

****CLASS SET - Return to teacher at end of period!****

Unit 4 Vocabulary Definitions

Directions: Copy the following definition *exactly as written* into your vocabulary chart. Then use definition to finish the other boxes.

1	Aerobic	Any process that requires oxygen.
2	Anaerobic	Any process that does not require oxygen.
3	Bridge Reaction	Reaction that converts the products of glycolysis (pyruvic acid) into the materials necessary for the Krebs Cycle.
4	Calvin Cycle	The light-independent reactions of photosynthesis in which energy from ATP and NADPH is used to build high-energy compounds such as sugar.
5	Cellular Respiration	Process that releases energy by breaking down glucose and other food molecules in the presence of oxygen.
6	Christae	Folds and loops of the mitochondria's inner membrane that increase the surface area for the purpose of cellular respiration.
7	Cuticle	The waxy covering on the exterior of the leaf that prevents water loss.
8	Electron Transport Chain	A series of electron carrier proteins that shuttle high-energy electrons during ATP-generating reactions.
9	Fermentation	The process by which cells release energy in the absence of oxygen.
10	Glycolysis	The first set of reactions in cellular respiration in which a molecule of glucose is broken into two molecules of pyruvic acid.
11	Krebs Cycle	The second stage of cellular respiration in which pyruvic acid is broken down into carbon dioxide in a series of energy-extracting reactions.
12	Matrix	The innermost compartment of the mitochondrion.
13	Mesophyll	Specialized ground tissue found in leaves that performs most of a plant's photosynthesis.
14	Phloem	Vascular tissue that transports solutions of nutrients and carbohydrates produced by photosynthesis through the plant.
15	Photosynthesis	Process used by plants and other autotrophs to capture light energy and use it to power chemical reactions that convert carbon dioxide and water into oxygen and energy-rich carbohydrates.
16	Photosystem	The cluster of chlorophyll and proteins found in thylakoids.
17	Stomata	Small openings in the epidermis of a plant that allows carbon dioxide, oxygen and water to diffuse into and out of the leaf.
18	Stroma	The fluid portion of the chloroplast existing outside the thylakoids.
19	Thylakoid Membranes	Sa-like photosynthetic membranes found in chloroplasts.
20	Vascular Bundle	Clusters of xylem and phloem tissue in stems.
21	Xylem	Vascular tissue that carries water upward from the roots to every part of the plant.