

Seed Dissection:

Observe and draw the inside of a seed that is beginning to grow.

All living things go through stages in life. Each type of plant and animal has its own life cycle, and the stages vary from species to species.

Materials:

Per Student:

large bean seeds (Lima Beans are ideal)
water
paper
pencils
magnifying glasses (optional)



Key Questions:

- Why is the seed coat so tough? Think of environmental conditions that could affect the survival of the plant.
- How does the seed know when it is a good time to start growing?
- Does it need sunlight to grow?

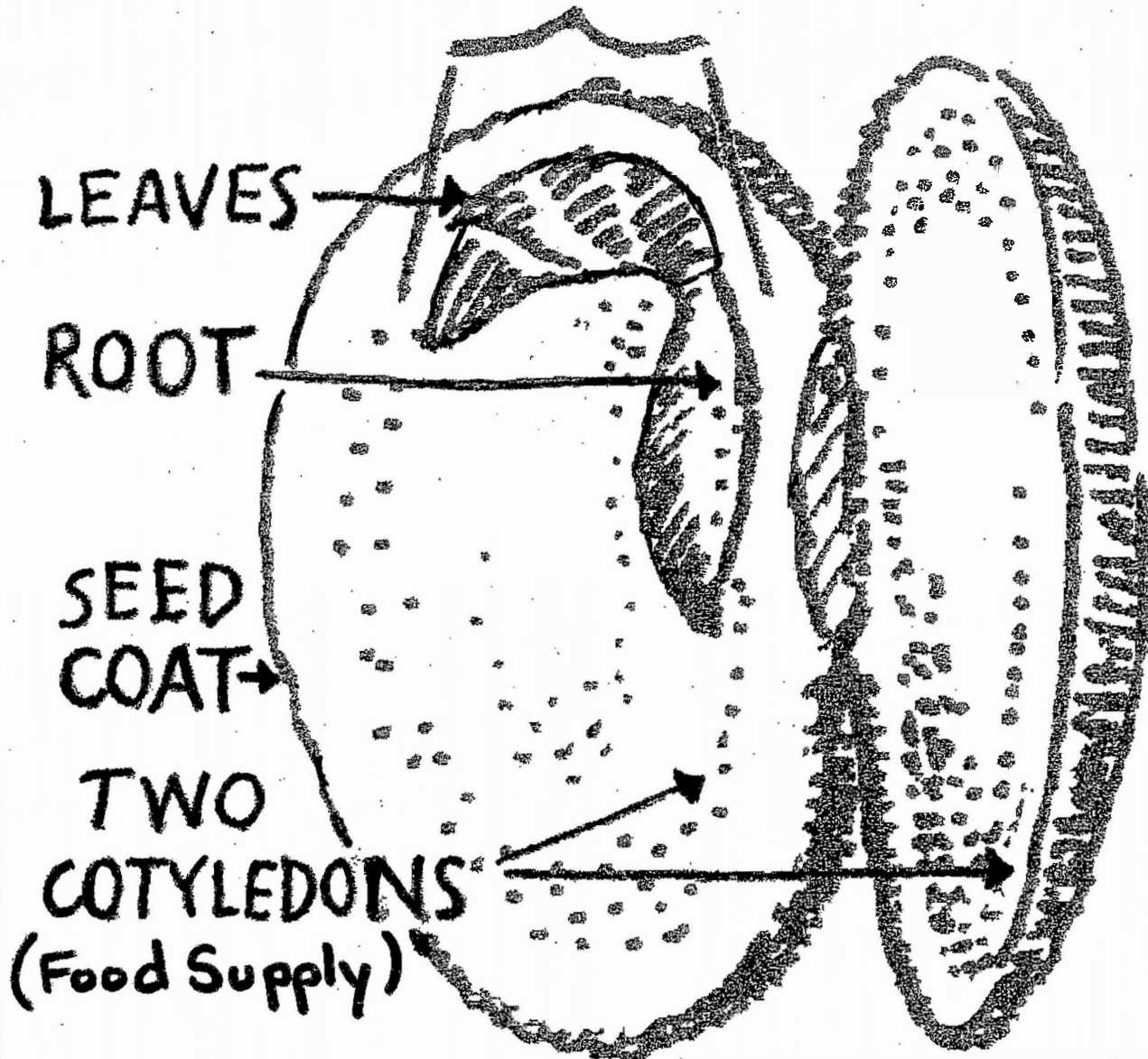
What To Do:

1. Soak half the beans in water overnight before the dissection. Leave the other half to dry for comparison.
2. Brainstorm about seeds:
 - What are they?
 - Do all seeds look the same?
 - What do seeds turn into?
 - What do seeds need to grow?
3. Remove a soaked bean from the water.
4. Trace the bean twice on your paper so you have two separate bean outlines.
5. In one bean outline, draw what you think will be inside the bean.
6. Peel off the outer skin of the beans (seed coat). What do you think the skin/seed coat does?
7. Carefully pull open the seeds to see what's inside.
8. Compare soaked beans to unsoaked beans. How are they different? How are they similar?
9. Use a magnifying glass to examine the seeds. The baby plant (plant embryo) will likely be the same color as the rest of the bean, but it will have a tiny root and two tiny flattened leaves.
10. Draw what you see inside the bean. Compare with the Seed Diagram on next page.
11. Compare your drawings and observations with classmates.

Extensions:

- Dissect a peanut. Does the inside of the peanut look similar to or different from the bean?
- Make a list of animals that rely on seeds for food.

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LIMA BEAN SEED