

**FOSS California Living Systems Module**  
**Glossary**  
**2007 Edition**

**Artery:** A blood vessel that carries blood from the heart to the body.

**Bladder:** The organ that holds urine until it is eliminated.

**Blade:** The flat part of a leaf.

**Bolus:** A wad of food.

**Botanist:** A scientist who studies plants.

**Capillary:** The smallest blood vessel. Gases, nutrients, and wastes are exchanged between capillaries and cells.

**Carbohydrate:** A group of nutrients that provide energy; sugars and starches.

**Carbon dioxide:** A waste gas produced during cellular respiration. Plants use carbon dioxide during photosynthesis to make food.

**Classification:** The process by which scientists identify and organize objects and organisms, such as plants.

**Classify:** To identify and organize according to similar properties or other criteria.

**Cell:** The basic unit of life.

**Cell membrane:** The outside of a living cell.

**Cellular respiration:** The process by which energy for life is released from food in cells.

**Chlorophyll:** A molecule that absorbs red and blue light and reflects green light.

**Circulate:** To move in or flow through in a circle.

**Circulatory system:** The system of blood vessels and organs that transports blood to all the cells in the body.

**Colon:** The large intestine where solid waste is compacted in preparation for elimination.

**Cytoplasm:** The liquid that fills living cells.

**Diabetes:** A disease in which the body cannot process sugar efficiently.

**Digestion:** The process of reducing food into nutrients that can be used by cells.

**Digestive system:** The system of organs and structures responsible for the digestion of food. The digestive system includes the teeth, mouth, esophagus, stomach, small intestine, large intestine, and colon.

**Energy:** What cells need to do work.

**Esophagus:** The tube connecting the mouth and the stomach.

**Excretory system:** The system, which includes the kidneys and bladder, that eliminates waste.

**Fat:** A group of nutrients that provide energy and building blocks for development of some body systems.

**Food group:** The six groups designated by the United States Department of Agriculture (USDA) for a healthy diet. The six food groups are grains, vegetables, fruits, oils, milk, and meat and beans.

**Food pyramid:** An illustration that shows the recommended amounts of food in each food group for a healthy diet.

**Glucose:** A sugar found in food; the sugar broken down by in cells to release energy.

**Heart:** A muscular organ that pumps blood.

**Intestine:** A part of the digestive system. The small intestine absorbs nutrients from digested food. The large intestine removes water from solid waste.

**Kidney:** An organ that filters and cleans the blood.

**Large intestine:** The part of the digestive system between the small intestine and the rectum where water is removed from the solid waste.

**Left atrium:** The upper chamber on the left side of the heart.

**Left ventricle:** The lower chamber on the left side of the heart.

**Lung:** The organ in animals where gases, such as oxygen and carbon dioxide, pass between the atmosphere and the blood.

**Margin:** The edge of a leaf.

**Mineral:** A nutrient that xylem transports to the cells in a vascular plant.

**Multicellular:** An organism composed of many cells.

**Nutrient:** A chemical found in food that helps keep an organism alive and active.

**Nutrition:** The process of providing nutrients for cells.

**Oxygen:** A waste gas produced by plants during photosynthesis, which is used by all plants and animals during cellular respiration.

**Palmate:** A leaf vein pattern in which there are several veins that all start at one point near the base. The veins look like the fingers of a hand.

**Parallel:** A leaf vein pattern in which the veins are straight lines all running in the same direction.

**Phloem:** The long cells through which nutrients, such as sugars, are distributed in a plant.

**Photosynthesis:** The process by which green plants make sugar from carbon dioxide and water in the presence of light.

**Pinnate:** A leaf vein pattern that looks like a feather. There is one main vein that has smaller veins branching off sideways from it.

**Protein:** A group of nutrients that provide energy and building blocks for growth and repair of body tissues.

**Respiratory system:** The system of lungs and connecting tubes that transports oxygen to the red blood cells and gets rid of carbon dioxide.

**Right atrium:** The upper chamber on the right side of the heart.

**Right ventricle:** The lower chamber on the right side of the heart.

**Saliva:** The liquid produced in the mouth that aids digestion.

**Sap:** A sugar-rich liquid transported by phloem.

**Small intestine:** The part of the digestive system between the stomach and large intestine that absorbs nutrients from digested food.

**Specialized structure:** A structure used primarily for one purpose.

**Starch:** Chemicals produced by plants to store food.

**Stomach:** The organ where food is reduced to mush by acid and muscle activity.

**Sugar:** The nutrient that cells use for energy.

**Teeth:** Hard structures in the mouth used for cutting, biting, and chewing food.

**Tissue:** A group of similar cells working together to perform a function.

**Transport:** To move or carry.

**Urine:** Liquid waste produced by kidneys.

**Variable:** Anything you can change in an experiment that might affect the outcome.

**Vascular bundle:** The group of xylem tubes and phloem tubes in a vascular plant.

**Vascular plant:** A plant with an internal system of tubes for transporting nutrients to its roots, stems, and leaves.

**Vein:** The blood vessel that carries blood from the body to the heart.

**Xylem:** The hollow cells of a plant that transport water and minerals to plant cells.