Delhi Public School, Gandhinagar
Class 4
Subject: EVS
Name of Book: SCIENCE VOYAGE
CHAPTER 3:Animals and their Young ones

New Words

1. Reproduction	**11. Nymph**
2. Embryo	**12. Moulting**
3. Incubation	**13. Cocoon**
4. Yolk	**14. Caterpillar**
5. Hatching	**15. Pupa**
6. Tadpole	**16. Chrysalis**
7. Cluster	**17. Reptiles**
8. Spawn	**18.Mammals**
9. Cluster	**19.Blowholes**
10.Metamorphosis	**20.marsupials**

Answer The Following Questions:

Q. 1)-Define reproduction?Why do all living organism reproduce?

Ans.)- The process by which living organisms produce young ones is known as reproduction. All living organism reproduce for the continuity of life.

Q. 2)-What are the two ways by which animals reproduce?

Ans.)-Animals reproduce in two ways-

ii) by laying eggs from which young babies hatch out.

i) by giving birth to young ones.

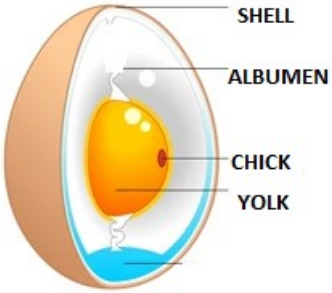
Q. 3)- Describe the structure of a bird's egg with the help of a labelled diagram.

Ans.)- Structure of a bird's egg:

(i)Shell-The outermost covering of the egg, it protects the young ones inside the egg

(ii) Egg White -within the shell is a white thick jelly like substance called the albumen. Itis rich source of protein. It also protects the developing baby.

(iii)Yolk-Inside albumen is round and yellow yolk. It is rich in fats, vitamin and minerals and provides nutrition to growing embryo.



Q. 4)- With the help of a flowchart show the life cycle of a frog.

Ans.)- Female frog lays eggs in water in clusters (frogspawn)

↓

Early tadpole (fish like, has tail to swim and gills to breathe)

↓

Late tadpole (grows limb, starts losing its tail and gills, starts developing lungs)

↓

Adult frog

Q. 5)- What are mammals? Give examples.

Ans.)-Animals that give birth to young ones and feed their own milk to their babies are known as mammals. Usually they have hair on their body Example : human beings, dolphins, rabbit .

Q. 6)- How do mammals take care of their young ones.

Ans.)-Mammals give birth to their young ones feed them, provide them with warmth of their body.

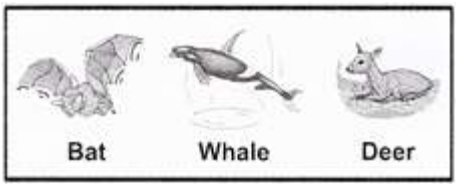
Some mammals carry their babies in the pouch of their body. These animals are known as marsupials. Example: kangaroo

Q. 7)-Define: (i) Life cycle (ii) Incubation (iii)Hatching (iv)Metamorphosis

(v) Moulting **(Will be given to the students to write on their own as homework)**

Competency Based Question

Q. 1)- How are the animals given below similar?



A) Their eggs have hard shells.

B) Their eggs must be incubated.

C) They give birth to live young one.

D) They do not look after their young.

Answer: C

Q. 2)-Which of the following young ones resemble their parents?

A) Caterpillar B) mosquito

C) tadpole D) Nymph

Answer: D

Q. 3Aruna studied two animals P and Q. At the end of her study, she made her observations as follows:

Observation	Animal P	Animal Q
Eggs are laid on land.	√	×
There are 4 stages in the life cycle.	×	√
It has six legs	√	√

Which of the following headings would be correct?

A)

Animal P	**Animal Q**
Butterfly	**Frog**

B)

Animal P	**Animal Q**
Cockroach	**Mosquito**

C)

Animal P	**Animal Q**
Cockroach	**Frog**

D) None of the above

Correct Answer: B (Animal 'P' is a cockroach and animal Q is a mosquito).

Q. 4 The growing chick in the yolk is called

A) larva.

B) pupa.

C) embryo.

D) cocoon.

Answer: C

Q. 5 The animals which suckle their young ones are called

A) mammals.

B) insects.

C) reptiles.

D) cocoons.

Answer: A

Delhi Public School, Gandhinagar
Class 4
Subject: EVS
Name of Book: SCIENCE VOYAGE
CHAPTER 1: GREEN PLANTS

New Words

1. Chlorophyll	10. Iodine
2. Leaf Apex	11. Alcohol
3. Midrib	12. Insectivorous
4. Petiole	13. Parasitic
5. Stipule	14. Saprophytic
6. Compound Leaf	15. Mould
7.Photosynthesis	16.Decay
8.Glucose	17.Organic
9.Starch	18. Stomata

Answer The Following Questions:

Q. 1)- Describe the detailed structure of a leaf with a well labelled diagram.

Ans.)- **Structure of a leaf:** The flat part of the leaf that is called a leaf blade.

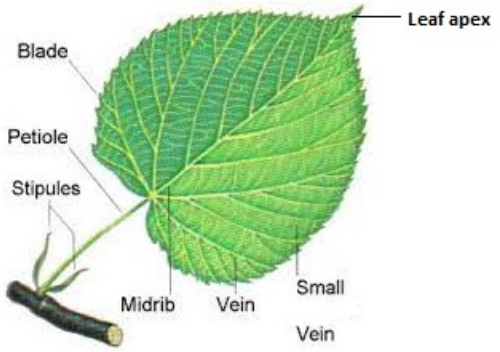
It is fattened for maximum absorption of sunlight. The upper side of leaf is dark and smooth while the lower side is light coloured and rough.

The tip of the leaf is called the Leaf apex.

The main vein in the center of the leaf is called Midrib.

The stalk of the leaf that attaches the leaf blade to stem is called Petiole.

Leaf like pairs found at the base of petiole are called Stipules.



Q. 2)-Write the functions of the following:

Ans-a) Veins- Helps in transporting food, water and minerals in different parts of plant.

b) Stomata-Help in exchange of gases (taking in carbon dioxide and giving out oxygen &water vapour).

c) Stipule-Protect the young leaf.

d) Petiole-Attaches leaf blade to the stem of a plant and supplies food and water to stem.

Q. 3)- Explain the process of photosynthesis in plants with equation and diagram.

Ans.)- Leaf is the kitchen or food factory of the plant.
It uses sunlight, water, carbon dioxide and chlorophyll to make food for the plants.

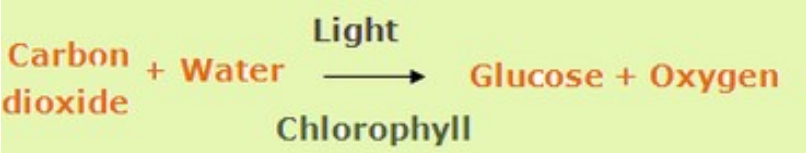
The process of photosynthesis:

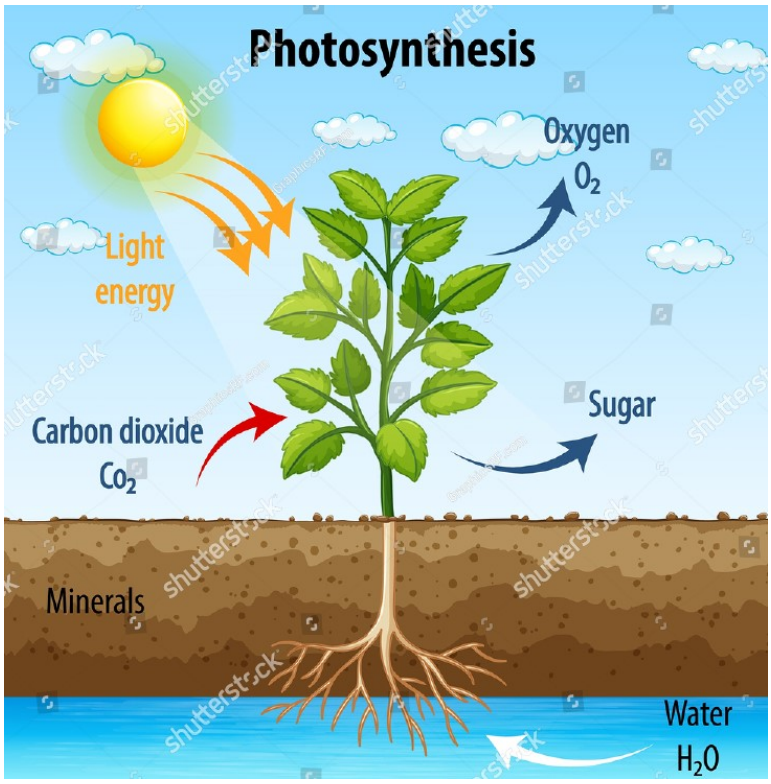
(i)The energy from sunlight is absorbed by chlorophyll present in leaves of the plants.

(ii) Water and minerals present in the soil is absorbed by the roots of the plants and carried to leaves by stem.

(iii)Carbon dioxide is taken through stomata (present in underside of leaves).

Equation:





Q. 4)- What happens to food prepared by plants?

Ans.)- Plants prepare their food in form of simple sugar or glucose.

This glucose is utilized by plants for growth and development.

The extra glucose is stored in form of starch in plant parts such as leaves, stems and roots

Q. 5)- How are plants and animals interdependent?

Ans.)- Plants and animals are interdependent:

(i) Plants are producers of food. Animals depend on plants for food.

(ii)Plants release oxygen during the process of photosynthesis which is used by animals for breathing.

(iii) Animals use oxygen and give out carbon dioxide which is used by the plants.

(iv) Animals die and decay & hence form natural fertilizers and minerals

Q. 6)- What is food chain?

Ans.)- A food chain describes how energy and nutrients move from producers (plants) to Herbivores and later to Carnivores.

Energy flow starts from sun to plants and then to animals in form of food.

Sun ⟶ Plant ⟶ Herbivores ⟶ Carnivores

Q. 7)- Explain the following unique organisms.

Ans.)-**(i) Venus's flytrap** – It is both producer and a Carnivore.

It photosynthesizes and catches insects for nutrition as well.

Such plants are called insectivorous plants

(ii) Non-green plants – These plants do not have chlorophyll hence cannot photosynthesize.

Therefore, they grow on dead decaying matter and absorb food from it.

Example: Coral Root& Indian pipe.

(iiI) **Parasitic plants** – Some plants depend on other plants partially or completely for their nutrition they are called parasitic plants. They cause damage to plants on what they grow.

Example: Cuscuta &Mistletoe.

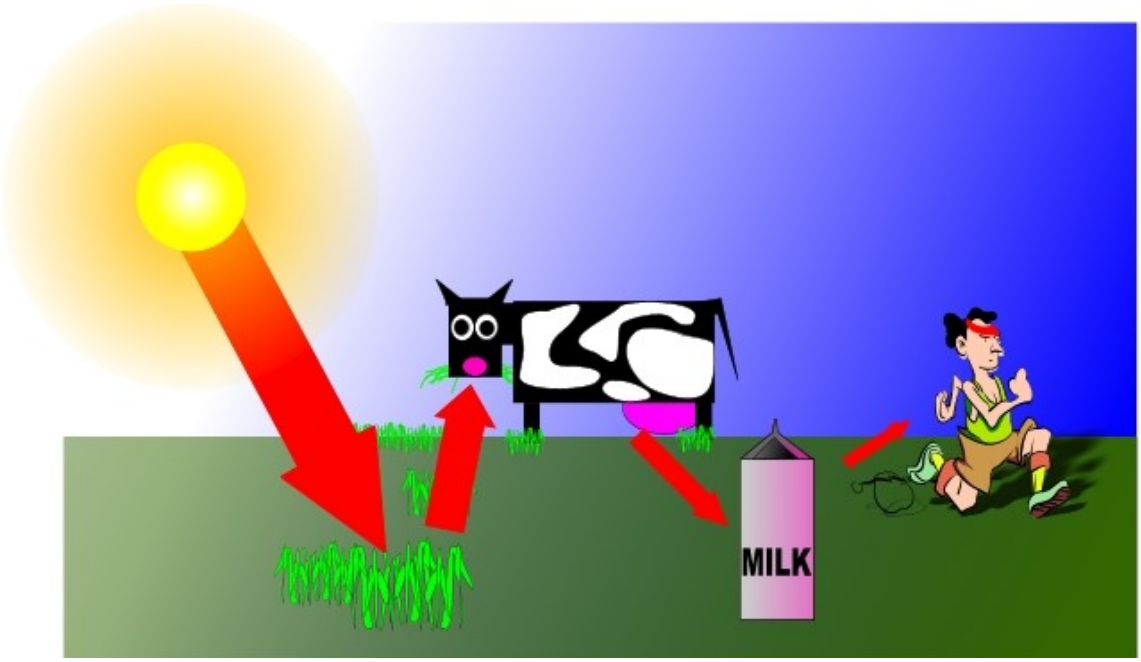
Q. 8)- What are compound leaves? Give example.

Ans-When leaf blade of leaf is divided into many leaflike structures called leaflets, they form a compound leaf. Example: Gul mohar.

COMPETENCY BASED QUESTIONS

1) Read the paragraph and fill in the blanks:

Photosynthesis is the process in which radiant energy from the sun is changed inside a plant into food (chemical energy).
Radiant energy can be called light or solar energy. All energy on the earth originally comes from the sun when people eat food, they get chemical energy they need to live and grow. The food chain below shows the energy from the sun could end up inside a person.
Plants need solar energy, carbon dioxide, chlorophyll and water to go through photosynthesis.



(i) Give two other names for sunlight energy: _____, _____ .
(ii) All energy on the Earth comes from the_____.
(iii) What energy transformation occurs during Photosynthesis:

_____ ⟶ _____

(iv) _____ absorbs sunlight as well as gives green colour to the plants.

Answer:

(i) Light, solar.

(ii) Sun

iii) Radiant energy ⟶ chemical energy

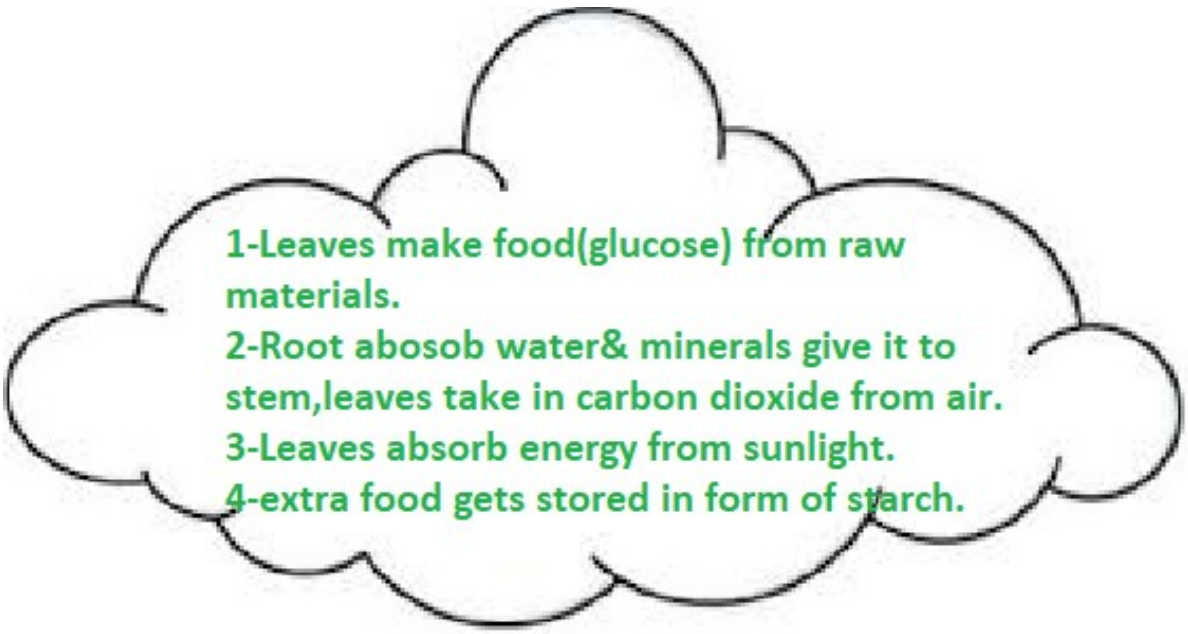
iv) Chlorophyll

2) Why the upper side of leaf darker green than the lower side:

a) For plants look more attractive.
b) Because more amount of chlorophyll is present on upper surface of leaf (to trap sunlight).
c) Make plant colourful.
d) None of the above.

Answer: (b)

3) Given below are activities performed by plants put them in correct order:



Answer: 2 ⟶ 3 ⟶ 1 ⟶ 4.

Delhi Public School, Gandhinagar
Class 4
Subject: EVS
Name of Book: SCIENCE VOYAGE
CHAPTER 2:HOW PLANTS SURVIVE

New Words

1. Adaptations	11. Coastal
2. Habitat	12. Spongy
3. Terrestrial	13. Submerged
4. Aquatic	14. Aerial
5. Deciduous	15. Fleshy
6. Climate	16. Thorns
7. Conifers	17. Tentacles
8. Evergreen	18. Epiphytes
9. Marshy	19. Yarn
10.Swamps	20. Biofuels

Answer The Following Questions:

Q. 1)- Define the following:

Ans.)- (i) Adaptations – they are special features that allow an organism to survive and reproduce in a particular area.

(ii)Habitat- the natural home of a plant or an animal is called the habitat.

Q. 2)-**Differentiate between deciduous and evergreen trees given example of each.**

Ans.)-

Deciduous trees	Evergreen trees
Trees that shed all their leaves once in a year are called deciduous trees.	**Trees that do not shed all their leaves at the same time. A few leaves fall and new ones grow. They remain green always.**
Example: Teak, Neem, Peepal	**Example: Conifers**

Q. 3)- Give one feature of the plants that grow in following areas (write their adaptive features only).

Ans.)- (i)Plains -trees are branched with numerous leaves.

(ii)Mountains – trees have needle like leaves with waxy coating so that snow slides of easily.

(iii)Deserts-Plants have small or no leaves. They have thick fleshy stem (covered with thorns) that store water.

(iv)Swamps – Plants have roots that grow above the ground in order to breathe (aerial or breathing roots).

(v)Coastal areas – They are able to survive in heavy rainfall.

Q. 4)- Explain the three types of aquatic plants along with examples. Draw diagrams also.

Ans.)- (i)Floating plants- The plants are spongy and filled with air this enables them for floating as they become light in weight.

Example: water hyacinth and duckweed

(ii)Fixed plants- Such plants have root fixed at the bottom of the pond in mud.

Their stems are hollow and have airspaces.

They have broad flat leaves at the water surface to trap maximum sunlight.

Stomata are found only on upper surface of the leaves.

Leaves have waxy coating to repel water.

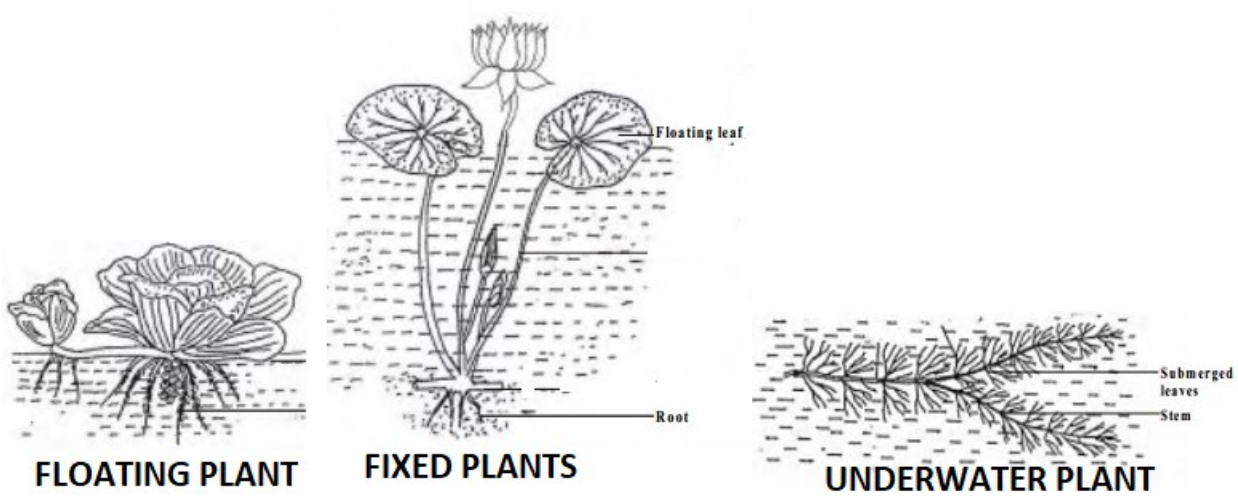
Example: water lily and lotus

(iii)Underwater plants- These plants are submerged completely in water.

The leaves and stems are thin and flexible (this allows movement with water current).

Leaves are without stomata (breathe in and dissolved gases in water through general water surface)

Example: Hydrilla and tape grass



Q. 5)- -What are epiphytes give examples?

Ans.)-Plants that grow on other plants to reach positions where they can have better access to sunlight or called epiphytes, they absorb moisture and nutrients from air, water and rain. Example: Moses and Fern.

Q. 6)-Write five ways to show importance of plants for humans. **(Will be given to the students to write on their own as homework).**

Competency Based Question

Q. 1)- Match the following home remedies to be used in the following situations

a) Ravi is having cough and cold	(i) turmeric
b) To reduce inflammation in body	(ii) aloe vera juice
c) For proper digestion by stomach	(iii) juice of Tulsi leaves
d) For having good sleep skin	(iv) Amla juice

Ans.)- (a)(iii); (b)(i); (c)(iv); (d)(ii).

Q. 2)-Identify me: I am an aquatic plant with broad flat leaf, stomata are present only on the upper surface of my leaves.

Ans-Lotus

Q. 3)- Choose the correct option: Why conifers have woody cones instead of flowers?

(i) because of extremely cold climate.

(ii) to prevent flower withering.

(iii) woody cones protect the seeds effectively.

(iv) all of the above

Ans-(iv)

Q. 4)- Ravi tried to grow Neem tree and Peepal tree in marshy areas to save the environment, with in a few week plants died. What could be the correct reason for it?

(i)they cannot grow in saline water

(iv)they do not have breathing roots

(iii)both (i) and (ii)

(iv)none of the above

Ans-(iii)

Q. 5)- Since India is agriculture-based country, we produce a lot of crops which have waste parts (after harvesting) so instead of burning them what could be done to save the environment from harmful gases released (due to burning)

(i)used to produce paper

(ii)can be turned into manure

(iii)can be used to produce biofuel.

(iv)all of the above

Ans-(iv)