

Bell work for 8/11-16

8/11

A process that scientist use to better understand the world around them is called

- A. Scientific probing
- B. Scientific method
- C. Observation
- D. The process of inclusionary science

8/12

Amal is designing an experiment to test the effect of varying amounts of light on the rate of photosynthesis. He hypothesizes that the amount of oxygen produced is related to the amount of light a plant receives. He plans to use four plants of the same species and size. He will expose three of the plants to light for different lengths of time. The fourth plant will receive no sunlight at all. He will measure oxygen production for all four plants. **What is the purpose of the fourth plant?**

- A. The fourth plant is a spare.
- B. The fourth plant is the control.
- C. The fourth plant is the test variable (independent variable)
- D. The fourth plant is the outcome variable (dependent variable).

8/15

Marisol wants to study cellular respiration in yeast. She plans to test rate of respiration in four beakers. Each beaker contains equal amounts of sugar, water, and yeast. The water temperature in the four beakers will be 15 degrees Celsius ($^{\circ}\text{C}$), 25 $^{\circ}\text{C}$, 35 $^{\circ}\text{C}$, and 45 $^{\circ}\text{C}$. She will measure respiration rate by measuring the amount of carbon dioxide produced. **What is the test variable (independent variable) in this experiment?**

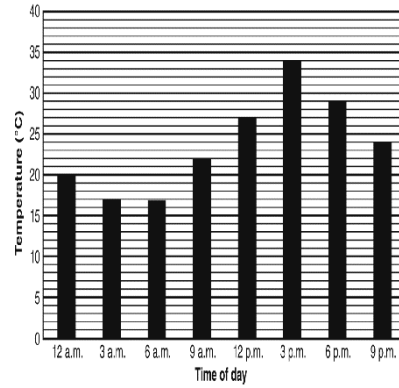
- A. water temperature
- B. amount of sugar added
- C. amount of yeast added
- D. amount of carbon dioxide produced

8/16

Tracy performed an experiment on the effect of temperature on the rate of photosynthesis in plants during the day. She included the following graph in her lab report.

What other information does she need to include?

- A. units
- B. a title
- C. a legend
- D. axis labels



B, B, A, B