

When a seed is planted in moist soil and placed under a light source such as the sun or a lamp, it begins to grow. This process is called germination. The seed's coat splits open so that the roots can grow down into the soil and the plant can grow upwards toward the light. You can discover how germination works by planting your own seeds and watching them sprout!

**MATERIALS NEEDED:**

- Dried beans
- Plastic bags
- Paper towels
- Water
- Tape



**INSTRUCTIONS:**

1. Soak your seeds in water overnight the night before you want to begin the project. This will speed up the germination process as it "wakes up" the seeds.
2. Drain and dry the seeds.
3. Dampen a paper towel and place it into a plastic bag.
4. Place bean seeds in the bag on one side of the paper towel. Do not put them in the paper towel; place them between the bag and the paper towel.
5. Seal the bag tightly.
6. Tape the bag to a window that is exposed to the sun.
7. In 24 hours, you should be able to observe the seeds beginning to sprout.
8. After about three days, all of your seeds should sprout and begin to grow and change.
9. When leaves start to sprout, the seeds are ready to be moved to soil.

**WRITE ABOUT IT!**

Writing in complete sentences, explain why you think seeds and plants need water to grow. What would happen if a seed was watered too much or too little?

Plants need water for photosynthesis. Absorbed by the roots, water travels through a plant's stems to the chloroplasts

in the leaves. Water also helps move nutrients from the soil into the plant. Too little water can cause a plant to wilt or

droop. Too much water can cause a plant's roots to rot.