

Planting a Seed

Description: In this activity, children will plant a seed and learn about what their seed needs in order to grow into a plant.

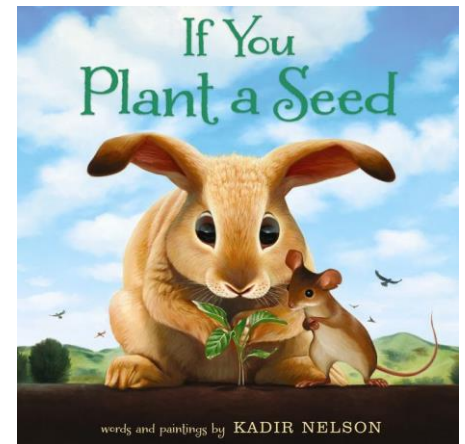
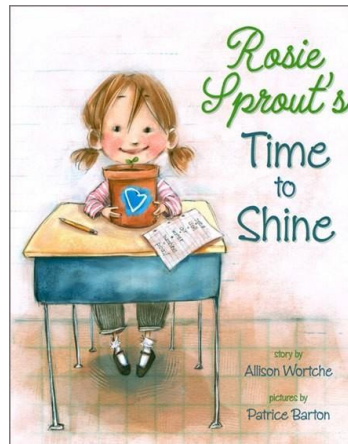
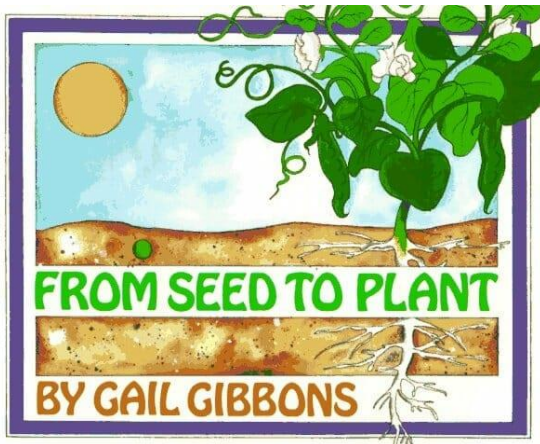
Time: 20-30 minutes

Materials:

- Soil
- Seeds and their Seed Pack
- Containers for planting with holes at the bottom so water can drain (ideas: pot, yogurt container, plastic cup)
- Water if watering immediately

Good Books:

- *From Seed to Plant* by Gail Gibbons
- *Rosie Sprout's Time to Shine* by Allison Wortche
- *If You Plant a Seed* by Kadir Nelson



Background Information:

Most plants grow from seeds, which come in a variety of shapes, sizes, and textures. Within this compact package, seeds contain everything a plant needs to grow and reproduce. Some seeds, such as grass, begin life with one leaf. These kinds of seeds are monocots. Other seeds, such as beans, begin life with two leaves. These kinds of seeds are dicots.

The outside covering of seeds is called the seed coat. It protects the baby plant, or embryo, inside the seed. The seed also contains endosperm, or a food supply, that the embryo uses to grow until the plant can create its own food. In order for seeds to grow into plants, they need soil containing nutrients, water, sunlight, the right temperature, room to grow, and time.

Introduction:

Begin the lesson by asking children what they need to live and grow. Make a list of their ideas on a sheet of paper. Suggestions should include:

- Food
- Water
- A place to live
- Ways to stay warm when the weather is cold and cool when the weather is hot
- People to help and protect them or LOVE

Then ask children to think about what animals, including pets such as dogs, cats, and fish, need to live and grow. Write these suggestions on the same sheet of paper. Children will notice that the needs of animals are similar to the needs of human beings.

Go through the same exercise with plants. Here, too, children will notice that plants need similar things: food, water, and a place to live, such as a pot with the right kind of soil containing the proper nutrients, or space in a garden. Plants have another important need: They must be near light. In fact, light is so important to plants that they will grow toward it!

In addition, point out that soil helps regulate the plant's temperature. In the garden, mulch is another way to keep in water and regulate the plant's temperature. Plants also need someone to take care of them by watering and feeding them, and, if necessary, moving them to a better location so that they can continue to grow.

After this initial discussion, ask children what they think seeds need to live and grow. At this point, children will probably recognize that seeds need the same things to live and grow as plants and animals. If children wonder why, explain that inside each seed, there is a baby plant that will grow into a mature plant. The seed contains everything the baby plant needs until it is ready to live on its own.



Directions:

1. **Read the back of the packet** to learn what your individual seed needs. How much sun, how much water, how deep to plant and how much space it will need,
2. **Add soil to the cup** or planting container that has holes in the bottom so water can drain out or directly into the ground if you are sowing into the earth.
3. **Make a small hole** in the soil to the depth the seed packet says.
4. The child should **place one or two seeds in the hole and cover them with soil.**
5. If planting a garden outside, repeat this process for each seed making sure there is enough space between each seed.
6. Tell children to **water the soil when it looks dry.** They can tell when the growing plants need water by sticking their fingers one inch into the soil. If it feels dry, then watering is necessary. Tell children that when they water the plant, they should add enough water so that it starts to come out of the hole at the bottom of the cup.
7. When the plant becomes too big for the pot or it is warm enough outside, they can **take their plant and plant it outside** in their garden, in a larger bucket, can or milk jug in a sunny window or on a deck/patio, in a garden or even in a public park. Shhhh...they can be guerilla gardeners.
8. After the plants have started to sprout, they will be able to see the different parts of a plant. **Go over the different plant parts** that will emerge. Make sure that the child can name these parts and describe their functions:
 - **Root:** Anchors the plant and takes in water and nutrients from the soil.
 - **Stem:** Helps support the plant.
 - **Leaves:** Take in light, which the plant will use to make its own food.



Questions for Discussion:

1. What do seeds need to grow into plants?
2. What are the three main parts of a plant? What function does each serve?
3. Do you have any other plants at home? If so, what do you observe about how they grow? Do they have any additional parts?