



CLASS-V

SUBJECT- SCIENCE

TERM 1 (2020 - 2021)

TOPIC – Plants – Increasing In Numbers


Name - _____ CLASS / SEC _____ Date – 07.04.2020

NEW PLANTS FROM SEEDS


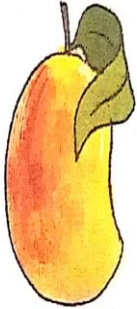
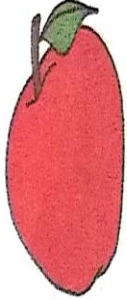
Most plants bear flowers. Once flowers bloom, they turn brown, the petals fall off and they change into fruits. Fruits have seeds inside them. New plants grow from these seeds.

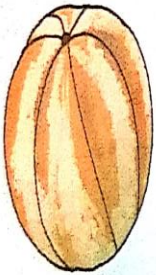
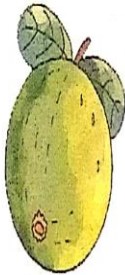
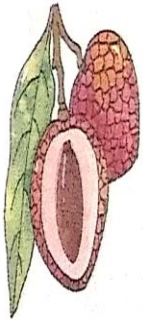
Activity -1

(To be done in the notebook along with 3 pictures pasted/drawn for each kind)

Warm-Up 

1. Given below are pictures of some fruits. Choose from the options given in the box and write down the number of seeds each fruit has.

a.  b.  c. 

d.  e.  f. 

one seed a few seeds many seeds

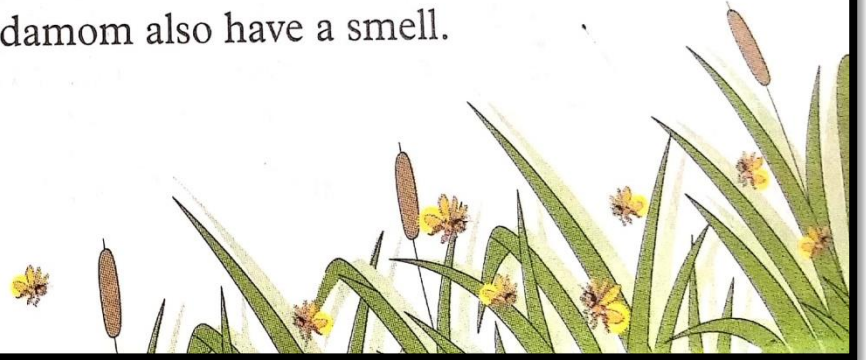
Activity -2

(For observation only)



Different types of seeds

Observe the seeds of Bengal gram, kidney bean, cumin, coriander, and red chilli. They are of different colours, sizes, and shapes. Some seeds like that of a cardamom also have a smell.



It's time now to visit your mama's kitchen. It's a store house of a variety of seeds!!!

PEEPING INSIDE THE SEED....

Let's first understand the structure of seed through an activity.

Activity -3

(To be performed only for observations)

To understand the structure of a seed

You will need: Kidney bean (rajma) seeds, cotton wool, four petri dishes and water

What to do: Bring some kidney bean seeds to class. Try to split a seed with your hands. You cannot, because it is hard. Now, put the seeds in a moist piece of cotton wool and place them in a shallow dish for a day. Next day, take out a seed and observe it carefully.

You will see: The seed has become soft as it has absorbed water. It has a small hole through which water is absorbed. Right below the hole is a scar. This is where the seed was attached to the fruit.

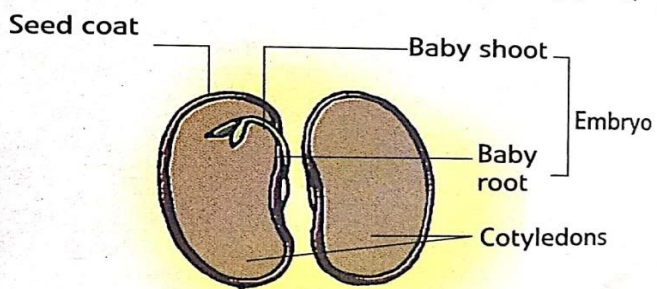
What to do: Remove the thin outer covering of the seed. This is the seed coat that protects the baby plant.

You will see: You can see two seed leaves. These are called cotyledons. They store food and provide nourishment to the germinating seedlings. Between the cotyledons is the baby plant, known as the embryo.

It has two parts, the baby shoot and the baby root. The baby shoot grows upwards and gives rise to stem, leaves and flowers. The baby root grows downward into the soil to form the roots of the plant.



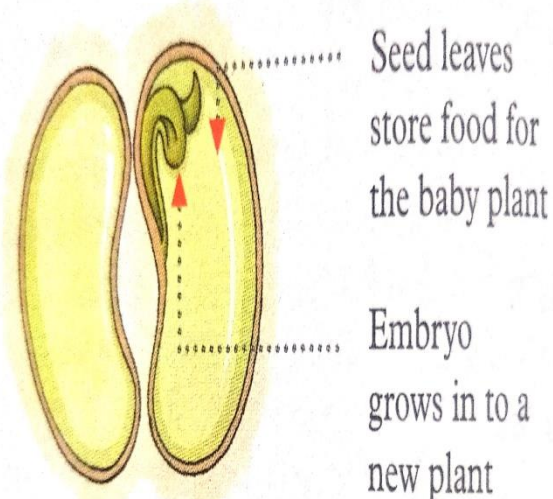
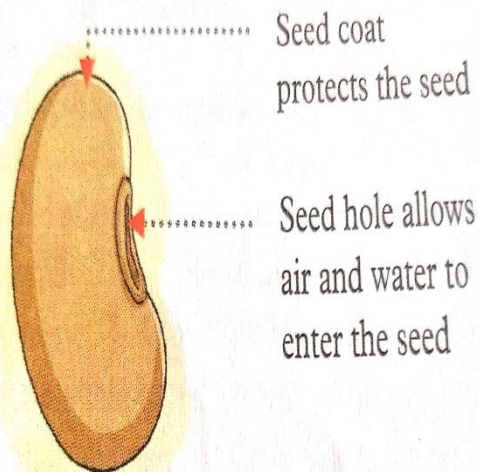
Kidney bean seed



Seed structure

Let's Sum up the above activity:- (To be copied in the notebook along with the diagrams)

S.No	Part Observed	Name	Function
1)	A tiny hole/opening through which air bubbles along with water can be seen oozing out on pressing the seed	Hilum	For absorption of water and breathing by the baby plant
2)	A dark black mark	Scar	Marks the point of attachment of the seed to it's fruit
3)	Outer most hard covering of the seed	Seed Coat	Protection of the baby plant
4)	1-2 soft, fleshy creamish white structures	Cotyledons/Seed leaves	Have stored food, used by the baby plant during its development into a seedling
5)	A tiny baby plant. It has 2 parts. a) Greenish leaf like b) Thin white part	Embryo ↓ a) Baby shoot (Plumule) b) Baby root (Radicle)	a) It grows upward to form the shoot system b) Grows downward to form the root system



All seeds do not have two seed leaves. While seeds of plants like beans, peas and dals have two seed leaves, seeds of plants like rice, wheat and maize have only one seed leaf. Collect these seeds and find out by yourself.



DID YOU KNOW?? (To be copied in the notebook)

InfoBits

- Seeds of some plants such as gram have two cotyledons. They are called **dicot seeds**.
- Seeds of some plants such as rice and maize have one cotyledon. They are called **monocot seeds**.



MAIZE

WHEAT

CASHEW & ALMONDS

(MONOCOTS)

(DICOTS)

Now, paste samples of different monocot and dicot seeds in your notebook (any 3 of each kind).

References:-

Dear children,

Here is a short video for reference made specially for you by one of our Science teachers:

<http://bbpspp.balbharati.org/wp-content/uploads/2020/04/Structure-of-Seed- Video-Lesson Class-V.mp4>

YOU TUBE LINKS

- 1) <https://www.youtube.com/watch?v=TE6xptjgNR0>
- 2) <https://www.youtube.com/watch?v=mgSzn-RJ3Zg&t=113s>

Recap Zone

- 1) Plants produce many seeds, but only healthy seeds grow into new plants.
- 2) A seed has 3 main parts: - Seed coat, Cotyledon and the Embryo.

Put on your thinking Caps:- **(Question 1 to 3 are to be done in the notebook)**

Ques1. Fill in the blanks:-

- a) Fruits have _____ inside them which grow into new _____.
- b) The outer covering of a seed is called the _____.
- c) _____ is the part of a seed that contains stored food for the baby plant.
- d) The _____ inside the seed grows into a seedling.
- e) _____ And _____ are examples of monocot seeds.
- f) _____ is the point of attachment of the seed to the fruit.

Ques2. Write True/False:-

- a) All seeds grow into new plants.
- b) A seed absorbs water through the embryo.
- c) A seed with two seed leaves is called a dicot seed.

Ques3. Explain the following observation giving reason (HOTS):-

- a) Soaked seeds wrapped up in cotton sprout even without food. How and Why?

(Lifeskill Activity)

Ques. Explore your mama's kitchen, learn to name and identify at least 10 pulses and spices available in the kitchen. List their English and Hindi names in your diary.