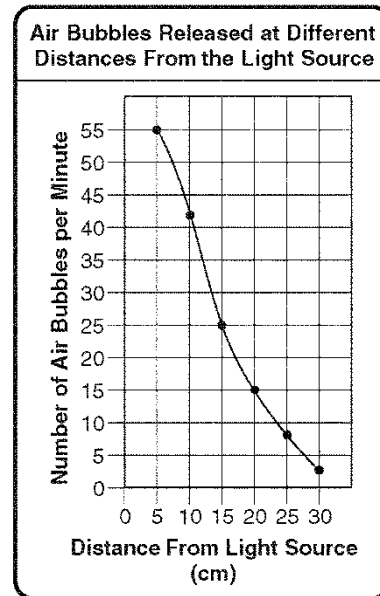
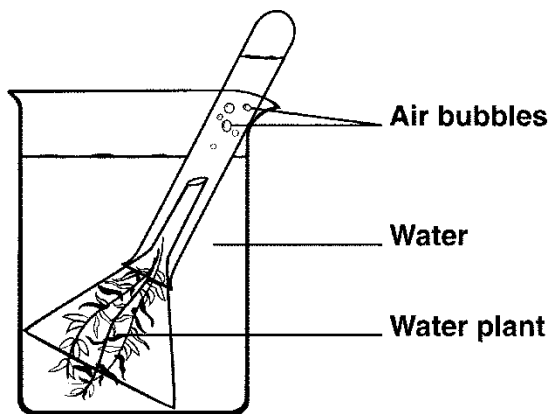


Honors Biology
More Practice with the Scientific Method

A student prepared two beakers with identical sprigs of a water plant as shown below. She placed one beaker in the shade (**Beaker A**) and the other beaker beside a fluorescent lamp (**Beaker B**). She then systematically changed the distance of **Beaker B** from the lamp. She counted the bubbles of oxygen given off by each sprig of the water plant. Shown here is the graph of the data for the beaker she placed in the light (**Beaker B**).



- A) What is the **problem** being investigated in this experiment?
- B) Propose a **hypothesis** for this experiment:
- C) Identify the **independent variable** in this experiment.
- D) Identify the **dependent variable** in this experiment.
- E) Which beaker is representing the **control group**?
- F) Which beaker is representing the **experimental group**?
- G) What **quantitative data** is being collected in this experiment?
- H) Propose an example of **qualitative data** that could be collected in this experiment.
- I) How many air bubbles of oxygen are produced when the plant is 20 centimeters from the light?
- J) What do the results of the experiment show?