



Name: \_\_\_\_\_

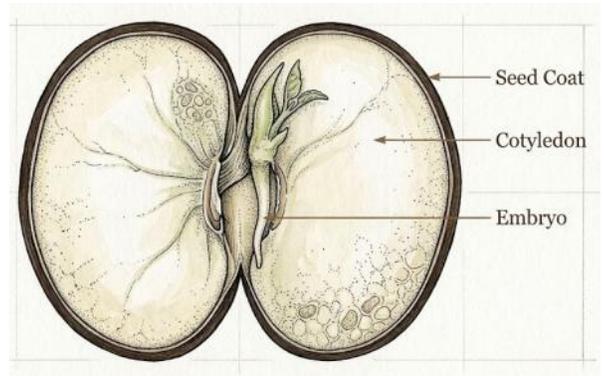
# The Tiny Travelers: The Secret Life of Seeds

Have you ever held a tiny sunflower seed in your hand and wondered how it could ever turn into a plant taller than you? A seed might look like a small, dry pebble, but it is actually a living thing waiting for its moment to shine. Every seed is a "survival kit" that contains everything a plant needs to start its life in the great outdoors.

## The Three Main Parts

To survive, a seed relies on three specialized parts that work together like a team:

- **The Seed Coat:** This is the tough, outer skin. It acts like a suit of armor or a winter coat, protecting the delicate insides from cold temperatures, dry soil, and even hungry insects.
- **The Embryo:** This is the "baby plant." It is tucked safely inside the seed, perfectly formed with a tiny root and the very first beginnings of leaves.
- **The Cotyledon:** This is usually the largest part of the seed. Because a seed starts its journey underground in the dark, it cannot use the sun to make food through photosynthesis yet. The cotyledon is like a packed "lunchbox" full of stored energy that feeds the embryo until it can reach the surface.



## The Process of Waking Up

Seeds can stay "asleep" for a long time—this is called dormancy. Some seeds can wait for years until the conditions are just right! To wake up and begin to grow—a process called germination—they need a specific "alarm clock" made of three things: water to soften the coat, oxygen from the soil, and the right temperature (usually warmth from the spring sun).

Once the seed germinates, the tiny root pushes out first to anchor the plant and find water. Next, a small green shoot stretches up toward the sky. Once the first leaves open, the "lunchbox" (cotyledon) is empty, and the plant begins to make its own food using sunlight.



Name: \_\_\_\_\_

### Seeds on the Move

Plants cannot walk to find a better spot to live, so they have developed clever ways to move their seeds to new places where there is more room to grow. This is called seed dispersal.

- **By Wind:** Seeds like dandelions have "parachutes" or "wings" to fly miles away.
- **By Water:** Coconuts and some beans can float on rivers or oceans to reach new shores.
- **By Animals:** Some seeds have tiny hooks (called burrs) that hitch a ride on an animal's fur. Other seeds are hidden inside tasty fruits; when an animal eats the fruit, the seeds are dropped in a new location later!

1. According to the text, what is the effect of water hitting a dormant seed?
  - a) The seed becomes hungry and eats the embryo.
  - b) The seed coat softens, helping the seed "wake up" to germinate.
  - c) The seed immediately grows a giant flower.
  - d) The seed coat gets harder to protect the baby plant.
2. In the section "The Process of Waking Up," what does the word dormancy mean?
  - a) A state of deep sleep or inactivity.
  - b) The process of making food from the sun.
  - c) When a seed travels through the air.
  - d) The part of the seed that stores food.
3. Which of these happens first during germination?
  - a) The cotyledon falls off because it is empty.
  - b) The first leaves open to catch the sunlight.
  - c) The tiny root pushes out to find water.
  - d) The plant begins to make its own food.