



# Moisture Experiment Activity



*Ready to get started with this activity? To keep track of your progress, check off the instructions for each step below as they are completed. Make sure to check the box of the last step when you're done to receive congratulations for your completed activity!*

**Consider this:** For an organism to grow it has to have the right conditions that meet its specific needs. Plants need the right temperature, light, water, soil, mineral nutrients, and oxygen. Water is a key ingredient to growth in plants, and in us. Moisture essentially brings a seed to life. The water fills the seed, in a process called imbibition which activates enzymes that bring on the germination process. So, what happens when too much rain rolls through the wheat fields? Or, when the news reports drought conditions? We can set up a variety of conditions in this experiment to see the impact it has on the bean.

## 1. Gather Your Materials

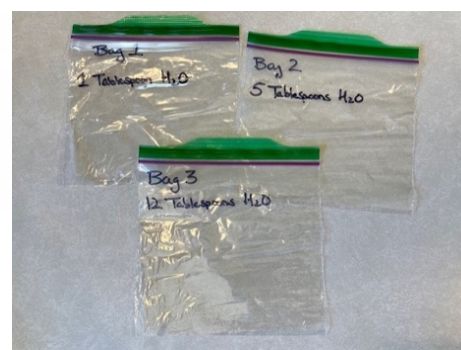
- (3) Lima beans
- (3) Sandwich bags
- (15) Cotton balls
- A measuring spoon
- Tape
- Water



## 2. Label the Bags

Label each bag with a number (1, 2, and 3):

- On bag #1, write "1 tablespoon"
- On bag #2, write "5 tablespoons"
- On bag # 3, write "12 tablespoons"



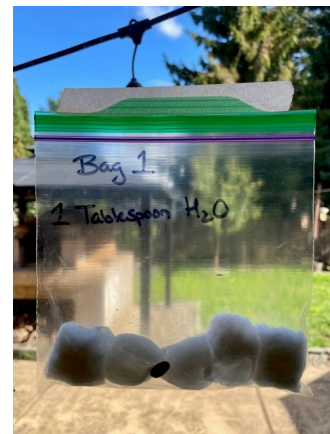


### 3. Prepare Bag #1

Add to bag #1:

- (1) Tablespoon of water
- (1) Bean
- (5) Cotton balls

Seal the bag.



### 4. Prepare Bag #2

Add to bag #2:

- (5) Tablespoons of water
- (1) Bean
- (5) Cotton balls

Seal the bag.



### 5. Prepare Bag #3

Add to bag #3:

- (12) Tablespoons of water
- (1) Bean
- (5) Cotton balls

Seal the bag.





#### 6. Tape in a Window.

- Tape the bags to a window that receives plenty of sunlight.



#### 7. Things to Think About

- Do you think the amount of water in each bag will have an effect on how much the beans grow? Why?
- Do you think all of the beans will grow? Explain your answer.
- Which bean do you think will grow the most? Why?
- Which bean do you think will grow the least? Why?

