Name _____

IN THE LIMA LIGHT

LETTUCE GROW

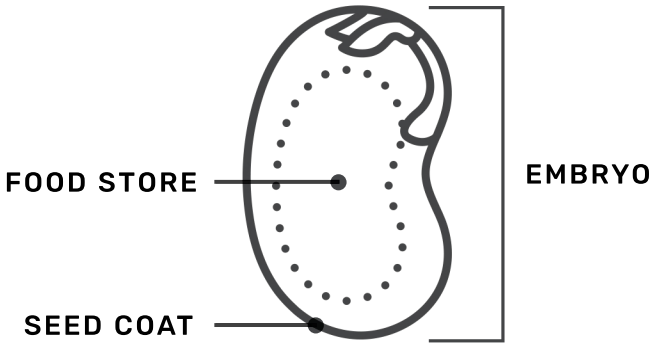
LET'S DISCUSS

1. What part of a plant is a seed? Brainstorm with students and write their ideas down on a whiteboard or chart paper.
2. How does a seed become a plant?
3. Why do people grow and eat beans?
4. What conditions are required for the bean to grow into a plant?

PART 1: BEAN EXPLORATION

Materials:

- ○ Lima beans that have been soaked in water overnight
- ○ Two toothpicks
- ○ Small paper plate or napkin.



PART 2: GROWING BEANS

Materials:

- ○ Sandwich bags
- ○ Dry lima beans
- ○ Paper towels
- ○ Water
- ○ Permanent Marker to label bags
- ○ Ruler to measure bean height (in older students, younger students can qualitatively describe, such as "tallest, or no growth")

Construct a chart as shown below with the group. If a single student is completing this activity, have them test multiple bags of beans in different conditions.

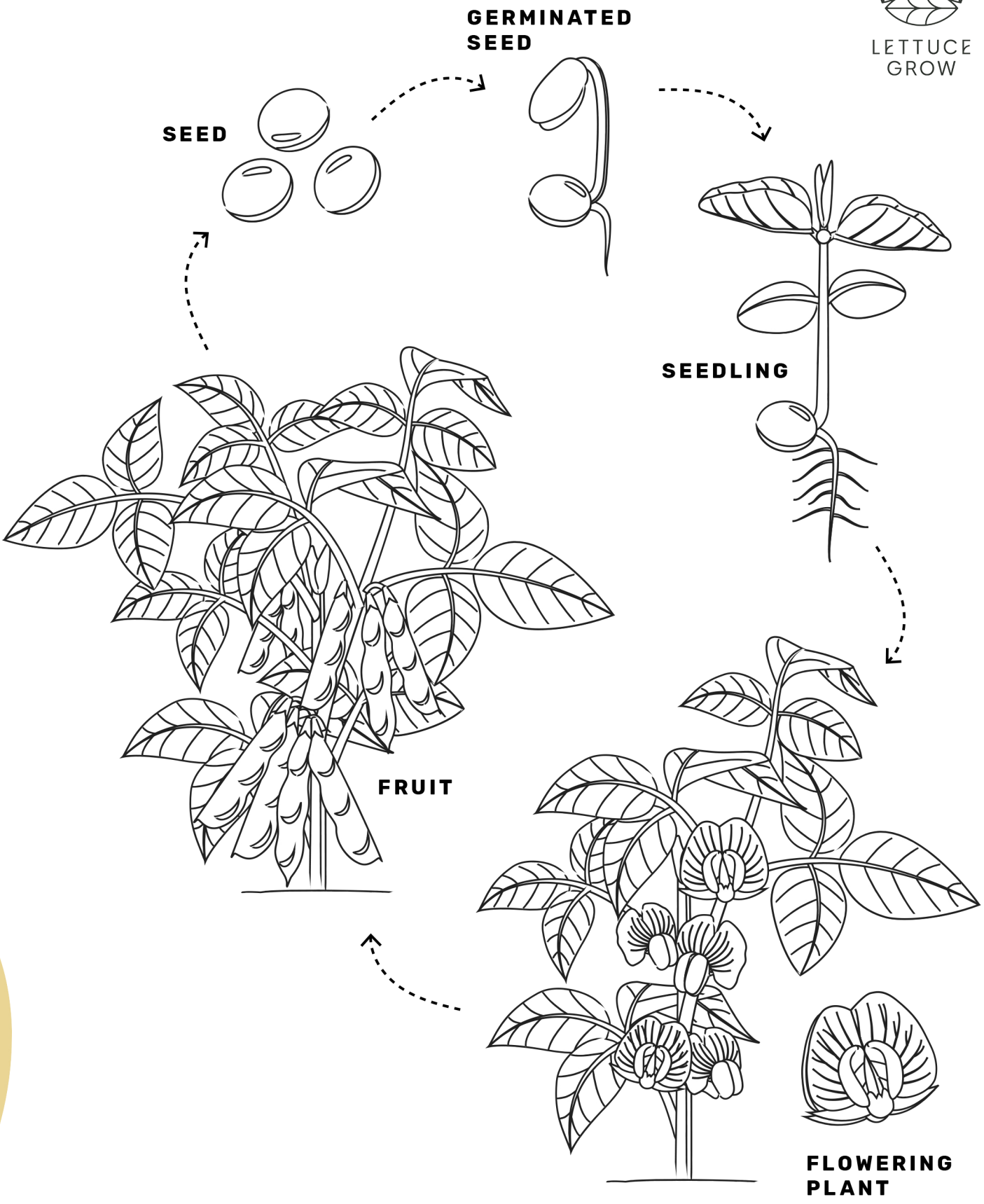
STUDENT NAME	TESTING CONDITION *light, dark, wet, dry, cold, room temperature, etc.*	HOW TALL DID THE BEAN GROW?

FURTHER DISCUSS

1. Ask students if there is anything else they would test if they were to continue to experiment with lima beans.

Name _____

LETTUCE GROW



“In the Lima Light”

Discussion Questions Answer Key For Teachers

1. Answers may vary, you want to listen to students’ prior knowledge.

2. A seed has everything a tiny plant needs to survive. The tough covering protects the plant, the tiny plant is on the inside, and the rest of the bean is a food supply for the tiny plant. Once the plant starts to grow and use up the food supply (about two weeks), it can start to make its own food using sunlight. The same food supply that can grow a plant provides energy for us when we eat beans!

3. Beans are full of fiber, protein, and iron. All of these are healthy for you to eat!

4. The only thing a bean needs to start to grow into a plant is water! Eventually, they will also need sunlight and nutrients.

Question To Post After Activity 1:
Give each student a lima bean that has been soaked overnight, two toothpicks, and a plate or napkin to work on. Encourage students to dissect the lima bean. Can they find the tiny plant inside?

After students have dissected their bean, encourage them to color in the Life Cycle of a Bean handout. Try to keep the bean the same color, the root the same color, and the leaves the same color in each picture so you can clearly see how they develop.

Question To Post After Activity 2:
Provide each student with a bag, a dry lima bean, a paper towel (which could be dampened with the water if the student wants to test if water is required for a bean to grow into a plant), and a marker to label their bag with their name. Have each student record what condition they are testing, and leave the bean in that location for 1 week. Which beans grew the tallest?