



**BAL BHARATI PUBLIC SCHOOL, PITAMPURA, DELHI - 110034**

**CLASS V**

**SUBJECT-SCIENCE**

**TERM 1 (2020 - 2021)**

**TOPIC: Plants - Increasing the Numbers**

**REVISION ASSIGNMENT-3 (Germination of Seeds)**

NAME - \_\_\_\_\_

CLASS V/ SEC \_\_\_\_\_

Date – 08.05.2020

### **LET'S RECALL**

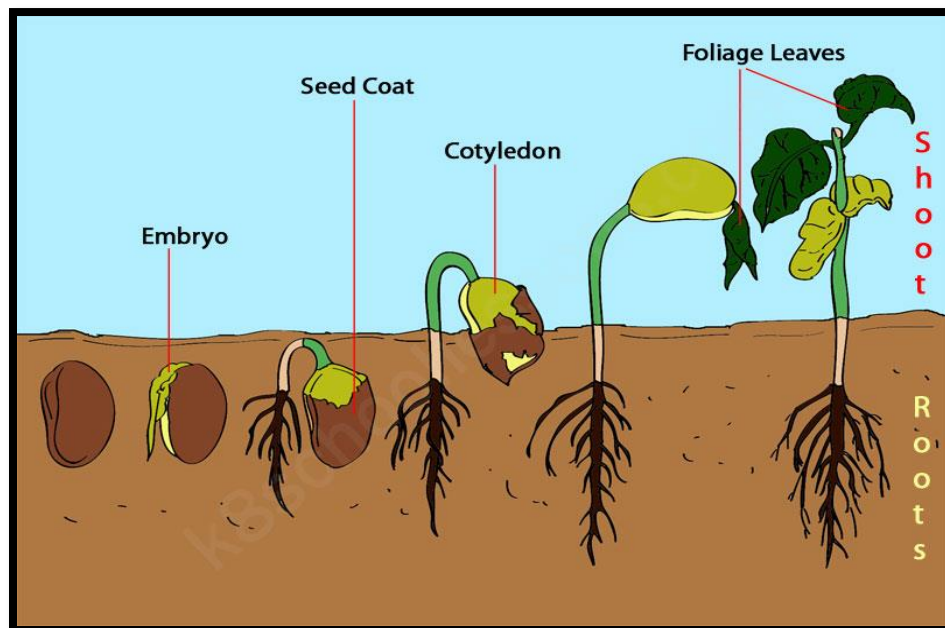
**(Not to be done in the notebook)**

We have learnt that most plants reproduce through seeds.

Seeds contain a tiny baby plant inside them, called an **EMBRYO**.

The process by which this tiny baby plant comes out of the seed and grows into a new plant (**SEEDLING**) is called **GERMINATION**.

### **Stages of Germination in a bean seed**



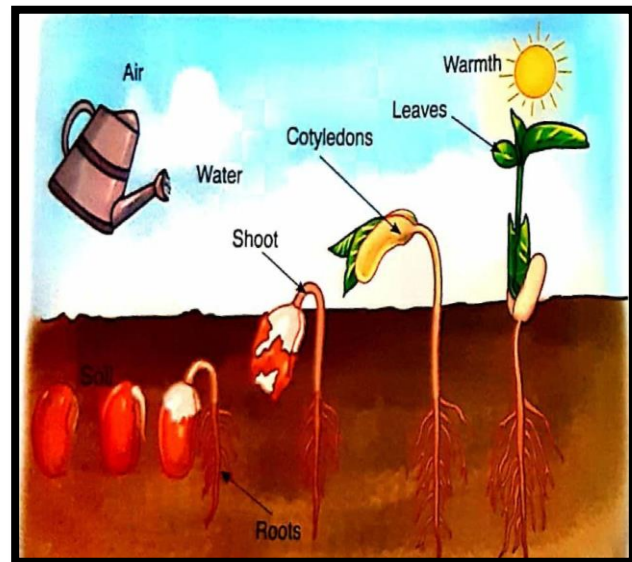
But this whole process does not happen all at once.

**The seeds do not germinate until they get all the right conditions.**

## CONDITIONS NECESSARY FOR GERMINATION:

- 1) The seed gets air, water, and warmth.
- 2) The seed soaks up water; seed coat breaks and the root emerges.
- 3) The new plant develops roots and a shoot.
- 4) As the plant grows in size, it develops leaves.
- 5) The cotyledons shrink and disappear.

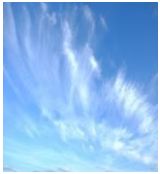
Thus, we observe that the seeds need: **WATER, AIR, WARMTH AND SOME LIGHT TO GERMINATE AND GROW INTO HEALTHY SEEDLINGS.**



**WATER** – makes the seed coat soft, so that the embryo can come out easily.



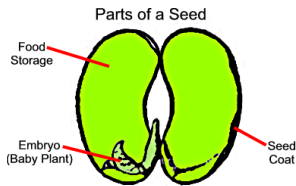
**WARMTH**- is required for the cells of the embryo to get active.



**AIR** –provides oxygen to the seeds for breathing and to release energy.



**LIGHT** –gives direction to the embryo to grow. The tiny shoot (plumule) grows towards light and the tiny root (radicle) grows opposite to light.



The **COTYLEDONS** or the seed leaves provide the baby plant with the food nutrients essential for its growth. Once the tiny leaves develop, the young plant is able to make its own food.

## Let's Revise

**(Please note: Q1 to 3 are to be done in the notebook)**

**Q 1. Complete the following sentences with the correct words: -**

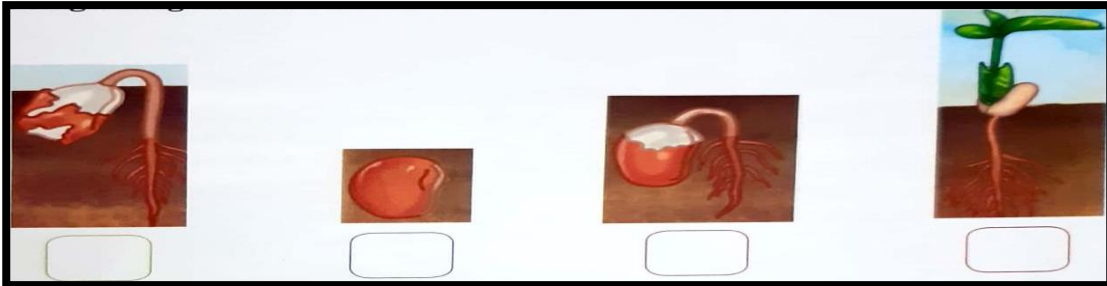
- A. The process by which a seed produces a seedling. -----
- B. ----- makes the seed coat soft.
- C. When the seed begins to germinate, the baby plant gets the nutrition from the-----
- D. The seeds won't germinate when kept in the freezer as they do not get any -----
- E. The tiny shoot emerging out of the seed will always grow towards the -----

**Q 2. Think and answer:-**

While sowing seeds in the field, a farmer keeps some distance between the seeds. Why?  
[Hint: Think of all the conditions required for the seeds to germinate.]

**Q 3. Number the different stages of germination in the correct order from 1 to 4.**

**(Draw the diagrams and mark the stages)**



**LIFESKILLS ACTIVITY**

**Your mother stores a lot of grains in the kitchen. Find out what she does to prevent the seeds from getting spoiled.**

