

SUBJECT-EVS**LESSON PLAN****TOPIC-SEEDS AND SEEDS**

Pre-Content/content Post-Content	Learning Outcome/Objectives	
	General	Specific
<u>Precontact</u> Students know that plants grow from seeds. They know the names of many seeds they use in everyday life. Content: • Conditions necessary for the germination of a seed. • Structure of a seed and different types of seeds. -monocot and dicot seeds. • Dispersal of seeds. <u>Post Content</u> • They will be able to explain how so many new plants grow in forests although nobody plants them.	Students will be able to • explore the structure of a seed.. • identify the conditions necessary for germination of a seed • identify the different type of seed. • elaborate the different ways by which plants disperse their seeds. • categorize seeds in accordance of their dispersal.	Students will be able to: • label the different parts of a seed and describe their functions. • list out changes observed during the process of germination. • differentiate between monocot and dicot seeds and classify the different seeds as spices, cereals and grains used in our daily life. • list the important characteristics of seeds which help them to disperse by different agents like air, water and animals. • recall the different agents for dispersal of seeds.

Homework/Assignment – Study the lesson and complete the exercises given in the textbook.

Collect seeds of some plants and classify them into monocot and dicot seeds. Write their uses.

Collect information about the seeds dispersed by different agents – e.g. air, water and animals.

AND PROGRESS**MONTH: DECEMBER****CLASS: V**

Teacher's Activity	Students' Activity	Teacher's Observation and Remedial action taken
Teacher will - conduct an activity to show the external and internal structure of seeds. Experiential Learning Annexure 5A - explain the conditions necessary for germination of a seed - divide the students into four groups and will ask them to classify seeds according to their shapes, texture, use. - show the difference between monocot and dicot seeds - show a small video on dispersal will be shown in the ICR and the content given on pages 47-49 will be explained through examples. - ask to collect the information about the different agents of seed dispersal and ask them to draw it in their notebooks.	Students will - bring some soaked seeds of bean or gram to study the internal structure. They will draw the different parts of the seed and write their functions. Experiential Learning Annexure 5a - take some bean seeds and do the activity and note down the observations. Group Activity - perform the activity and paste the samples in their notebooks after classification. - write the difference between them in their notebooks. Project- Plant your seeds - prepare a project on a plant as given on page 44 in their textbook. They will be asked to explain the changes noticed after a week. - perform the activity and draw the diagrams in their notebooks. Also they will write about the agents of dispersal of seeds.	

Teaching Aids: Pictures of different seed and plants, soaked and dry bean seeds. Charts to show dispersal of seeds , ICR , Textbook

Methodology/Innovative Methods: Known to unknown, Discussion, Audio Visuals, Demonstration, Activity and project method.

Interdisciplinary Links: Students will develop their language skills and improve their knowledge on new scientific terms..

HOD**Coordinator****Headmistress****Principal**

Annexure 5A & 5a

Activity Number-5

Plant the seeds for tomorrow

<u>SUBJECT</u>	<u>EVS</u>
<u>CLASS</u>	<u>V</u>
<u>CHAPTER</u>	<u>SEEDS AND SEEDS</u>
<u>TOPIC</u>	<u>GERMINATION</u>
<u>TIME</u>	• <u>SETTING UP THE EXPERIMENT – 20 MINS</u> • <u>PROCESS OF GERMINATION – 2 DAYS</u>
<u>NATURE OF ACTIVITY</u>	<u>GROUP ACTIVITY</u>

What will I learn ? (Learning Outcome)

To deduce that air and Water are essential for life processes.

Skills- Comprehending , Analyzing , Applying & Creating

What I have to do ? :

- work in group
- exhibit team spirit
- infer information
- recapitulate and associate previous knowledge to new situation
- follow instructions diligently

What do I require ? :

A slide, some tap water, a beaker, few bean seeds, a piece of thread.

What do I need to know ? :

- Air envelops the earth and makes life possible. The majority of living forms require oxygen for respiration, which is responsible for releasing energy for all life processes.
- Water is a necessity, to maintain a healthy body and a good balance within tissues of a living body. A large part of the living body is made up of water, and it must constantly be replenished, as it is used continuously in the process of life.

Teacher's Activity (Demonstration) : Teacher will:

1. Fill the beaker half with tap water and keep it at room temperature.
2. Tie a bean seed halfway down on the slide and one seed towards top of slide.
3. Place the slide in half filled beaker in such a way that one bean seed is above the water level and other bean seed is half dipped in water.
4. Leave the beaker with the seed slide, for a day or two at room temperature and observe.

How will I proceed ?

Students' activity: Students will:

perform the activity and record the observations in the tabular form.

What have I observed ? :

Conditions	Seeds will germinate or not	Reason
Seeds kept at the extreme ends of the slides		
Seeds kept in the center of the slides		

What have I learnt ? :

- Air is available to seed placed into middle of slide, while air is not available to the seed placed under water. Hence air is essential for life processes.
- The seed placed in the centre which is half dipped in water starts germinating, a small root emerges out of the seed, while the seed placed above water does not germinate. Water is essential for life processes.

What am I curious to learn?

Let us find out what are monocot and dicot seeds.

Let me evaluate myself

Q1. Define the following terms:

Germination: _____

Embryo: _____

Cotyledon: _____

Q2. Give reasons

a) Seeds kept in an air-tight container do not sprout.

b) Seeds kept in the refrigerator do not sprout.

c) Farmers leave space while sowing seeds.

Q3. Why can't we survive without water?
