From Seed to Plant

A. Fill in the Blanks

Word Bank:	germination roots photosynthesis	seed coat	pollination	
1. The protective outer layer of a seed is called the				
2. The process where a plant uses sunlight, water, and air to make its own food is called				
3. The part of the plant that anchors it in the ground and absorbs water is the				
4. When a seed starts to sprout and grow, it is called				

B. Match the Following;

Column A (Insect)	Column B (Description)
1. Leaf	A. The beginning of a new plant.
2. Stem	B. Helps the plant reproduce by making seeds.
3. Root	C. The process of a seed sprouting.
4. Flower	D. Makes food for the plant using sunlight.
5. Seed	E. Carries water and supports the plant.
6. Germination	F. The movement of pollen between flowers.
7. Pollination	G. Absorbs water and nutrients from the soil.

5. The transfer of pollen from one flower to another is known as ______.

C. Practice Problems

- 1. Describe what happens during germination.
- 2. What are the three main parts of a seed?
- 3. Why are the leaves of a plant so important? What is their main job?
- 4. Explain the two main jobs of a plant's stem.
- 5. What is the difference between a seedling and a fully grown plant?

D. Warm-up Questions

- 1. What is the very first stage of a plant's life?
- 2. Name one thing a seed needs to start growing.

- 3. What part of the plant grows down into the soil?
- 4. What part of the plant makes food using sunlight?
- 5. Where do flowers, fruits, and vegetables come from?

E. Challenge Questions

- 1. A seed is planted in a dark closet but is given plenty of water. What will happen to the seed? Will it grow into a healthy plant? Explain why or why not.
- 2. Why is it important for seeds to travel away from the parent plant?
- 3. If a plant's leaves were covered in a thick layer of dust, how would it affect the plant's health? Explain your answer.
- 4. Some plants, like carrots and radishes, have very large roots that we can eat. What do you think the plant stores in these big roots?
- 5. Imagine you are a tiny seed. Describe your journey from being inside a fruit to becoming a small seedling.

F. Word Problems & Application

- 1. Maria plants a bean seed in a pot. She waters it every day. After 5 days, she sees a tiny green shoot poking out of the soil. What is this process called? What is the tiny new plant called?
- 2. Tom notices that all the dandelions in his yard have fluffy white tops. A big gust of wind blows, and the white fluff flies everywhere. What is happening, and why is it important for the dandelions?
- 3. A farmer wants to grow healthy corn. Besides planting seeds and watering them, what are two other important things the corn plants will need from their environment to grow tall and strong?
- 4. Sasha sees a bee buzzing from one apple blossom to another. What important job is the bee doing for the apple tree? What will form on the tree because of the bee's work?
- 5. When you eat a strawberry, you see tiny seeds on the outside. What part of the plant is the red, juicy strawberry itself? What is its job for the seeds?

G. True or False

1. Plants only need sunlight to grow.	
2. The stem's only job is to hold the plant up.	
3. All seeds look the same.	
4. Pollination is how seeds travel to new places.	
5. A seed can germinate without water.	