

## Best Lettuce Experiment

### 1) ASK A QUESTION: (I wonder...)

What is the best lettuce cultivar for school lunches?

Brainstorm ideas about what makes the "best" lettuce.

What can we measure to decide what a "best" lettuce is?

### 2) RESEARCH: (I know, I think...)

- There are many different lettuce cultivars
- There are differences in how lettuce cultivars are used
- Different lettuce cultivars have differences in the leaves - color, leaf margin (edge of the leaf), and other differences

### 3) HYPOTHESIS: (I predict...)

I predict that all lettuce cultivars will / will not (circle one) grow the same.

I predict that all lettuce cultivars will / will not (circle one) taste the same.

### 4) EXPERIMENT: (I try...)

1. We will plant 4 lettuce cultivars:

A = Baby Star

B = Esmeralda

C = Pacheco

D = Simpson Elite

2. All lettuce cultivars will be planted in the same size containers.

3. All lettuce cultivars will be planted in greenhouse soil mix.

4. All lettuce cultivars will be given no additional fertilizer.

5. All lettuce cultivars will be watered the same.

6. All lettuce cultivars will be grown in the same conditions (light, temperature).

### 5) COLLECT DATA: (I observe, measure...)

	1 week	2 weeks	3 weeks	4 weeks	5 weeks
Date					

Plant growth. How tall are your plants?

Plant Height (centimeters)

Cultivars	Week 1	Week 2	Week 3	Week 4	Week 5
Baby Star					
Esmeralda					
Pacheco					
Simpson Elite					

**Leaf Data. What do the leaves look like?**

<b>Cultivar</b>	<b>Leaf Characteristic</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>
<b>Baby Star</b>	<b>Describe leaf edge</b>				
	<b>Sketch the leaf</b>				
<b>Esmeralda</b>	<b>Describe leaf edge</b>				
	<b>Sketch the leaf</b>				
<b>Pacheco</b>	<b>Describe leaf edge</b>				
	<b>Sketch the leaf</b>				
<b>Simpson Elite</b>	<b>Describe leaf edge</b>				
	<b>Sketch the leaf</b>				

### Leaf Evaluation

Evaluate the leaf appearance of each lettuce cultivar. Assign a number 1-5 for each one. You may think all four cultivars are outstanding and give them all 5's or you may assign a range of numbers.

- 1 - Unacceptable    Leaves brown, shriveled, close to dying or dead
- 2 - Poor            Leaves have some dead/brown spots
- 3 - Average        Typical color, texture and leaf shape
- 4 - Good            Leaf appears healthy and has good color and shape
- 5 - Outstanding   Leaf looks GREAT. Just looking makes you want to eat it!

Cultivar	Week 1	Week 2	Week 3	Week 4	Week 5
Baby Star					
Esmeralda					
Pacheco					
Simpson Elite					

### Taste Evaluation

Taste a portion of a leaf from each lettuce cultivar. Assign a number 1-5 for each one. You may think all four cultivars are outstanding and give them all 5's or you may assign a range of numbers.

- 1 - Terrible    Disgusting! You can hardly swallow it!
- 2 - Poor        I didn't spit it out, but I don't want to eat it again!
- 3 - OK          Not bad, not great, either.
- 4 - Good        I would eat this again (maybe with a little ranch dressing)
- 5 - Outstanding   I LOVE the flavor and will definitely eat it again!

Date:	Baby Star	Esmeralda	Pacheco	Simpson Elite

### 6) EXPLAIN DATA (I tell, explain...)

1. Does your data support your hypothesis about lettuce cultivar growth? \_\_\_\_\_

Explain:

2. Does your data support your hypothesis about lettuce cultivar taste? \_\_\_\_\_

Explain:

3. Look at all of your data (height, leaf evaluation, nutrition taste). What lettuce cultivar do you recommend as the best?

Explain why you recommend that lettuce cultivar.

#### 7) **NEW QUESTIONS (I wonder...)**

What new questions do you have?

What should the next Lettuce Experiment be?