks have (**cracker/probe/strainer** (✓)) type of beaks.

#### **Checkpoint 2**

#### Fill in the blanks.

- 1. Chickens have <u>scratching</u> type of claws.
- 2. <u>*Eagles*</u> make platform nest on top of trees.
- **3.** Birds have <u>poor</u> sense of smell.

#### EXERCISES

#### A. Fill in the blanks.

- 1. The <u>streamlined</u> body of bird helps it to cut through the air.
- 2. <u>Ostrich</u> is a flightless bird.
- 3. <u>*Down*</u> feathers keep a bird's body warm.
- 4. Ducks have <u>webbed</u> feet.
- **5.** Eagles have sharp and <u>*curved*</u> claws.
- **6.** A parrot has a <u>curved</u> beak.

#### **B.** Tick (✓) the correct answer.

- **1.** The features which help a bird fly.
  - (a) hollow and light bones  $\checkmark$
  - (c) shape of the beak
- **2.** Which of these birds can fly?
  - (a) Penguin
  - (c) Kiwi

- (b) no teeth
- (d) claws
- (b) Pigeon 🖌
- (d) Emu



D. Find and encircle five special features of a bird from the word maze. Also, write how this feature is helpful to the bird.

Q	F	S	D	Р	K	$\overline{C}$	<u>Beak – eating food</u>
В	E	Α	K	С	N	L	
F	A	E	T	U	Т	A	<u>Wings – flying</u>
R	T	L	A	M	В	W	Claws – catching and holding prey
F	H	W	Ι	N	G	S	
А	E	Z	L	A	V	N	<u>Tail – changing direction</u>
Ν	R	C	Т	G	A	Ι	
Р	S	J	W	В	0	X	<u>Feathers – covering and keeping body warm and help in flying</u>

#### E. Answer the following questions.

#### 1. What are special features of birds?

- **Ans.** (a) Birds have streamlined body to cut through the air.
  - (b) They have wings to fly.
  - (c) They have hollow and light bones to make their body light.
  - (d) They have beak to eat food.
  - (e) They have feathers to cover and keep their body warm.

#### 2. What are flightless birds? Name any two.

**Ans.** Some birds cannot fly. These are called flightless birds. Ostrich and penguin are flightless birds.

#### 3. What do birds eat?

- Ans. Birds eat seeds, nuts, nectar, fruits, fish, insects, flesh, etc.
  - 4. Where do birds make their nests?
- Ans. Birds make their nests in safe places like tree trunk, on tree top, in branches of tree, etc.

#### 5. What does the mother bird do after laying eggs?

**Ans.** The mother bird sits on the eggs to keep them warm till the baby birds inside are fully developed.

#### 6. What do the birds use their beaks for?

**Ans.** Birds use their beaks for eating, feeding their young ones, gathering nesting materials, building nests, preening, scratching, defence, attacking and moving objects.

#### 7. Why do birds have different types of beaks?

Ans. Birds have different types of beaks because they eat different types of food.

#### 8. How do feet and claws of a bird help it?

**Ans.** Feet and claws of a bird help it to walk, run, climb, perch, catch food and wade through water.

#### 9. How does a tailor bird build its nest?

**Ans.** A tailor bird stitches two or three broad leaves together using its sharp beak as a needle to make its nest. It sews the leaves with cotton, hair, wool or spider's web.

#### **Think Zone**

#### Give reasons.

- 1. A bird has a streamlined body.
- Ans. Streamlined shape of the body helps a bird to cut through the air.
  - 2. The bones of a bird are hollow.
- **Ans.** The hollow bones of a bird make its body very light. This helps it to fly easily for longer time.
  - 3. Birds collect twigs, leaves and dried grass.
- Ans. Birds collect twigs, leaves and dried grass to make their nests.

#### **ANSWERS**

#### **Checkpoint** 1

#### Choose the correct answer.

- **1.** Which of these are the building blocks of our body?
  - (a) Tissues (b) Cells 🖌
  - (c) Organs (d) Organ systems
- **2.** How many bones are there in a human body?
  - (a)  $206 \checkmark$  (b) 602 (c) 260 (d) 620
- **3.** Which of these is not an organ of the digestive system?
  - (a) Stomach (b) Heart 🗸
  - (c) Small intestine (d) Large intestine

#### **Checkpoint 2**

#### Fill in the blanks.

- 1. We must breathe in air through our <u>nose</u>.
- 2. Our <u>*kidneys*</u> filter the blood and make urine.
- 3. Heart, <u>blood</u> and <u>blood vessels</u> make our circulatory system.
- 4. <u>Brain</u> is the control centre of the body.

#### EXERCISES

#### A. Fill in the blanks.

(a) Ear

- **1.** There are <u>206</u> bones in our body.
- 2. The watery liquid present in our mouth is called <u>saliva</u>.
- 3. *Excretory* system helps to throw out waste.
- **4.** The air moves to the <u>lungs</u> from nose.
- 5. The <u>*respiratory*</u> system helps to give out carbon dioxide.

(b) Nose

#### **B.** Tick ( $\checkmark$ ) the correct answer.

- **1.** It is a part of digestive system.
- (c) Stomach  $\checkmark$  (d)

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- **2.** They are the organs of respiratory system. (b) Kidneys (a) Lungs  $\langle \checkmark \rangle$ (c) Eyes (d) Ears **3.** They filter the blood and make urine. (a) Blood vessels (b) Digestive juices (c) Kidneys 🖌 (d) Lungs **4.** This is the control centre of our body. (a) Heart (b) Stomach (c) Brain 🖌 (d) Windpipe C. Match the organ to the system to which it belongs. 1. Heart ~ (a) Respiratory system 2. Brain -(b) Excretory system 3. Foodpipe (c) Circulatory system 4. Lungs (d) Digestive system 5. Kidneys (e) Nervous system D. Write True or False. 1. Saliva is found in the lungs. False **2.** Excretory system helps in the movement of the body. False 3. The small intestine is a part of the digestive system. True False **4.** Kidneys help to remove sweat. **5.** The heart pumps blood to all parts of the body. True E. Answer the following questions. 1. What is our body made up of?
- Ans. Our body is made up of cells.

#### 2. What gives shape to our body?

**Ans.** The skeletal system gives shape to our body.

#### 3. How is muscular system useful to us?

**Ans.** Muscular system works with the skeleton and helps to stand, walk, run and do other activities. It also helps us to speak, smile, shake hands, blink eyes, etc.

#### 4. How do lungs remove waste out of the body?

**Ans.** Lungs remove waste out of body by breathing out carbon dioxide.

#### 5. What is the function of heart?

**Ans.** The heart pumps blood to all parts of the body.

#### 6. What are the functions of the brain?

Ans. The brain helps us to think, learn, understand, remember and do many activities.

F. Look at the picture given below and label its parts.



#### G. Complete the crossword puzzle with the help of given clues. Down

**1.** They throw out urine. <sup>1</sup>K 2. They make the skeleton. Ι 5. Foodpipe takes the food to this organ. В Ο Ο D L N Ο В R Ν 'nΝ Ε R V Ε S А Ι Across Y Т Ε **2.** It flows in fine tubes in the body. S S <sup>6</sup>N S Ε Ο 3. It controls all body functions. Μ **4.** They are part of the nervous system. 6. Air enters our body through this. Α 7. It pumps blood. С Ή Ε А R Т

#### Think Zone

1. Which organ systems you would be using while sitting at the dining table eating your dinner?

Ans. Skeletal, muscular, nervous and digestive systems.

- 2. We should not cover our face while sleeping. Why?
- **Ans.** We should not cover our face while sleeping because covering the face does not let fresh air to breathe in.

### **ANSWERS**

#### **Checkpoint 1**

#### Choose the correct answer:

- **1.** Food gives us energy
  - (a) to grow

- (b) to play (d) all of these  $\checkmark$
- (c) to think
- 2. Which of these foods should be avoided or eaten occasionally?
  - (a) pizza 🖌
  - (c) pulses
- 3. Milk, beans and pulses are
  - (a) junk foods
  - (c) growth foods  $\checkmark$

- (b) fruits
- (d) vegetables
- (b) fuel foods
- (d) protective foods

#### **Checkpoint 2**

#### Fill in the blanks.

- 1. A food <u>*pyramid*</u> shows main groups of food.
- 2. A balanced diet helps to keep us <u>healthy</u>.
- **3.** Do not eat <u>junk</u> food.

#### **EXERCISES**

#### A. Name two of these foods.

<b>1.</b> Protective foods	Lemon	Carrot
<b>2.</b> Fuel foods	Rice	Butter
<b>3.</b> Growth foods	<u>Soyabean</u>	<u>Egg</u>

#### B. Fill in the blanks.

- 1. Healthy foods are <u>good</u> for health.
- **2.** Eating of junk foods makes us <u>obese</u>.
- **3.** *Fuel* foods give us energy to work.
- 4. <u>Vitamins</u> and <u>minerals</u> are protective foods.
- 5. We should drink enough <u>water</u>.
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#### C. Tick ( $\checkmark$ ) the correct answer.

- 1. The foods from the grain group give us
  - (a) energy 🖌
  - (c) power to grow
- 2. For growing tall and strong, we should eat
  - (a) chips
  - (c) pizza
- 3. We should brush our teeth
  - (a) once a day
  - (c) once a week (d) twice a week
- 4. These foods belong to the milk group of food pyramid.
  - (a) rice and potato (b) burger and pizza
  - (c) curd and cheese  $\checkmark$ (d) maize and apple

D. Find out the food groups in the food pyramid to which these foods belong.

- FOOD GROUP FOOD 1. Onion <u>Vegetable group</u> 2. Chocolate Others 3. Fish Meat group
- Milk group 4. Butter
- Fruit group 5. Apple
- E. Answer the following questions.
  - 1. Why do we eat food?

Ans. Food provides our body with the energy it needs to stay alive, grow, be active and keep warm.

- 2. What does junk food contain?
- **Ans.** Junk food contains a lot of oil, salt or sugar.

#### 3. Into how many types can food be divided?

- **Ans.** Food can be divided into following types:
  - (a) Fuel food
  - (b) Growth food
  - (c) Protective food

#### 4. What is the function of each type of food?

- **Ans.** (a) Fuel food gives us energy to work.
  - (b) Growth food helps our body to grow.
  - (c) Protective food protects us from various diseases and makes us strong.
  - 5. What is a balanced diet?
- Ans. The diet which has energy-giving, body-building and protective foods in the right amounts is called a balanced diet.

- (b) protection from diseases (d) freshness
- (b) pulses 🖌
- (d) samosa
- (b) twice a day  $\checkmark$

#### 6. List any five healthy eating habits.

- Ans. (a) Wash your hands properly before eating.
  - (b) Chew your food well and eat slowly.
  - (c) Avoid eating junk food.
  - (d) Do not talk, laugh, read or watch TV, computer or mobile while eating food.
  - (e) Brush your teeth at least twice a day.
  - F. Find out which of these are protective, growth or fuel foods.



Protective foods	Growth foods	Fuel foods
Cabbage, Orange, Lemon,	Meat, Egg, Fish	Butter, Bread, Potato,
Tomato, Carrot		Banana, Rice

#### Think Zone

- 1. Why should we not eat uncovered food?
- **Ans.** We should not eat uncovered food because it may contain dust and germs which can make us sick.
  - 2. We should not overeat even if the food is tasty. Why?
- **Ans.** We should not overeat because it may upset our stomach and make us sick. Overeating can also make us obese.
  - 3. Sarthak's parents don't want him to eat pizza and burger very often. Why?
- **Ans.** Pizza and burger are made with lots of oil and salt. They neither help our body to grow and nor save it from diseases. Eating such food very often makes us obese and sick.
  - 4. Sattvik loves to eat bread, rice, pizzas and chapatis but hates eating vegetables and fruits. If you were a doctor, what would you advise him?
- **Ans.** Sattvik should eat vegetables and fruits also because they keep us fit and healthy and save us from diseases.
  - 5. What will happen if we eat only energy-giving foods?
- **Ans.** If we eat only energy-giving foods, our body would not grow and become sick. We would become obese.

### ANSW/ERS

#### **Checkpoint** 1

#### Fill in the blanks.

- 1. Things which happen suddenly and harm or injure us are called <u>accidents</u>.
- 2. Accidents can be prevented by following <u>safety</u> rules.
- 3. We should not touch electric gadgets with <u>wet</u> hands.
- 4. We should not play with sharp objects like <u>blade</u> and <u>knife</u>.
- 5. We should cross the road at <u>*zebra crossing*</u>.

#### **Checkpoint 2**

#### Write True or False.

<b>1.</b> We should crowd around a sick person.	False
<b>2.</b> A cut should be washed with running water.	True
<b>3.</b> We should make strangers our friends.	False
4. We should call for help, if someone gives us unsafe touch.	True

#### EXERCISES

#### A. Encircle the correct word.

- **1.** You (should/(should not)) run around in the classroom.
- 2. You (should/(should not)) play with sharp objects.
- **3.** You ((should)/should not) wait for your turn while playing a game.
- 4. You (should / should not) hit each other.

#### B. Fill in the blanks.

- 1. Safety rules keep us free from <u>accidents</u>.
- 2. Do not touch electrical switches with <u>wet</u> hands.
- **3.** Never fly <u>*kite*</u> on terrace or roof.
- **4.** A <u>good</u> touch makes you feel happy and safe.
- 5. We should not <u>crowd</u> around the injured person.

#### C. Tick ( $\checkmark$ ) the correct answer.

	1. Accidents occur due	to		
	(a) carelessness 🚺	(b) alertness	(c) awareness	(d) laziness
	2. Playing with knife ca	n cause		
	(a) suffocation	(b) burns	(c) cuts 🖌	(d) fall
	<b>3.</b> We should cross the r	road when traffic light	for us is	
	(a) red	(b) green 🖌	(c) yellow	(d) blue
	4. Never accept eatables	s from		
	(a) friends	(b) relatives	(c) teachers	(d) strangers 🚺
D.	Answer the following q	uestions.		

#### 1. Why do accidents occur?

**Ans.** Accidents occur due to our carelessness or when we are in a hurry.

#### 2. Write any three safety rules to be followed at home.

- **Ans.** (a) Do not play with sharp things such as blades, knives, pins and scissors. You may get cuts.
  - (b) Never leave your toys, bags, shoes and books lying on the floor. You may fall.
  - (c) Do not take any medicine on your own. You may become sick.

#### 3. Write any three safety rules to be followed on the road.

- **Ans.** (a) Always walk on the footpath.
  - (b) Never play or run on busy streets or roads.
  - (c) Cross the road only at a zebra crossing.

#### 4. How can you prevent accidents in the classroom?

**Ans.** Accidents in the classroom can be prevented by following some safety rules as follows:

- (a) Do not throw things at each other in the class.
- (b) Do not run around in the classroom.
- (c) Do not climb onto the desks.
- (d) Do not push anybody.
- (e) Use school equipments carefully.
- (f) Be careful of the corners of desks and benches.

#### 5. What is first aid?

**Ans.** The first help given to an injured or a sick person before the medical help is given is called first aid.

#### Think Zone

- 1. Why should we not stick our hands out of the moving vehicles?
- Ans. Sticking hands out of the moving vehicles may hart us.

#### 2. Your teacher tells you to use a sharpener and not a blade. Why?

**Ans.** Using a blade may cut and bleed our finger.

- 3. Why should we wear seat belts while travelling in a car?
- **Ans.** We should wear seat belts so that we must not fall forward if brakes are applied by the driver.
  - 4. Riya saw some children throwing stones at stray dogs while playing in the playground. She stopped them from doing so. Why?
- **Ans.** She stopped them because doing so will hurt the dog. Besides this, the hurt dog may bite them.

#### **ANSW/ERS**

#### **Checkpoint 1**

#### Write True or False.

<b>1.</b> A house protects us from rain only.	False
2. A good house has good drainage system.	_True_
<b>3.</b> Windows of a house should have wire mesh.	_True_

#### **Checkpoint 2**

#### Unscramble these letters to find the names of some cloth fibres.

- 1. YAONR <u>RAYON</u>
- 2. ILSK <u>SILK</u>
- 3. LOWO <u>WOOL</u>
- 4. TOTOCN <u>COTTON</u>

#### EXERCISES

#### A. Tick ( $\checkmark$ ) the correct answer.

**1.** A pucca house is made up of (a) steel and bricks  $\checkmark$ (b) mud and straw (c) bamboo (d) sticks 2. Wool is obtained from (a) silkworm (b) sheep (c) horse (d) cow 3. Wire mesh on doors and windows stops these from entering the house. (b) Dust (a) Air (c) Flies and mosquitoes  $\checkmark$ (d) Smoke 4. The silkworm lives on the leaves of this tree. (a) Mango (b) Eucalyptus (c) Mulberry 🖌 (d) Jasmine B. Fill in the blanks. **1.** A house is a <u>*building*</u> where people live comfortably. 2. Kitchens and bathrooms should be <u>cleaned</u> regularly.

- **3.** Natural fibres are obtained from <u>animals</u> and <u>plants</u>.
- 4. Nylon is a <u>synthetic</u> or man-made fibre.
- **5.** The silk cloth is <u>smooth</u> to touch.

#### C. Name the following.

- **1.** A fibre obtained from the stem of a plant
- 2. Body part of some animals from which wool is obtained
- 3. Plant on which silkworms live

#### D. Answer the following questions.

- 1. What is a house?
- **Ans.** A house is a building in which people live together happily.
  - 2. What is a house made of?
- Ans. A house is made up of bricks, stones, cement, sand, iron, steel, wood, glass, etc.

#### 3. Why should doors and windows have wire meshes?

**Ans.** Wire meshes on the doors and windows stop flies and mosquitoes from entering the house.

#### 4. What is a cloth made of?

- Ans. A cloth is made of fibres.
  - 5. What are natural fibres?
- **Ans.** Fibres which are obtained from plants and animals are called natural fibres. For example, cotton, jute, silk and wool.

#### 6. What are man-made fibres?

**Ans.** Fibres which are made in factories from chemicals are called man-made fibres. For example, polyester, nylon, rayon, etc.

#### 7. Polyester and nylon clothes are used during rainy season. Why?

**Ans.** Polyester and nylon clothes do not soak water and dry fast. Therefore, they are used during rainy season.

#### Think Zone

#### 1. A house must get plenty of sunlight. Why?

Ans. Sunlight keeps the house dry and germ-free. It gives natural light and freshness.

#### 2. A house should have a good drainage system. Why?

**Ans.** A good drainage system carries out the waste from kitchen, bathroom, toilet, etc. smoothly and keeps the house clean.

<u>Jute</u> <u>Hair</u> Mulberry

#### **ANSWERS**

#### **Checkpoint 1**

Unscramble these letters to find the terms related to air.

- 1. RZEEBE <u>BREEZE</u>
- 2. YXOENG <u>OXYGEN</u>
- 3. OMRTS <u>STORM</u>
- 4. LOPLTUNIO <u>POLLUTION</u>

#### **Checkpoint 2**

Fill in the blank boxes.



#### **Checkpoint 3**

Tick ( $\checkmark$ ) the correct option.

- **1.** Sun's heat **evaporates** (✓) /**boils** water in lakes.
- **2.** Clouds are formed of water **droplets** (✓) /**bubbles.**
- **3.** Washing clothes in river makes water **clean/dirty** (**/**).
- **4.** We should use **bucket and mug** (✓)/**shower** to take bath.

#### EXERCISES

#### A. Fill in the blanks.

- 1. Humans cannot live without <u>air and water</u>.
- **2.** Hailstone is an example of <u>solid</u> form of water.
- 3. Water evaporates to turn into <u>water vapour</u>.

	4.	• The heat of the sun causes water to <u>evaporate</u> from the rivers.			
	5.	Water <u>plants</u> and <u>animals</u> die due	to water pollution.		
В.	Ti	ck ( $\checkmark$ ) the correct answer.			
	1.	The layer of air around the Earth is calle	ed		
		(a) atmosphere 🖌	(b) wind		
		(c) storm	(d) breeze		
	2.	When green plants make food, they give	e out a gas called		
		(a) carbon dioxide	(b) nitrogen		
		(c) water vapour	(d) oxygen 🖌		
	3.	Strong movement of wind is called			
		(a) breeze	(b) storm		
		(c) air	(d) pollution		
	4.	A disease caused by drinking polluted v	water is		
		(a) cough	(b) cold		
		(c) cholera (✓)	(d) malaria		
C.	Μ	atch the following.			
	1.	Water vapour (a)	rain		
	2.	Clouds (b)	gas		
	3.	Water pollution (c)	snow		
	4.	Solid water (d)	typhoid		
D.	W	rite True or False.			
	1.	Air is brown in colour.		False	
	2.	All living things need air to breathe.		True	
	3.	When liquid water is heated, it changes	into ice.	False	
	4.	Water condenses to form water vapour.		<u>False</u>	
	5.	We should leave the tap running while	brushing our teeth.	<u> </u>	
Ε.	Aı	nswer the following questions.			
	1.	What is atmosphere?			
Aı	ıs.	A thick layer of air around the earth is c	alled atmosphere.		
	2.	What does air contain?			
Aı	ıs.	Air contains gases such as nitrogen, oxyg	gen, carbon dioxide and water vapour al	ong with	
		smoke, dust and germs.			
	3.	what are the three forms of water? Giv	ve one example of each form.		

- **Ans.** The three forms of water are
  - (a) Solid e.g., Ice
  - (b) Liquid e.g., Rain
  - (c) Gas e.g., Water vapour

#### 4. Explain the water cycle.

**Ans.** Water cycle is the movement of water between the earth and air by changing from one form to other. The heat of the sun evaporates water from oceans, lakes, rivers and other water bodies. Plants also give out water vapour. The evaporated water rises into the air and cools to form water droplets. These water droplets form clouds. When the water droplets in clouds become heavy, they fall down in the form of rain. In this way, water cycle goes on.

#### 5. How does water get polluted?

- **Ans.** Water gets polluted by following ways:
  - (a) Bathing, washing clothes and giving bath to animals in the rivers.
  - (b) Throwing garbage and harmful substances into the rivers.

#### 6. Write any four ways to conserve water.

- **Ans.** We can conserve water by not wasting it, such as:
  - (a) Keeping taps tightly closed after use.
  - (b) Using bucket and mug for taking a bath instead of using a shower.
  - (c) Getting repaired the leaky taps.
  - (d) Not leaving the tap running while brushing teeth or washing face or hands.

#### **Think Zone**

- 1. Anushka poured cold water into a glass. After some time, she found water droplets on the outer surface of glass. Where have these droplets come from?
- **Ans.** Air contains water vapour. When air comes in contact with the cold surface of the glass containing cold water, the water vapour present in air cools and changes into droplets of liquid water.
  - 2. Mr. Sharma washes his car using a bucket of water instead of using a garden hose. Is this right or wrong? Why?
- **Ans.** It is right because using a bucket of water instead of garden hose for washing car is a good way to save water.

#### 3. Why do clothes not dry quickly on a rainy day?

**Ans.** Wet clothes become dry due to evaporation of water from them. On a rainy day, the amount of water vapour in air becomes very high. This slows down the process of evaporation and therefore, clothes do not dry quickly.

#### **ANSWERS**

#### **Checkpoint 1**

- 1. Soil is a mixture of tiny pieces of rocks, <u>minerals</u>, <u>water</u>, <u>air</u> and humus.
- **2.** The layer below the topsoil is <u>subsoil</u>.
- **3.** Humus makes the soil <u>fertile</u>.
- 4. It takes <u>hundred</u> years for soil to form.
- **5.** The layers of topsoil are humus, <u>*clay*</u>, <u>*sand*</u> and gravel.

#### **Checkpoint 2**

#### Write True or False.

1.	Silt is the largest particle of soil.	False
2.	Loam is the best soil for growing plants.	True
3.	Soil is home of earthworms and ants.	True
4.	Soil gives minerals to plants.	True

#### **EXERCISES**

#### A. Fill in the blanks.

- 1. <u>Sand</u> is the largest particle of the soil.
- 2. Silt feels <u>smooth</u> and <u>powdery</u> to touch.
- **3.** <u>*Clay*</u> is the smallest particle of the soil.
- 4. <u>Humus</u> is a mixture of decayed remains of animals and plants.
- 5. <u>Soil</u> is important for growing plants.

#### **B.** Tick ( $\checkmark$ ) the correct answer.

**1.** Soil is formed from

(a) rocks		(b)	twigs
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- (c) sand
- 2. When the rocks heat up, they become
  - (a) smaller in size
  - (c) remain same in size

- (d) humus
- (b) larger in size
- (d) cracked

- **3.** This soil can hold a lot of water.
  - (a) Sandy soil
  - (c) Silt soil
- 4. Plants grow in the

- (b) Clayey soil
- (d) Loamy soil

- (a) topsoil  $\checkmark$ 
  - (c) bedrock

- (b) subsoil
- (d) parent rock

#### C. Answer the following questions.

#### 1. What is soil?

**Ans.** Soil is the topmost layer of the earth's surface. It is a mixture of tiny pieces of rocks, minerals, water, air and humus.

#### 2. How is soil formed?

Ans. Soil is formed by the breaking of rocks into fine particles.

#### 3. What is topsoil made up of?

**Ans.** Topsoil is made up of humus, clay, sand and gravel.

#### 4. What is loam?

Ans. The soil which is made up of equal amounts of sand and clay is called loam.

#### 5. Write three differences between sandy soil, clayey soil and loamy soil.

Ans. Three differences between sandy soil, clayey soil and loamy soil are as follows:

Property	Sandy Soil	Clayey Soil	Loamy Soil
Size of particles	Large	Very small	Contains equal amounts of clay and sand particles
Texture	Rough	Soft and smooth	Rough
Amount of water	Cannot hold water	Can hold a lot of water	Can hold enough water

#### 6. Why is soil important?

Ans. Soil is important because

- (a) we depend on soil for our food.
- (b) it gives shelter to worms like earthworm and insects like ant, beetle, etc.
- (c) burrowing animals like mole, rabbit, mouse, etc. make burrow and live in the soil.
- (d) potteries, bricks, etc. are made from soil.

#### D. Complete the following crossword puzzle with the help of given clues.

#### Across

- **1.** It makes the soil fertile.
- 4. Plants grow in this layer of soil.
- 6. It is a solid rock layer of soil.
- **7.** It is the smallest particle of soil.



#### Down

- 2. Wet and sticky soil.
- 3. Particle of soil having size between clay and sand.
- 5. Layer below the topsoil.
- 8. An insect that lives in soil.

#### Think Zone

#### 1. Humus is an important part of soil. Why?

Ans. Humus makes the soil rich in nutrients for plants to grow well.

#### 2. We should protect our soil. Why?

**Ans.** We should protect our soil because it takes about a hundred years for soil to form. Also, soil is important for growing plants and crops, making houses, etc. It provides home to animals like moles, rabbit, earthworm, ant, beetle, etc.

#### 3. Which soil do potters use to make pots? Why?

**Ans.** Potters use clayey soil to make pots because it becomes sticky when wet. This feature helps in shaping the pots.

#### **ANSWERS**

#### **Checkpoint 1**

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#### Fill in the blanks.

- 1. <u>*Weather*</u> is the state of air at a particular place and time.
- 2. Scientists who study weather are called <u>meteorologists</u>.
- **3.** The position of the <u>sun</u> determines whether it will be a hot day or a cold day.
- **4.** Moving air is called <u>wind</u>.
- 5. <u>*Precipitation*</u> is the water that falls on the earth from the sky.

#### **Checkpoint 2**

#### Write True or False.

<b>1.</b> The summer season is followed by the autumn season.	False
2. The leaves of plants turn yellow and fall off in rainy season.	False
3. The days are short in winter season.	True
4. We use umbrella in rainy season.	True

#### EXERCISES

#### A. Name the following.

- 1. Moving air Wind
- 2. A gentle wind Breeze
- 3. A strong wind Storm
- Summer, Rainy, Autumn, Winter, Spring 4. Five seasons
- B. Match the following. Column A
  - 1. Precipitation
  - 2. Cotton clothes -
  - **3.** Spring season
  - 4. Autumn season

#### Column B

- (a) leaves fall off (b) fresh leaves on plants
- (c) summer season
- (d) rain, snow and hail

#### C. Write True or False.

	<b>1.</b> The weather remains the same throughout the year.	False
	<b>2.</b> Hails are a type of precipitation.	True
	<b>3.</b> Movement of air is called wind.	True
	<b>4.</b> During winter, the wind is warm.	False
	5. Our lives are not affected by change of seasons.	False
D.	Answer the following questions.	

#### 1. What is weather?

Ans. The state of air at a particular place and time is called weather.

#### 2. Name the factors on which weather depends?

Ans. Weather depends on sun, wind, precipitation and clouds.

- 3. Who is a meteorologist?
- **Ans.** The scientist who studies weather is called a meteorologists.
  - 4. What is a season?
- Ans. When weather remains the same for many days, it is called a season.

#### 5. How does rain affect our lives?

**Ans.** Rain cools the earth making the weather pleasant. On the other hand, too much rain can cause floods which can damage buildings, roads, trees, poles, crops, etc., and may cause loss of human and animal life.

(b) straight (d) none of these

#### E. Tick (✓) the correct answer.

- 1. Which of the following does not cause changes in weather?
  - (a) sun(b) clouds(c) wind(d) earth
- 2. At noon, the sunrays are
  - (a) slanting
  - (c) both (a) and (b)
- 3. Rain makes the weather
  - (a) very hot (b) very cold
  - (c) pleasant 🖌 (d) dry
- 4. In which of these seasons, we see bright and colourful flowers all around?
  - (a) winter (b) spring 🗸
  - (c) summer (d) autumn

#### Think Zone

#### 1. Why are cloudy nights warmer than clear nights?

**Ans.** Cloudy nights are warmer because clouds act as a blanket and prevent the heat of the earth from escaping into the sky.

2. Why is morning cooler than noon?

Ans. Morning is cooler than noon because at this time, the sunrays fall slanting.

- 3. Why is a cloudy day cooler than a sunny day?
- Ans. A cloudy day is cooler because clouds do not allow sunrays to reach the earth's surface.
  - 4. Tina chose a black dress to wear while going out to play on a hot summer day. Her mother advised her to wear a white frock. Why?
- Ans. Wearing light-coloured clothes during summer keeps our body cool.

### The Earth – Our Home

#### **ANSWERS**

#### **Checkpoint 1**

#### Write True or False.

1. The Earth has both air and water.	<u> </u>
2. The layer of air that surrounds the Earth is called solar system.	False
<b>3.</b> The Earth is the second planet from the Sun.	False
4. The Earth is round in shape.	<u>True</u>
5. A globe is a model of the Earth.	True
6. Dwarf planets are bigger than planets.	False

#### **Checkpoint 2**

#### Fill in the blanks.

- 1. The Earth is always in <u>motion</u>.
- 2. The Earth <u>rotates</u> on its own axis.
- 3. When it is day in India, there is night in <u>America</u>.
- 4. The <u>revolution</u> of the Earth causes seasons.

#### **EXERCISES**

#### A. Fill in the blanks.

- **1.** The Earth is the <u>third</u> planet from the Sun.
- **2.** A large part of the Earth is covered with <u>water</u>.
- **3.** A <u>globe</u> is a model of the Earth.
- 4. An imaginary line around which the Earth rotates is called <u>axis</u>.
- 5. The movement of Earth around the Sun is called <u>revolution</u>.

#### **B.** Tick ( $\checkmark$ ) the correct answer.

- 1. How many planets are there in the solar system?
- (c) 8 🗸 (a) 5 (b) 6 (d) 12 2. There is air to breathe on the
  - (c) Venus (d) Saturn (a) Mars (b) Earth

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- 3. The fixed path on which planets move around the Sun is called
- (a) axis(b) orbit (c) pole(c) pole(d) atmosphere4. How many hours are there in a day?
- (a) 24 🖌 (b) 26 (c) 36 (d) 48

#### C. Answer the following questions.

#### 1. What is solar system?

- **Ans.** The Sun, its eight planets and all the objects moving around them make up the solar system.
  - 2. What does the Earth get from the Sun?

Ans. The Earth gets light and heat from the Sun.

#### 3. What did people think earlier about the shape of the Earth?

**Ans.** Earlier, people thought that the Earth was flat. They thought if they went too far, they would fall off from the edge of the Earth.

#### 4. What is rotation?

Ans. Rotation is the spinning movement of the Earth on its own axis.

#### 5. What is revolution?

Ans. Revolution is the movement of the Earth around the Sun on a fixed path called the orbit.

#### 6. How are day and night caused?

- **Ans.** The rotation of the Earth causes day and night. The part of the Earth that faces the Sun has daytime and the part of the Earth that is away from the Sun does not get sunlight and hence, has night.
  - 7. What causes seasons?
- **Ans.** The revolution of the Earth causes seasons.
- D. Solve the crossword puzzle using the given clues.
  - 1. Movement of the Earth around the Sun
  - 2. A model of the Earth
  - **3.** Movement of the Earth on its own axis
  - 4. The dwarf planet
  - 5. Seventh planet of the solar system
  - **6.** A fixed path on which a planet moves around the Sun
  - 7. An imaginary straight line on which the Earth rotates
  - **8.** The shape of the Earth



#### Think Zone

- 1. If you keep walking, you will not fall off the Earth. Why?
- **Ans.** It is because the shape of the Earth is round. If we keep walking, we will finally reach the same point again.
  - 2. Indians usually call their friends living in America when it is night in India. Why?
- **Ans.** India and America are located on the opposite sides of the Earth. When there is night in India, there is day in America. So, Indians generally call their American friends at night.

### **Heavenly Bodies in Outer Space**

#### **ANSWERS**

#### Checkpoint

#### Who am I?

- **1.** I am the only natural satellite of the Earth.
- 2. I am a person who flies into space.
- 3. I am the first Indian to go into space.
- **4.** I am the nearest star to the Earth.
- 5. I am a group of stars forming a pattern.

#### **EXERCISES**

#### A. Name the following. **1.** Two constellations <u>Ursa Major, Ursa Minor</u> **2.** The only natural satellite of the Earth Moon 3. First man to walk on the Moon Neil Armstrong 4. Two astronauts Rakesh Sharma, Kalpana Chawla **5.** The star nearest to the Earth Sun B. Write True or False. False **1.** There is atmosphere in space. 2. The Sun controls the Earth's climate. True False **3.** The Moon is a planet. 4. The first person to walk on the Moon was Rakesh Sharma. False 5. Outer space begins 800 kilometres above the Earth. True 6. The Sun is a ball of hot liquids. False C. Match the following. Column A Column B (a) Satellite 1. Sun — 2. Moon – (b) Constellation

(c) Star

4. Ursa Major (d) Astronaut

3. Spaceship -

<u>Moon</u> <u>Astronaut</u> <u>Rakesh Sharma</u> <u>Sun</u> Constellation

#### D. Answer the following questions.

1. What does space look like?

Ans. Space looks like a black blanket dotted with the Sun, Moon, planets and twinkling stars.

2. Who is an astronaut?

**Ans.** A person who flies into space is called an astronauts.

#### 3. What is the Sun? What is it made of?

**Ans.** The Sun is a star. It is made of burning gases.

#### 4. When did humans first land on the Moon?

Ans. 20 July 1969

#### 5. What is the weather on the Moon like?

Ans. Since there is no atmosphere, no wind and hence, no weather is found on the Moon.

6. What is a constellation?

Ans. A group of stars which forms a pattern in the sky is called a constellation.

#### E. Find and encircle eight words related to space.

Α	Μ	A	Н	Р	V	N	U	Т	E	C
Ι	J	S	Ι	C	W	E	F	0	Е	0
K	Κ	Τ	G	R	Ν	Ι	В	Т	S	N
Μ	L	R	Q	A	F	L	S	0	Н	S
Κ	Т	0	U	Τ	Y	A	Р	Q	R	Τ
Ζ	R	N	G	E	S	R	Ν	R	Н	E
Q	L	A	Ι	R	М	M	0	0	N	L
Α	S	U	N	S	С	S	D	F	G	L
J	X	T	Ζ	S	L	Τ	V	D	W	A
Р	Ν	В	Е	Т	J	R	С	В	Κ	Τ
C	X	0	D	А	X	0	Y	Ζ	А	Ι
S	С	Р	Ν	R	Т	N	Μ	0	А	0
Y	U	R	Ι	G	Α	G	Α	R	Ι	N

#### Think Zone

#### 1. You cannot talk with your friend in space. Why?

**Ans.** There is no air in space, it is a vacuum. So, no one can hear sound in space because sound cannot travel through vacuum.

#### 2. Astronauts who reach the Moon bounce around on its surface. Why?

**Ans.** Objects weigh less on the Moon than on the Earth. That's why the astronauts who reach the Moon bounce around on its surface.

3. Why can we not see stars during the daytime?

Ans. We cannot see stars during the daytime because of the glare of sunlight.

4. No life is possible on the Moon. Why?

Ans. There is no air and water on the moon, therefore, no life is possible there.

### Light, Sound and Force

#### **ANSWERS**

#### **Checkpoint 1**

#### Write Yes or No.

<b>1.</b> A glowing bulb is a natural source of light.	False
2. Opaque objects make shadows.	<u> </u>
<b>3.</b> A shadow is always formed behind the source of light.	_False_
4. At noon, the shortest shadow is formed.	True

#### **Checkpoint 2**

#### Fill in the blanks.

- **1.** A vibrating rubber band can produce <u>sound</u>.
- 2. Noise is not <u>good</u> for our health.
- **3.** A <u>force</u> can change the shape of an object.

#### **EXERCISES**

#### A. Fill in the blanks.

- **1.** It becomes <u>day</u> after sunrise.
- 2. A shadow is always formed on the <u>opposite</u> side of the source of light.
- 3. A shadow does not have any <u>colour</u> in it.
- **4.** Larynx is placed in the <u>throat</u>.
- **5.** Force can stop a <u>moving</u> object.

#### B. Write True or False.

<b>1.</b> A stone is a luminous object.	False
<b>2.</b> We can see objects even in complete darkness.	False
3. Musical sounds are unpleasant and irritating.	False
4. When we lift our schoolbag, a force is applied on it.	True
$T_{i}^{i} = 1$ ( ) the correct concrete	

#### C. Tick ( $\checkmark$ ) the correct answer.

**1.** Light is needed to

(c) dry the floor

- (a) see the things around  $\checkmark$
- (b) hear the sounds
- (d) dry the clothes

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**2.** A shadow is always (a) colourful (b) black (c) small (d) big **3.** Sound is produced by (a) bigger objects (b) coloured objects (c) vibrating objects  $\checkmark$ (d) smaller objects **4.** A push or a pull is a form of (a) force  $\checkmark$ (c) pollution (d) noise (b) music D. Answer the following questions. 1. What is a luminous object? **Ans.** A thing that gives out light is called a luminous object. 2. What do you mean by noise? **Ans.** Noise is an unpleasant and irritating sound.

#### 3. Name three man-made sources of light.

Ans. Candle, Torch, Bulb.

#### 4. How can we reduce noise pollution?

**Ans.** We can reduce noise pollution by playing music and TV at low volume and not creating unpleasant sounds from loudspeakers, vehicles, etc.

#### Think Zone

- 1. The moon shines at night, but it is a nonluminous object. Why?
- Ans. The moon shines by the light of the sun falling on it. Therefore, it is a nonluminous object.
  - 2. We should not make a noise but speak softly. Why?
- **Ans.** If we speak louder, it would make unpleasant sound. Therefore, we should always speak softly.

### Measurement

#### **ANSWERS**

#### **Checkpoint 1**

#### Write True or False.

1. Length is measured in years.	_False_
2. Measuring tape and metre rods are used to measure length.	True
<b>3.</b> The standard unit of time is second.	True
<b>4.</b> We measure capacity in litre.	_True_
5. Temperature is measured with the help of a measuring tape.	False

#### **EXERCISES**

#### A. Tick ( $\checkmark$ ) the correct answer.

1.	Milk	is	measured	in
----	------	----	----------	----

- (a) Kilogram(b) Second(c) Metre(d) Litre
- **2.** Which of the following is standard unit of length?
  - (a) Cubit (b) Handspan
  - (c) Metre 🖌 (d) Litre
- **3.** The normal human body temperature is
  - (a)  $32^{\circ}$ C (b)  $37^{\circ}$ C (c)  $37^{\circ}$ F (d)  $32^{\circ}$ F
- **4.** We buy petrol in
  - (a) Kilogram
  - (c) Litre 🗸
- 5. The device used to measure temperature is
  - (a) Weighing balance
  - (c) Metre rod

(b) Thermometer

(b) Metre

(d) Second

(d) Measuring tape

#### B. Match the following.



- C. Answer the following questions.
  - 1. What is length? Name two non-standard units of length.
- Ans. Length tells us how long an object is. Two non-standard units of length are cubit and foot.
  - 2. What are the various units in which time can be measured?
- Ans. Time can be measured in year, month, day, hour, minute and second.
  - 3. What do you understand by capacity?
- Ans. The amount of a liquid that a container can hold is called its capacity.
  - 4. What is the standard unit of measuring capacity?
- Ans. The standard unit of measuring capacity is litre (L).
  - 5. What does mass of an object tell us?
- Ans. Mass of an object tells us how light or heavy the object is.
  - 6. What is temperature?
- Ans. Temperature is the measure of hotness or coldness of an object.
  - 7. What is a thermometer?
- **Ans.** The device used to measure temperature is called thermometer.
  - 8. What is the normal human body temperature in (a) degree Celsius, and (b) degree Fahrenheit?
- **Ans.** (a) 37°C (b) 98.6°F
- D. Name a suitable measuring device that you would use to measure the following.

<b>1.</b> Your waist	<u>Measuring tape</u>
<b>2.</b> The height of your lunch box	Ruler
<b>3.</b> Your weight	Weighing machine
<b>4.</b> Milk in a glass	Measuring can

#### Think Zone

- **1.** Ritu wanted to measure her friend's height. She took a small ruler to measure her height but her friend asked her to use a measuring tape. Why?
- **Ans.** A small ruler is used to measure smaller lengths and we cannot measure larger lengths with it accurately. Therefore, measuring tape will be suitable to measure the height.

#### 2. Handspan and cubit are not used as standard units. Why?

**Ans.** Handspan and cubit are not used as standard units because their sizes are not same for all people and vary from person to person. Hence, they give different results for same measurement.