Graphing Our Results

Week 16 — Wednesday | Plant Needs Experiment Results

Reading Time

Scientists love to share their results. But a big list of numbers can be hard to read! That is why scientists make graphs. A graph is a picture of data. It shows numbers in a way our eyes can understand quickly.

One kind of graph is a bar graph. In a bar graph, each bar stands for one thing — like one of our plants. The taller the bar, the bigger the number. If Plant A grew 10 centimeters and Plant B grew 2 centimeters, Plant A's bar would be much taller. In one quick look, you can see which plant grew the most!

Today we will turn our plant measurements into a bar graph. Then anyone who looks at our graph can see our results — even without reading a single number. That is the power of a good graph!

Quick Questions

1. What is a graph?

2. In a bar graph, what does a taller bar mean?

3. Why do scientists use graphs instead of just lists of numbers?

Activity: Make a Bar Graph of Plant Growth

Safety First! Today we may use scissors and glue for our graph. Always cut away from your body, keep scissors pointed down when walking, and wash sticky glue off your hands when you are done.

What you need: your plant measurements from the experiment, a ruler, crayons, scissors, and glue (optional for paper-strip bars).

Steps:

1. Write your plant measurements in the chart on page 2.
2. On the graph, color one bar for each plant. Make each bar as tall as the number of centimeters the plant grew.
3. Give your graph a title and label each bar with the plant's name.

Our Plant Growth Data

Fill in your measurements. If you do not have real measurements, use these: Sunny+Water = 10 cm, No Water = 3 cm, No Light = 5 cm.

Plant	Treatment it got	Height (cm)
Plant 1	Sunlight + water (control)	
Plant 2	Sunlight, but NO water	
Plant 3	Water, but NO light	

Color Your Bar Graph

Color one bar for each plant. Stop coloring at the plant's height!

cm	Plant 1	Plant 2	Plant 3
10			
9			
8			
7			
6			
5			
4			
3			
2			
1			

My graph title:

Which Plant Grew the Most? — Data Challenge

Use YOUR bar graph to answer these questions.

1. Which plant grew the tallest?

2. Which plant grew the least?

3. How many centimeters taller is the tallest plant than the shortest plant?

4. What did the tallest plant get that the others did not?

Draw Your Three Plants

Draw each plant the way it looks now. Match your drawings to your graph!

Plant 1	Plant 2	Plant 3

Tell the Story of Your Graph

Pretend a friend has never seen your plants. Use your graph to tell them what happened in our experiment. Use words like *tallest*, *shortest*, *water*, and *sunlight*.