


Basic Science Vocabulary – Quick & Easy Guide



Main Idea

To understand science, you've got to understand the words scientists use. Think of science vocabulary like secret codes—they help explain how experiments work and what scientists discover.

Experimental Terms

- A **hypothesis** is your best guess about what might happen.
 "If I do this, then that will happen."
- A **variable** is something you change in an experiment. But you only change **one thing at a time** so you can see what happens!

Two Types of Variables:

- **Independent Variable (IV)** = The one thing YOU change
 Goes on the **X-axis** of a graph
- **Dependent Variable (DV)** = The thing you MEASURE
 Goes on the **Y-axis** of a graph

 **Graph tip:** Your graph title should always be **IV vs. DV**

Example: *Amount of Sunlight vs. Plant Growth*

- A **control** is what you compare your experiment to. It's the "*normal*" version.
 - A **constant** is what stays the same (like time, place, temperature).
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Living Things Vocabulary

- **Autotrophs** are producers (like plants) that *make their own food*.
 - **Heterotrophs** are consumers (like animals) that *eat to get energy*.
 - **Scavengers** eat leftovers (like roadkill or scraps).
 - **Predators** *hunt* other animals.
 - **Prey** is the animal that gets hunted.
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Cells and Organisms

- **Unicellular** = Made of ONE cell (like bacteria)
 - **Multicellular** = Made of MANY cells (like animals, fungi, and plants)
 - **Decomposers** break down old food and return it to the soil
(Examples: fungi and bacteria)
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Key Terms and Definitions

Term	Definition
Hypothesis	A testable guess; a prediction like "If... then..."
Variable	Anything that can change in an experiment
Independent Variable (IV)	The one thing you change on purpose in an experiment
Dependent Variable (DV)	What you measure; the result or data you collect
Control	The normal condition used for comparison
Constant	Things that stay the same in an experiment
Autotroph	A living thing that makes its own food (like a plant)
Heterotroph	A living thing that must eat food (like animals or humans)
Scavenger	An animal that eats dead things or leftovers
Predator	An animal that hunts and eats other animals
Prey	The animal that is hunted and eaten
Unicellular	An organism made of only one cell (like bacteria)
Multicellular	An organism made of many cells (like animals, plants, and fungi)
Decomposer	Organism that breaks down dead things and returns nutrients to the soil

Matter	Anything that has mass and takes up space (including air and water)
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