

Modified In-School Off-School Approach Modules (MISOSA)
Distance Education for Elementary Schools
SELF-INSTRUCTIONAL MATERIALS



PARTS OF A SEED



Department of Education
BUREAU OF ELEMENTARY EDUCATION
 2nd Floor Bonifacio Building
 DepEd Complex, Meralco Avenue
 Pasig City

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PARTS OF A SEED (Part I)

At the end of this lesson, you will able to:

- identify the parts of a seed
- infer the function of each part of a seed



Try to Recall

- Do the following activities:

ACTIVITY 1

- Get a gumamela flower.
- Name its parts.
- Identify whether it is pistillate, staminate or a perfect flower.
- Identify which of its parts becomes the seed.

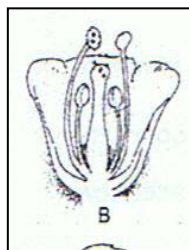
ACTIVITY 2

- Study the illustration.
- Arrange them according to the stages on how seeds are formed.
- Draw them in your notebook.

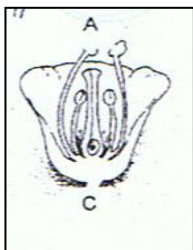
A.



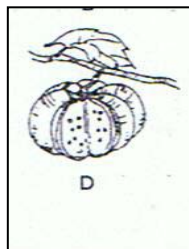
B.



C.



D.



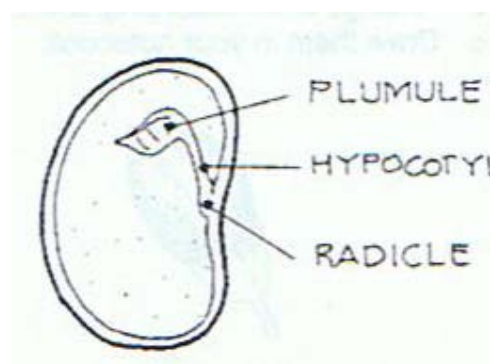
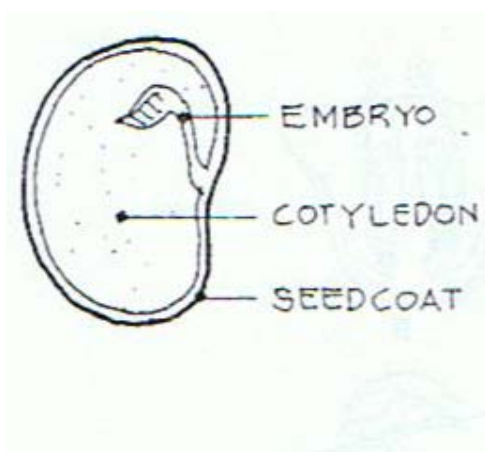


- Do the following activities:

ACTIVITY 1

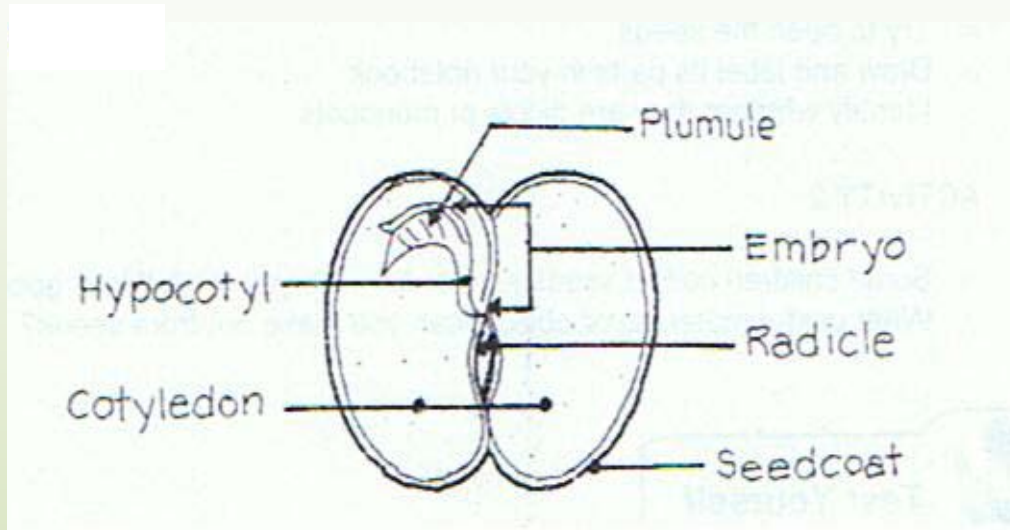
- Perform this activity. You will need the following:
 - Bean seeds
 - Hand lens
- Get bean seeds.
- Soak them in water overnight.
- Remove the skin.
- Split the seeds open.
- Look inside the bean using a hand lens. What do you see?
- Draw what you see under the hand lens in your notebook.
- Count the parts of a seed.
- Guess the name of these parts of the seed.
- Write your guess in your notebook.

Compare your answer with the picture below.



Read and Lear More:

The seed has an outer covering. This covering is called the **seed coat**. The seed coat protects the seed from injury. Inside the seed coat is a young plant called **embryo**. Beside it are two food parts called **cotyledons**. The cotyledons store food for the young plants. The embryo consists of a **plumule** which is the first leaves, the **hypocotyl** which will become the root stem and the **radicle** which becomes the primary root of the seedlings.



As you examine the seeds, you notice that some of them have two cotyledons. They are **dicotyledon** or **dicots**. You also notice that corn and papaya seeds have one cotyledon. Rice and wheat have cotyledon too. They called **monocotyledon** or **monocots**.

I learned that:

- ☑ The parts of a seed are seed coat, embryo, cotyledon.
- ☑ The embryo is made up of the plumule, hypocotyls and radical.
- ☑ The cotyledons provide food for the young plants.
- ☑ The protective covering of the seed is the seed coat.
- ☑ Some seeds have two cotyledons and they are called dicots.
- ☑ Some seeds have only one cotyledon and they are called monocots.



ACTIVITY 1

- Find at least five seeds.
- Try to open the seeds.
- Draw and label its parts in your notebook.
- Identify whether they are dicots or monocots.

ACTIVITY 2

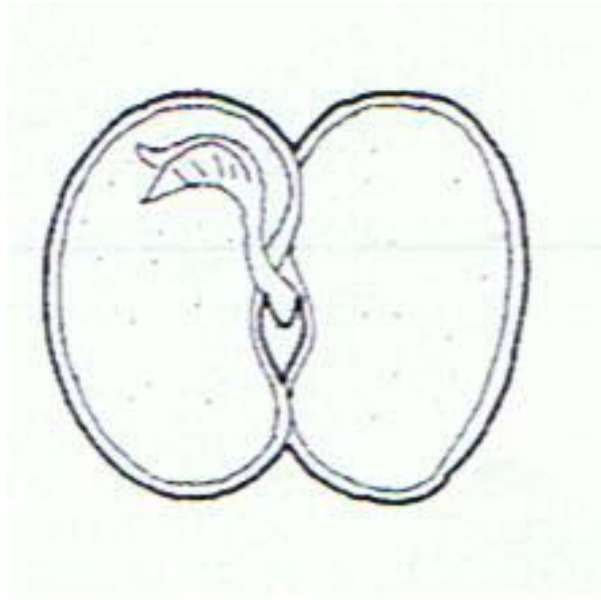
- Some children collect seeds just for fun. Do you think this is good? Why?
- What useful materials or objects can you make out from seeds?



- Identify the main parts of the seed and the function of each part. Write the letter of the best answer in your notebook.
-
1. Seeds are protected from injury by their outer covering called _____.
 - a. seed coat
 - b. cotyledon
 - c. roots
 - d. young plant
 2. The young plant inside the seed grows into a new plant because of the food provided by the _____.
 - a. seed coat
 - b. cotyledon
 - c. roots
 - d. stem
 3. As the young plant inside the seed grows into a new plant its roots become the _____.

- a. rootlets c. leaves
 - b. main roots d. seed leaves
4. The roots are very important for the new plants because _____.
- a. They protect the new plant
 - b. They help the new plant get out from the soil
 - c. They absorb water and mineral from the soil
 - d. They help in the germination process
5. The biggest part of the seed is the _____.
- a. Seed coat c. young plant
 - b. Cotyledon d. roots

- Here's a diagram of a seed. Label its parts. Do this in your notebook.



- Answer each question correctly. Write the answers in your notebook.

1. What do mango, santol and avocado seeds have in common?

2. How do cotyledons help the new plant?

3. What do you call seed with one cotyledon?

4. What do you call the tiny new plant?

5. A seed has four parts. What do you call the outer covering?

Good! You finished all the activities diligently.