

Part 3
Designing an Experiment to Test Your Hypothesis



Materials List:

The materials list is a list of everything used during the investigation. It is written in unnumbered, list form. Include the amounts of each item and brand names when appropriate.

Procedure:

The procedure is a numbered step-by-step set of direction for conducting the experiment. The steps are sequential, easy to follow, and detailed. The procedure includes:

- What you are changing, testing, or comparing
- What you are measuring
- What you are using to measure the results
- How many times the experiment is being repeated [note: you must have a minimum of 5 trials]
- A diagram of the experimental set-up

A procedure is NUMBERED:

- 1.
- 2.
- 3.

Do not write the procedure as a paragraph. Make sure you include the details of what you are doing, how you are doing it, and how many times you do it.

The following are NOT included as steps in your procedure:

1. Gather your materials
2. Make a graph
3. Write a conclusion

You need only to include the steps that are actually part of the experiment.

To design your experiment you need to know the following information:

- Plants give off oxygen during photosynthesis
- Oxygen can be observed in water plants as bubbles

You will have access to the following materials:

- Elodea (a common water plant)
- Beakers
- Water
- Funnels
- Lamps
- Light bulbs of different wattages
- Rulers
- Anything that is in the classroom