Girls' High School and College, Prayagraj <u>Work Sheet 2 (New)</u> <u>Session-(2020-2021)</u> <u>Class- 5A to 5F</u> <u>Subject – Science</u> <u>Chapter- More About Plants</u> <u>Topic- Germination of Seeds</u>

Instructions: Parents are expected to ensure that the child reads the passage for two days , understands and then answers the questions given below. The different stages of germination of a bean seed:-

- The seed gets sufficient air, water and warmth.
- The seed soaks up water and the seed coat breaks.
- The new plant develops roots and then shoot.
- As the plant grows in size, leaves develop.
- The cotyledons finally shrink and fall.

In the beginning or early stages of germination the

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Seedling gets the food required for its growth from the cotyledons. When the food stored in the cotyledons is used up, it gets its food from the soil. The roots absorb water and minerals from the soil and provide nutrients to the Seedling. The soil has pores through which air reaches the seed. Thus all the conditions needed for the seed to germinate are provided by the soil.



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Many a times too many seeds compete for the same space in the soil. The seeds compete for air, water, sunlight and nutrients. As a result, many of them die. All the seeds do not germinate into plants. Some seeds are eaten by birds and insects, some gets destroyed by rain or extreme heat. So the process by which a new seed produces a plant is called germination. In nature, many plants use special methods to ensure that their seeds do not grow too close to each other.

### Exercises:

## Q1. Fill in the blanks

- 1. In the early stages of development the seedling gets the food required for growth from the \_\_\_\_\_.
- 2. The seed soaks up \_\_\_\_\_ and the \_\_\_\_\_ breaks.
- 3. The new plant develops \_\_\_\_\_ and then a \_\_\_\_\_.
- 4. The \_\_\_\_\_ absorbs water and minerals from the soil.
- 5. The soil has \_\_\_\_\_ through which \_\_\_\_\_ reaches the soil.
- 6. Most plants grow from \_\_\_\_\_.
- 7. The \_\_\_\_\_\_ finally shrink and fall.

#### Q2. Write True or False

- 1. Most plants do not grow from seeds.\_\_\_\_
- 2. Plants need only sunlight and water for their growth.\_\_\_\_
- 3. Soil provides nutrients to the plants.

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4. Seeds are not destroyed by extreme heat.\_\_\_\_

### Q3. <u>Answer in short the following questions</u>

- 1. What is germination?
- 2. Name the conditions necessary for the germination of seeds?
- 3. What is absorbed from the soil?
- 4. For what do the seeds compete?
- 5. Why do all seeds not germinate into plants?
- 6. Which part of the seed grows first?

<u>Note</u>: The child should learn to draw and label the diagram of the structure of a bean seed and the stages of germination in a bean seed(given above).

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# <u>The End</u>