

Redwood Forest EcologyNotebooking

ENERGY CATCHERS

Key Question: How does the amount of light affect plant growth?

Procedures:

1. Collect materials... cups, straws, centimeter ruler, marbles, soil, green onions.
2. Use a centimeter ruler to mark centimeter (cm) lines on the straw (starting with a line for zero high enough on the straw to be visible after straw is inserted in soil.)
3. Cut green tops off green onions as demonstrated by teacher.
4. Place a few marbles in cup 1 (no holes), place cup 2 (with drain holes) in cup 1.
5. Place soil in cup 2 and plant onion bulbs 2 centimeters deep in soil.
6. Cover bulbs with soil, add 20 milliliters (ml) of water and insert straw into soil near the onion bulb deep enough for zero mark on straw to be at soil level.
7. Label cups with name and "light" or "dark" for the environment it will experience.
8. Check plants daily (for 7 to 10 days) and record height of onion leaves, observations of color, stem thickness, and other data below.

Data Collection:

Day #	Growth (cm)	Observation Notes
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____

Results:

Environment: _____ **Growth:** _____

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(Answer the question based on your data and observations. NOTE: Use your notes and compare your results to classmates' results.)

Draw a graph of your results on the next page (growth over time.)