
Glossary

Algae: A group of simple plants that live in water or damp areas. Algae have no roots, stems, or leaves.

Amphibian: An organism that breathes through gills when it is young and through lungs when it becomes an adult. Frogs and salamanders are amphibians.

Analyze: To study something by breaking it down into simpler parts.

Bacteria: Single-celled microorganisms. Some bacteria cause diseases, but most of them are harmless, or even beneficial, to humans.

Barometer: An instrument used to detect changes in the pressure in the atmosphere.

Binary fission: The process by which a cell divides into two parts.

Blepharisma: A single-celled, pear-shaped microorganism that is often found in pond water.

Cannibal: An animal that eats its own kind.

Cilia: Short, hairlike extensions that act like paddles to help a microorganism move through the water.

Classify: To group things together because they share one or more properties.

Colony: A population of one species of organism living in a particular place.

Conclusion: A decision that is based on observation or on a study of data.

Constant: A condition that is not changed in a scientific experiment.

Contaminate: To soil, stain, or infect by contact; to make impure.

Controlled experiment: A scientific investigation in which one variable is changed and all the others are kept the same, or constant.

Convex: Curved or rounded on the outside, like a bowl.

Coverslip: A piece of glass or clear plastic that is placed over the specimen on a microscope slide.

Data: Information, such as that gathered during an experiment.

Decay: The process by which dead organic material breaks down.

Decomposition: The process by which organic materials break up and decay.

Diameter: The length of a straight line that passes directly through the center of a circle or sphere, from one side to the other.

Euglena: A member of a group of one-celled microorganisms. A distinguishing feature of euglena is a long, whiplike structure, called a flagellum, that helps it move through the water.

Evidence: Something that offers proof.

Experiment: A procedure that is carried out to investigate a scientific question.

Field of view: The maximum area that is visible through the lens of a microscope.

Flagellum (plural, flagella): Long, whiplike structures that help some microorganisms move about in water.

Focus: To adjust the position of a lens in order to make a clear image.

Hypothesis: A prediction about how something works or how two variables are related.

Inference: A conclusion based on evidence.

Infusion: A watery mixture of decaying organic matter.

Internal: Being, or taking place, inside someone or some thing.

Invent: To think up or create something for the first time.

Lens: A piece of curved glass or other clear material that bends light rays. Lenses can help make things look clearer, larger, or closer.

Magnifier: A tool that makes something appear larger than it is.

Microbe: A tiny organism that can be seen only under magnification; a microorganism.

Micrometer: A unit used to measure very tiny objects.

Microscope: A device for viewing things that are too small to be seen with the eye alone.

Microscopic: Too small to be seen without a microscope.

Opinion: An expression of how one thinks or feels about something. An opinion is based on personal views, not necessarily on facts.

Organism: A living creature.

Paramecium (plural, paramecia): A one-celled, slipper-shaped microorganism that lives in fresh water.

Pasteurize: To heat a liquid at a high enough temperature and for a long enough time to kill harmful bacteria and then to cool the liquid quickly.

Pattern: A repeating arrangement of shapes, colors, numbers, or other things.

Reflect: To give back an image or likeness. Also, to think seriously about something.

Reproduce: To produce new organisms of the same species.

Slide: A small piece of glass or plastic used to hold specimens to be examined under a microscope.

Specimen: A sample that is used to represent an entire group.

Sterilize: To make free of living microorganisms.

Transparent: Clear; able to let light through undistorted.

Variable: An element in an experiment that can be changed.

Vinegar eel: A roundworm that lives in vinegar. It has a transparent body and can be seen without a microscope.

Volvox: A member of a group of microorganisms known as the green algae. Volvox live in colonies of 1,000–3,000 cells, arranged in a hollow sphere.

Weathering: The process by which earth materials are broken down by natural forces.

Weight: A measurement of the force of gravity on an object.

Well slide: A microscope slide with shallow dent. Used to hold thick specimens, either wet or dry.

Wet-mount slide: Two microscope slides, or a slide and coverslip, with a drop of liquid between them.