

Seed Activity

Using the textbook provided at the front and your textbook, complete the following questions.

1. What is the function of the pollen tube?
2. Draw a diagram of an open bean seed and label the hilum, cotyledon, hypocotyls, radicle, epicotyl, seed coat, and plumule. What part of the bean seed stores the food for the seed? How many cotyledons does the seed have?
3. Using a diagram of germination, identify the embryonic seed part that first grows out of the seed. What is it called? What do each embryonic part become? (radicle, hypocotyls, epicotyl, and plumules)
4. The cotyledons are carried up out of the ground as the stem grows. This is not the usual pattern of growth in seedlings. The cotyledons normally stay in the ground. What happened to the cotyledons as the seedlings continue to grow?
5. Draw a diagram of an open corn seed. Label the radicle, hypocotyl, epicotyl, and plumules. What part of the corn seed stores the food for the seed? The silk scar is the place where the pollen tube reached the ovule.
6. What are the similarities and differences between the corn and bean seeds?
7. Discuss the relationship between the parts of the flowers, seeds, and fruit. What part of the flower becomes the seed? Fruit? Which seed is a monocot? Dicot? Explain your answer. Why do seeds have a food source stored up? Where is located?