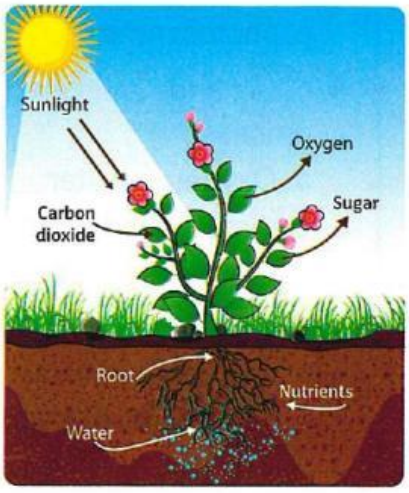
Activity 3 What Do You Already Know About Plant Needs ?

- Water and air are basic needs of plants, animals and humans.
- Humans and other animals need to eat food to gain energy and nutrients to live and grow.
- Most plants get nutrients and water from the soil and make their own food through a process known as "photosynthesis process" that takes place in the plant leaves.
- **Plants need some resources to live and grow such as :**
  - Carbon dioxide gas (a gas found in the air).
  - Sunlight. - Water. - Nutrients from the soil.

Plants and food

- Plants make their own food which is a type of sugar that provides the plant with energy to grow.
- Plants make their food (sugar) in their leaves by means of photosynthesis process, **where :**
  - The roots of a plant absorb water and nutrients from the soil.
  - Water and nutrients are carried from the roots to the leaves through the stem.
- **From the previous explanation, we can conclude that the plant's basic needs that enable it to make its food are :**
  - Sunlight - Water - Air (carbon dioxide).



Photosynthesis process

Check your understanding

▶ Classify the following items into "Basic plant need for photosynthesis" or "Not basic plant need for photosynthesis" :

(Water – Sunlight – Oxygen – Sugar – A forest – Carbon dioxide)

Basic plant need for photosynthesis	Not basic plant need for photosynthesis
.....	.....
.....	.....
.....	.....

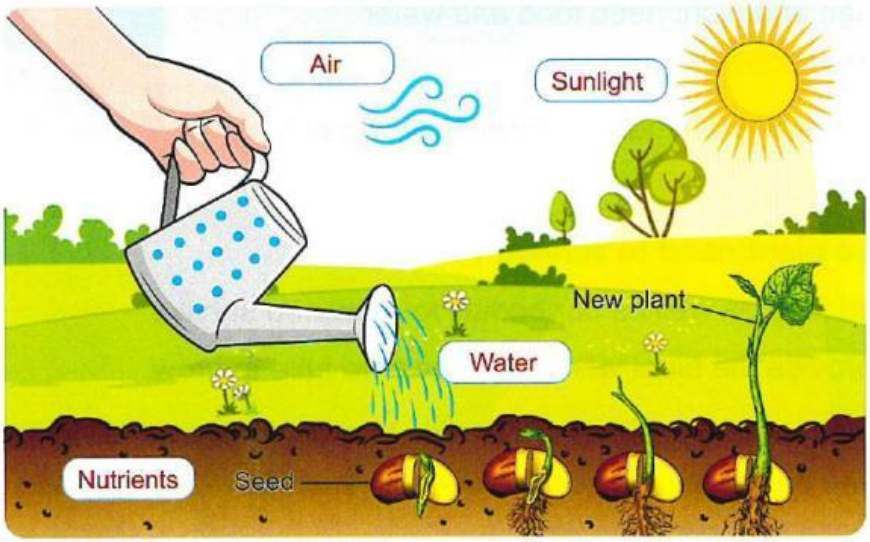
In the Assessment Book :
Try to answer :
Self-Assessment (1)

basic	أساسى	photosynthesis process	عملية البناء الضوئى	instead of	بدلًا من
gain	يكتسب	carbon dioxide gas	غاز ثانى أكسيد الكربون	provide	يمد
energy	الطاقة	absorb	يمتص		
by means of	عن طريق	forest	غابة		

LIVEWORKSHEETS

LESSON ONE

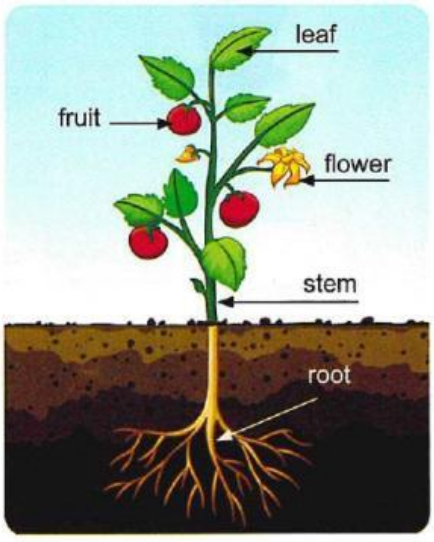
Activity 1 Can You Explain ?



- When you observe the figure above that shows the steps of growing up a bean seed to form a new plant, you can find out what the plant needs to grow.
- Plants need water, air, sunlight, nutrients and space to grow.

▸ How do the structures of a plant use water, air and light to perform life processes ?

- Plants consist of different parts which are roots, stem, leaves and sometimes flowers or fruits, where each part of a plant has its own function.
- Plants use these different parts to obtain their **basic needs** of water, air and light to make their own food.



Plant parts

▸ In this concept, we will study :

- Plant basic needs.
- Parts of a plant.
- Comparing plant and human systems.
- Human circulatory system.
- Plant transport system.
- Plant food.
- Flowers and seeds.
- Seed dispersal.

bean seed	بذرة فول	space	مساحة	circulatory system	الجهاز الدورى
nutrients	العناصر الغذائية	obtain	يحصل على	transport system	نظام النقل
perform	يقوم	basic needs	احتياجات أساسية	dispersal	نثر / انتشار

LIVEWORKSHEETS

Activity 2 Tree Needs

▶ **Look at the opposite picture, then put (✓) or (✗) :**



1. Both human and plant need food and water everyday to survive. ( )
2. Both human and plant need carbon dioxide gas to breathe. ( )

▶ **What does a plant need to survive ?**

- Plants need food as well as our bodies to grow and survive.
- We must provide the plant with all its needs to able to grow.

Example : When a tree is planted, it begins to grow from a seedling into a mature tree depending on some resources such as water, air and sunlight to make its food to survive.

Check your understanding

▶ **Circle the items that the plant needs to grow and survive :**



Space





Water



Meat



Sunlight



Air



Perfume

human	الإنسان	plant	يزرع	resources	مصادر
seedling	شتلة	mature	ناضج / كبير		

LIVEWORKSHEETS