

Module 1 Exploring Creation With Biology

Abiogenesis (a' bye oh jen uh sis) - The theory that, long ago, very simple life forms spontaneously appeared through random chemical reactions (16)

Asexual reproduction - Reproduction accomplished by a single organism (7)

Autotrophs (aw' toh trohfs) - Organisms that are able to make their own food (6)

Binomial nomenclature (bye no' mee ul no' mun klay chur) - Naming an organism with its genus and species name (29)

Carnivores (kar nih' vors) - Organisms that eat only organisms other than plants (3)

Consumers - Organisms that eat living producers and/or other consumers for food (4)

Decomposers - Organisms that break down the dead remains of other organisms (4)

Eukaryotic cell (yoo keh'r ee aht' ik sell) - A cell with distinct, membrane-bound organelles (19)

Herbivores (hur bih' vors) - Organisms that eat plants exclusively (3)

Heterotrophs (hef er uh trohfs) - Organisms that depend on other organisms for their food (6)

Hypothesis - An educated guess that attempts to explain an observation or answer a question (9)

Inheritance - The process by which physical and biological characteristics are transmitted from the parent (or parents) to the offspring (7)

Metabolism (muh tab' uh liz um) - The process by which a living organism takes energy from its surroundings and uses it to sustain itself, develop, and grow (2)

Microorganisms - Living creatures that are too small to see with the naked eye (14)

Mutation - An abrupt and marked difference between offspring and parent (8)

Omnivores (ahm nih' vors) - Organisms that eat both plants and other organisms (3)

Photosynthesis (foh' toh sin tuh' sis) - The process by which a plant uses the energy of sunlight and certain chemicals to produce its own food. Oxygen is often a by-product of photosynthesis. (3)

Producers - Organisms that produce their own food (4)

Prokaryotic cell (pro keh'r ee aht' ik sell) - A cell that has no distinct, membrane-bound organelles (19)

Receptors - Special structures or chemicals that allow living organisms to sense the conditions of their surroundings (6)

Scientific law - A theory that has been tested by and is consistent with generations of data (10)

Sexual reproduction - Reproduction that requires two organisms, a male and a female (7)

Species - A unit of one or more populations of individuals that can reproduce under normal conditions, produce fertile offspring, and are reproductively isolated from other such units (22)

Taxonomy (tak sahn' uh mee) - The science of classifying organisms (29)

Theory - A hypothesis that has been tested with a significant amount of data (9)

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Module 2 Exploring Creation With Biology

Aerobic (ehr oh' bik) **respiration** -

Respiration that requires oxygen (43)

Anaerobic (an uh ro' bik) **respiration** -

Respiration that does not require oxygen (43)

Conjugation - A temporary union of two organisms for the purpose of DNA transfer (47)

Endospore - The DNA of a bacterium that is coated with several hard layers (50)

Parasite (pehr' uh syte) - An organism that feeds on a living host (42)

Pathogen (path' uh jen) - An organism that causes disease (37)

Plasmid - A small, circular section of extra DNA that confers one or more traits to a bacterium (48)

Respiration - The process by which food is converted into useable energy for life functions (42)

Saprophyte (sap' roh fyte) - An organism that feeds on dead matter (41)

Steady state - A state in which members of a population die as quickly as new members are born (46)

Strains - Organisms from the same species that have markedly different traits (57)

Transformation - The transfer of a "naked" DNA segment from a nonfunctional donor cell to that of a functional recipient cell (49)

Function of:

Pilus - To grasp onto surfaces. It can also be used to grasp onto another bacterium during conjugation.

Capsule - To adhere to surfaces as well as to ward off infection-fighting agents

Cell Wall - To keep the interior of the cell together and to hold the cell's shape

Plasma Membrane - To negotiate what materials pass into and out of the cell as well as to metabolize nutrients

Cytoplasm - To hold the DNA and ribosomes in place

Ribosomes - To make protein

DNA - To store information needed to make this organism a living organism

Flagellum - To move the bacterium from place to place

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Module 3 Exploring Creation With Biology

Cellulose - A substance made of sugars. It is common in the cell walls of many organisms. (86)

Chlorophyll (klor' oh fill) - A pigment necessary for photosynthesis (76)

Chloroplast (klor' oh plast) - An organelle containing chlorophyll for photosynthesis (76)

Cilia (sil' ee uh) - Numerous short extensions of the plasma membrane used for locomotion (78)

Ectoplasm (ek' toh plas uhm) - The thin, watery cytoplasm near the plasma membrane of some cells (73)

Endoplasm (en' doh plas uhm) - The dense cytoplasm found in the interior of many cells (73)

Eyespot - A light-sensitive region in certain protozoa (76)

Flagellate (flah' gel ate) - A protozoan that propels itself with a flagellum (75)

Holdfast - A special structure used by an organism to anchor itself (89)

Nucleus (new' clee us) - The region of a eukaryotic cell which contains the DNA (72)

Pellicle (pel' ick ul) - A firm, flexible coating outside the plasma membrane (76)

Phytoplankton (fye toe plank' ton) - Tiny floating photosynthetic organisms, primarily algae (85)

Plankton (plank' ton) - Tiny organisms that float in the water (85)

Pseudopod (soo' doe pod) - A temporary, foot-like extension of a cell, used for locomotion or engulfing food (72)

Sessile Colony - A colony that uses holdfasts to anchor itself to an object (89)

Spore - A reproductive cell with a hard, protective coating (80)

Symbiosis (sim by oh' sis) - Two or more organisms of different species living together so that each benefits from the other (78)

Thallus - The body of a plant-like organism that is not divided into leaves, roots, or stems (86)

Vacuole (vac' you ol) - A membrane bound "sac" within a cell (72)

Zooplankton (zoo plank' ton) - Tiny floating organisms that are either small animals or protozoa (85)

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