

Plant Growing Lab (1 credit, 2 credit max)

Inspired by Blossoming Beans on sciencefun.org



#### Materials:

- 1 pinto bean
- 1 Ziploc bag
- 1 paper towel
- Spray bottle for holding water

#### Instructions:

1. Dampen paper towel with spray bottle
2. Place wet paper towel in Ziploc Bag
3. Place bean on top of wet paper towel
4. Close Ziploc Bag
5. Place Ziploc Bag in a warm, sunny spot
6. Add water to paper towel when it dries out
7. Observe your plant growing in 3-5 days!
8. **Document your steps through photos or video. You can share these through Google Slides, PowerPoint or by sharing your video by email or in live meetings.**
9. **What did you learn about plant growth by completing this lab? What was the right amount of hydration and sunlight?**

#### Alternate Growing Technique:

1. Put some soil in a Dixie(Solo, styrofoam could work) cup.
2. Plant your bean towards the bottom of the soil.
3. Spray the soil.
4. Place cup in a warm, sunny spot
5. Add water to soil when it dries out
6. Observe your plant growing in 3-5 days!

#### Other plant options:

Avocado pit/seed: This doesn't require soil. You can pierce the top of the pit with toothpicks and place in a cup of water. Roots will grow down into water. Once your plant is large enough, you can move into a flower pot or into soil outdoors.

Garlic clove: Follow bean in cup technique.

Potato: Take a potato and plant in soil in a flowerpot or outdoors. Water and watch a new potato plant grow.

How it Works:

Germination! That means the plant is sprouting roots. Usually, you can't see the roots sprout when the seed is under soil, but since there is no soil in this experiment you can see the whole process.

Extra Credit Options:

1. Prepare two plants, but put one in a sunny area and one in a dark area. Observe their similarities and differences and chart them down.
2. Chart your plant's growth each day using a ruler.
3. After 2 weeks, move your plant to some soil. Don't forget to water it and give it some sun!