Single-celled Organisms Vocabulary

Algae-aquatic, photosynthetic organisms ranging in size from single-celled forms to the giant kelp

Antibody- proteins that are produced in the bloodstream in reaction to foreign substances; As part of an animal's natural immune system, antibodies help neutralize foreign substances and produce immunity. Their property of targeting specific substances can be used for many kinds of research if the antibodies are purified from the blood of the animal that made them.

Autoradiography-a technique that uses radioactive materials to trace substances through a system

Bacteria-unicellular or filamentous organisms with a simple cellular organization (also called prokaryotes); the oldest forms of life on Earth

Catalyst-a substance that modifies the rate of a chemical reaction without being used up in the process

Camouflage-blending in with the environment

Chlorophyll-a green pigment used in photosynthesis

Commensalism-symbiotic relationship in which one member is helped and the other member is neither helped nor harmed

Conceptual Model-a way of thinking about something that uses interconnected ideas or units of information to make an abstract representation of a system or process

Control-a standard used to verify the results of an experiment

Cyanobacteria-the group of bacteria that are capable of oxygen-producing photosynthesis; The chloroplasts of green plants appear to have evolved from cyanobacteria.

Diatom-unicellular algae with cell walls made of silica

Dinoflagellate-marine algae having two flagella and a cell wall made of cellulose; Many are photosynthetic, some are bioluminescent, and some can cause red tides.

Endosymbiont-the member of the symbiotic relationship that lives inside the other member

Enzyme-protein that acts as a catalyst for chemical processes that take place in living systems

Flagellum-an organ of motility in unicellular organisms (In dinoflagellates it is flexible and whiplike.)

Frustule-a cell wall made of silica and composed of two parts

Host-the organism on or in which a parasite lives

Hypothesis-a testable prediction

Mutualism-symbiotic relationship in which both members benefit

Nitrogenase-the enzyme that converts atmospheric (elemental) nitrogen to ammonia as the first step of nitrogen fixation

Parasite-an organism that benefits by living in or on another organism and contributes nothing to the other organism

Parasitism- a symbiotic relationship in which the host is harmed and the parasite is helped

Photosynthesis-the biologically-mediated chemical process that uses carbon dioxide, water, nutrients, and energy from the sun to produce food and oxygen

Plankton-organisms that drift or swim weakly, generally carried about by currents

Radioactive-property of the atoms of some molecules that involves emitting energetic particles by disintegration of the nucleus of the atom

Rubisco-ribulose 1,5 bis-phosphate carboxylase; the enzyme that converts carbon dioxide to a three-carbon organic molecule as the first step in the photosynthetic production of glucose (a six carbon sugar)

Silica-a crystallized compound that occurs as sand, quartz, and other minerals

Soluble-capable of being dissolved

Symbiosis-a long-term association between two different types of organisms

Technology-the application of science to commercial enterprise, medicine, environmental restoration, and other human activities