

## Chapter 2: The Living World

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### EXERCISE [PAGE 17]

#### Exercise | Q 1.1 | Page 17

**Write the answer to the following question in your own words.**

What are the differences between plants and animals?

### SOLUTION

Plants	Animals
They can make their own food through the process of photosynthesis. They are autotrophs.	They cannot make their own food. They are heterotrophs.
They show movement, but cannot show locomotion i.e., they cannot change their position from one place to another.	They show movement as well as locomotion.
They show response to stimuli, but lack sense organs.	They also show responses to stimuli and have well-developed sense organs.
They grow throughout their life.	They stop growing once they reach their adult form.

#### Exercise | Q 1.2 | Page 17

**Write the answer to the following question in your own words.**

What are the similarities between plants and animals?

### SOLUTION

Apart from various differences, plants and animals also have some similarities. Plants and animals both show vital processes like growth, reproduction, respiration, and excretion. Both of them require energy to carry out their various functions.

#### Exercise | Q 1.3 | Page 17

**Write the answer to the following question in your own words.**

How is the plant kingdom useful to us?

### SOLUTION

**The plant kingdom has various uses in our life like:**

- they provide habitat for a variety of organisms.

- they are the major producers of oxygen.
- they provide us with wood, which is a source of fuel and other products.
- they provide us with plants that have medicinal and ornamental importance.

### Exercise | Q 1.4 | Page 17

**Write the answer to the following question in your own words.**

How is the animal kingdom useful to us?

#### **SOLUTION**

Animal kingdoms are useful to us in various ways. The animals from the animal kingdom can be domesticated for various purposes. There are three categories of useful domesticated animals.

- Milk and Flesh Yielding Animals- These are the animals from which we obtain food products. They include cattle, goat, poultry, pig, sheep, etc.
- Draught Animals- These are the animals used for transportation, ploughing of fields, and other agricultural activities. They are hardy and can lift heavy loads.
- Fibre, Hide, and Skin Yielding Animals- These animals yield useful products such as fibre (wool), hide, etc. They include sheep, goat, cattle, camel, etc.

### Exercise | Q 1.5 | Page 17

**Write the answer to the following question in your own words.**

What makes living things different from non-living things?

#### **SOLUTION**

Living things	Non-living things
They are made up of cells.	They are not made up of cells.
They show movement, but the energy for movement comes from within the organism.	They show movement by taking external force or energy.
They require food.	They do not require food.
Growth in them is irreversible.	Growth is reversible.
Respiration occurs in which food is oxidised to release energy.	They do not require respiration.
Reproduction occurs in living things.	Non-living things do not reproduce.

**Exercise | Q 2.1 | Page 17**

What helps them to breathe?

A fish

**SOLUTION**

A fish- Gills

**Exercise Q 2.2 | Page 17**

What helps them to breathe?

A snake

**SOLUTION**

A snake - External nares (they are similar to nose in humans)

**Exercise | Q 2.3 | Page 17**

What helps them to breathe?

A crane

**SOLUTION**

A crane- Nostrils

**Exercise | Q 2.4 | Page 17**

What helps them to breathe?

An earthworm

**SOLUTION**

An earthworm- Skin

**Exercise | Q 2.5 | Page 17**

What helps them to breathe?

Man

**SOLUTION**

Man- Nose

**Exercise | Q 2.6 | Page 17**

What helps them to breathe?

A banyan tree

**SOLUTION**

A banyan tree- Microscopic pores on leaves

**Exercise | Q 2.7 | Page 17**

What helps them to breathe?

A caterpillar

### **SOLUTION**

A caterpillar- Tiny holes on their body known as spiracles

### **Exercise | Q 3.1 | Page 17**

**Fill in the blank with the proper word.**

The process by which plants make their own food is called \_\_\_\_\_.

1. oxygen
2. dies
3. excretion
4. carbon dioxide
5. responsiveness
6. **photosynthesis**
7. stimuli

### **SOLUTION**

The process by which plants make their own food is called **photosynthesis**.

### **Exercise | Q 3.2 | Page 17**

**Fill in the blank with the proper word from the brackets.**

To inhale \_\_\_\_\_ and to exhale \_\_\_\_\_ is called respiration.  
(oxygen, dies, excretion, carbon dioxide, responsiveness, photosynthesis, stimuli)

### **SOLUTION**

To inhale **oxygen** and to exhale **carbon dioxide** is called respiration.

### **Exercise | Q 3.3 | Page 17**

**Fill in the blank with the proper word.**

The elimination of waste substances from the body is called \_\_\_\_\_.

1. oxygen
2. dies
3. **excretion**
4. carbon dioxide
5. responsiveness
6. photosynthesis
7. stimuli

### **SOLUTION**

The elimination of waste substances from the body is called **excretion**.

### **Exercise | Q 3.4 | Page 17**

**Fill in the blank with the proper word from the brackets.**

The ability to respond to an event is called \_\_\_\_\_ to \_\_\_\_\_.  
(oxygen, dies, excretion, carbon dioxide, responsiveness, photosynthesis, stimuli)

### **SOLUTION**

The ability to respond to an event is called responsiveness to stimuli.

**Exercise | Q 3.5 | Page 17**

**Fill in the blank with the proper word.**

On completing their lifespan, every living thing \_\_\_\_\_.

1. oxygen
2. **dies**
3. excretion
4. carbon dioxide
5. responsiveness
6. photosynthesis
7. stimuli

**SOLUTION**

On completing their lifespan, every living thing dies.

**Exercise | Q 4 | Page 17**

**Write the uses of these animals.**

**Animals:** Honeybees, sharks, yaks, sheep, earthworms, dogs, bivalves, horses, mice.

**SOLUTION**

Animals	Uses
1. Honeybees	Provide us with honey and wax.
2. Sharks	Used in medicines, cosmetics, pet products, etc.
3. Yaks	Used for obtaining wool.
4. Sheep	Used for obtaining wool.
5. Earthworm	Used in agriculture for composting(vermicomposting).
6. Dogs	As pets.
7. Bivalves	Used as a source of food.
8. Horses	For transportation.
9. Mice	As pets and models for testing various experiments.

**Exercise | Q 4 | Page 17**

**Write the uses of these plants.**

**Plants:** Ginger, mango, eucalyptus, babul (acacia), teak, spinach, aloe vera, turmeric, holy basil, Karanja, moh, mulberry, grapevine.

**SOLUTION**

Plant	Uses
1. Ginger	Used in foods and for medicinal purposes.
2. Mango	For obtaining fruits.
3. Eucalyptus	For making paper and essential oils.
4. Babul (Acacia)	Used in toothpaste and other medicinal purposes.
5. Teak	Used in making furniture.
6. Spinach	Used as food.
7. Aloe vera	Used for cosmetic and medicinal purposes.
8. Turmeric	Used as a spice and for various medicinal purposes.
9. Holy basil	Spiritual importance and for various medicinal purposes.
10. Karanja	Used for medicinal purposes like treating skin diseases.
11. Moh	Used for medicinal purposes.
12. Mulberry	For obtaining fruits.
13. Grapevine	For obtaining fruits and making wine.

**Exercise | Q 5 | Page 17**

What are the peculiarities of the movements of these living things?

**Living things:** Snakes, tortoises, kangaroos, eagles, chameleons, frogs, gulmohur, sweet potato creeper, dolphins, ants, rattlesnakes, grasshoppers, earthworms.

**SOLUTION**

Living thing	Movement
1. Snakes	Crawl
2. Tortoises	Swim and crawl
3. Kangaroos	Jump
4. Eagles	Fly
5. Chameleons	Walk
6. Frogs	Swim and hop

7. Gulmohar	Grows in the direction of light
8. Sweet potato	Grows in the direction of gravity
9. Creeper	Grows in the direction of light
10. Dolphins	Swim using fins
11. Ants	Walk
12. Rattlesnakes	Crawl
13. Grasshoppers	Hops
14. Earthworm	Crawl

### Exercise | Q 6 | Page 17

Write in detail about how the plants and animals found in your surroundings prove useful or harmful.

#### **SOLUTION**

There are so many kinds of plants and animals which we find in our surroundings. These plants and animals can be both useful and harmful to us. The following points support this fact:

#### **Useful plants:**

- Plants like tulsi, mint, ashwagandha, neem, etc. are called medicinal plants and have various medicinal properties.
- There are many plants which provide us with fruits and vegetables like mango etc.
- Certain plants are used for ornamental purposes like money plants etc.
- There are plants from which we obtain rubber which is used in the manufacture of tires, tubes, raincoats, belts, sports goods, etc.
- Flowers like rose, jasmine, lavender, Champa, saffron, etc. are used for extracting sweet-smelling oils called perfumes.

#### **Harmful plants:**

- Parthenium is a type of plant which can cause pollen allergy to humans.
- White Cedar is a small neem-like tree with attractive yellow fruits. These are lethal if taken by children and cause vomiting, diarrhea, and difficulty in breathing in adults.
- Leaves of colocasia and pods of nettle cause itching.
- Datura is an example of poisonous plants.

#### **Useful animals**

- Milk and Flesh Yielding Animals- These are the animals from which we obtain food products. They include cattle, goat, poultry, pig, sheep, etc.

- Draught Animals- These are the animals used for transportation, ploughing of fields, and other agricultural activities. They are hardy and can lift heavy loads.
- Fibre, Hide, and Skin Yielding Animals- These animals yield useful products such as fiber (wool), hide, etc. They include sheep, goat, cattle, camel, etc.

All animals and insects are not useful, some of them can cause a lot of harm to our health and also to our crops. Such animals and insects are known as pests.

- Insects, like grasshoppers, beetles, etc. cause enormous damage to the agricultural crops and thus affect their yield.
- Animals like tigers, lions, etc. can enter human settlements and may kill domestic animals and people.
- Caterpillars or larvae of many insects feed on the leaves on which they live.
- Stored grains are also attacked by rodents like rats and rabbits and by many kinds of moths, caterpillars, and beetles.