



مدارس الريادة العالمية
AL-REEYADA INTERNATIONAL SCHOOL



Cambridge Assessment
International Education
Cambridge Associate School



AL-REEYADA INTERNATIONAL SCHOOL
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Science 4

Worksheet

Reminder: Kindly print this worksheet and bring it to class on (Sunday and Monday) WITHOUT ANSWERS.

Name: _____ Grade/Section: _____
Roll No: _____ Date: _____

Important points: -

- The leaves of most plants are green because of a green substance known as **chlorophyll**.
- Chlorophyll is a **green** substance that helps **trap energy** from sunlight to make food.
- Chlorophyll is needed for plants to **make food**. They make food in their **leaves**.
- Some plants can also make food in their **stems**. An example is the **cactus**.
- Many **non-green living things** cannot make their own food such as mushrooms.
- 'Photo' means **light**. 'Synthesis' means **putting together**.
- **Photosynthesis** is the process through which plants make food. This process happens in the **leaves**.
- Plants need **carbon dioxide**, **water** and **sunlight**.
- Carbon dioxide from the air passes through small openings (holes) in the leaves called **stomata**.
- Water is absorbed by the **roots** and passes through vessels in the stem and travels through the **veins** to all the parts of the leaves.
- Sunlight is **trapped** by a green substance (chlorophyll) in the leaves.
- Photosynthesis is important because it provides two main things, **food**, and **oxygen**.
- Some of the starch that plants produce during photosynthesis is used by the plant as food for **growth**, **making flowers, fruits and seeds** and **repairing damage**.
- The **remaining** starch is stored in **fruits, seeds, leaves, roots or the stem** which are later used by the plants or eaten by animals.
- **Oxygen** that is produced during photosynthesis is released into the atmosphere.

- Photosynthesis is so essential to **life on earth** that most living things, including humans, cannot survive without it.
- Without plants to replace oxygen in the air, animals **will die**.
- All our **energy** for growth, development and physical activity comes from eating food from **plants and animals**.
- We **depend on plants** for oxygen and food.
- Photosynthesis also helps to **balance** oxygen and carbon dioxide levels in the air.
- When balance is maintained, **plants get enough** carbon dioxide to make food and animals get enough food and oxygen from plants.
- To **test for starch**, you will notice that the leaf colour changes to **blue black**. This shows the **presence of starch**.

PAPER – 2

I. Multiple Choice. Write the correct alphabet, representing your answer in the space provided.

- _____ 1. What will happen if plants stop photosynthesizing?
A. Plants will die. B. Animals will die C. Both plants and animals will die.
- _____ 2. ***** is an example of living things that do not make their food
A. Tape grass B. Mould C. Coffee plant
- _____ 3. ***** is the process by which plants make their own food.
A. Carbon dioxide B. Reproduction C. Photosynthesis
- _____ 4. plants need ***** things to make food.
A. five (5) B. two (2) C. three (3)
- _____ 5. Which food do plants make?
A. Sugars B. Starch C. Minerals
- _____ 6. Which of these are needed for photosynthesis to take place.
A. Water and minerals only
B. Water, minerals, carbon dioxide, and sunlight
C. Sunlight, sugars, and water
- _____ 7. Which part of the plant absorbs water from the soil?
A. veins B. stem C. roots
- _____ 8. The part of the plant where food is made also known as the food factory of the plant is the*****
A. midrib B. fruit C. leaf

_____ 9. What is the waste product of photosynthesis?
A. Carbon dioxide B. Chlorophyll C. Oxygen

_____ 10. Carbon dioxide is absorbed by the leaf through the *****
A. stomata B. veins C. leaf blade

_____ 11. The ***** provides energy to help the plant carryout photosynthesis.
A. air B. leaf C. sun

_____ 12. Animals depend on plants for ***** and *****
A. food and water B. food and oxygen C. oxygen and mineral

_____ 13. The plant uses the food made for these except*****.
A. breathing B. growth C. repairing damage.

_____ 14. Which of the following is a vein of a leaf?
A. Stem B. Midrib C. root

_____ 15. Water is transported to the leaf through the*****
A. chlorophyll B. stomata C. veins

_____ 17. What does photosynthesis produce?
A. Water and minerals B. Sugars and oxygen C. Carbon dioxide and food

_____ 18. What is needed for plants and animals to get enough carbon dioxide and oxygen respectively?

- A. Plants should produce their own carbon dioxide.
- B. We should protect nature to maintain balance between plants and animals.
- C. Animals should increase in number.

_____ 19. To test for starch in a leaf, why do we boil the leaf?
A. To block sunlight B. To remove its colour C. To kill the cells

_____ 20. After putting drops of iodine, the blue black colour on the leaf shows that *****.
A. Chlorophyll is absent B. Chlorophyll is present C. Starch is present.

PAPER – 4

A. Identify what is being asked or described. Write your answer in the blank.

_____ 1. The food factory of the plant or where food is made in the plant.

_____ 2. Very small holes(openings) on the underside of the leaves.

- _____ 3. The green pigment that helps the plant to absorb sunlight.
- _____ 4. It is needed for photosynthesis and travels through veins of the leaf.
- _____ 5. The food stored in plants after photosynthesis.
- _____ 6. The gas given out during photosynthesis, which we use for breathing.

B. Answer the following questions.

1. During which time of the day does photosynthesis stop and why?

Ans: _____

_____.

2. Write the functions of the following.

A. Roots: _____
_____.

B. Starch: _____
_____.

3. What will happen if all animals die?

Ans: _____

_____.

C. Fill in the blank with the correct answers.

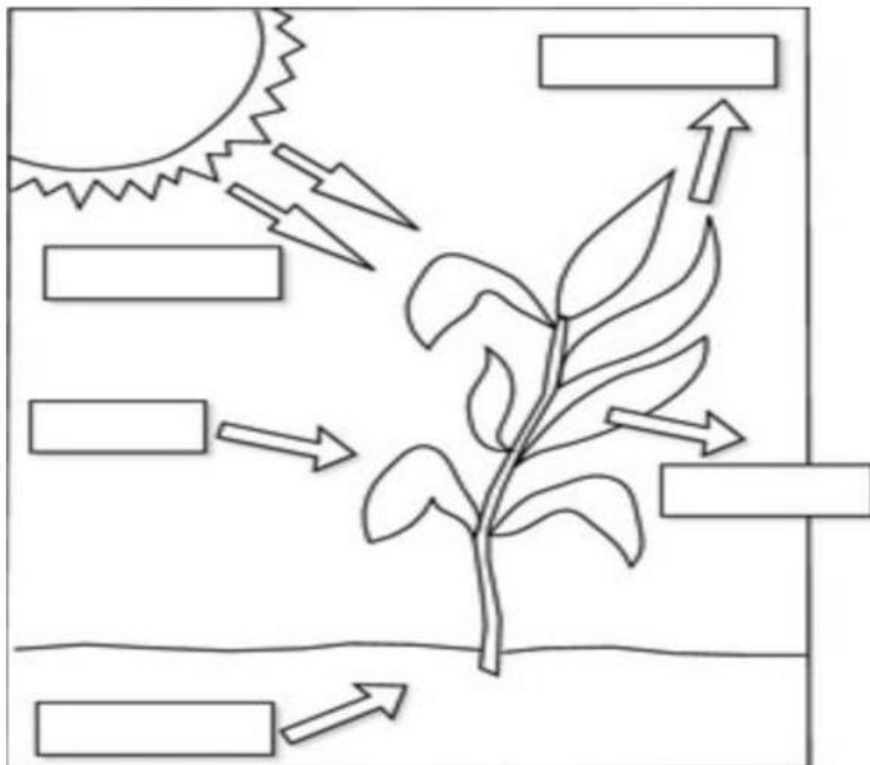
1. Photosynthesis is the process in which a plant makes _____ with the help of _____ from the soil and _____ from the air.

2. Sunlight is a source of _____.
3. Photosynthesis comes from the words "photo" and "synthesis". Photo means _____ and synthesis means _____.
4. Plants take in _____ and give out _____.
5. Plants make their own food by putting together _____, _____ and _____.
6. Photosynthesis is the _____ by which _____ make _____.

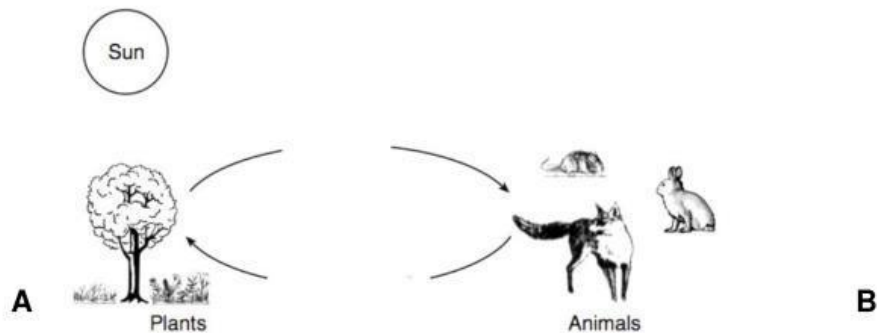
PAPER – 6

A

1. Label the diagram to show the things needed for photosynthesis and things produced in the process.



2. Look at the image and write the correct answers in the boxes provided.



I. Which one makes its own food? What is the process called?

Ans:

II. Mention two things that image A provides for image B

Ans:

1.

2.

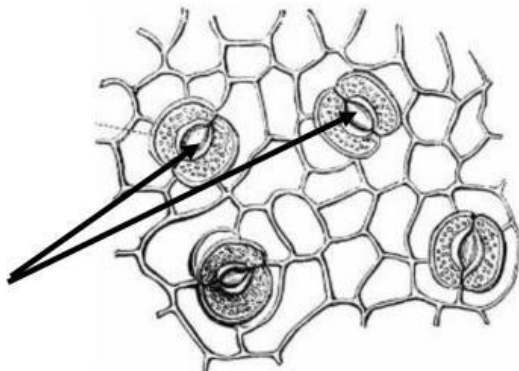
III. Which of the above has chlorophyll? What is its function?

Ans:

IV. What does image B provide for image A?

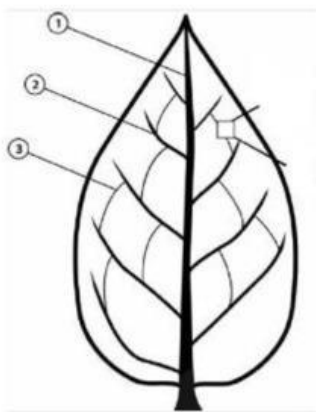
Ans:

3. Identify the name of the parts in the images given below and state their function.



1. Name: _____

Function: _____



1. _____

2. _____

3. _____

Function: _____

4. Describe the following stages in the leaf starch test.

