Plants that survive long periods of **drought** by storing large amounts of water in their stems, leaves and/or roots.	A part of the tissue of a plant. An extensive network of veins brings **water (H_2O)** into the leaves and transports the **glucose** produced by **photosynthesis** to the rest of the plant.	Water loss by evaporation in plants, mainly through their leaves.	The property, purchased in 1941 by Madame Ganna Walska, who applied her artistic talents to create unusual, dramatic, and beautiful gardens using rare plants. In 1958, she established the Lotusland Foundation to preserve her collections of exotic plants and encourage increased knowledge of plants.
Succulents	Veins	Transpiration	Lotusland

Pollinators include bees, butterflies, birds, bats, and beetles. Pollination by insects and other animals is essential to 80% of the world's flowering plants.	A place where anything is collected and stored; **Bromeliads** make a reservoir with their leaves to store water. This is an example of an **adaptation**.	Respiration is the process all living things go through to survive. It usually involves exchanging two gasses. Plants give off oxygen and take in carbon dioxide. Animals give off carbon dioxide and take in oxygen.	Tiny holes (pores) in the lower surface of the leaf on terrestrial plants and on the upper side of the leaf on **aquatic** plants. They allow gasses (**carbon dioxide CO_2** and **oxygen O_2** and water vapor) to pass in and out of the leaves.
Pollinators	Reservoir	Respiration	Stomata

A waste product of **photosynthesis**. It is an odorless, tasteless, colorless gas that is essential to life. Without plants there would be no oxygen! Without oxygen there would be no life on earth as we know it.	Plants that grow in and from the land. This is the most common type of plant. They generally have root structures that hold onto the soil and keep them in the ground.	Pollination is the transfer of **pollen** from the male part of the plant to the female part to ensure the plant produces fruits and seeds so that a new plant can be formed...	Process by which plants make their food (**glucose**) using sunlight, water, and **carbon dioxide**. Oxygen is a waste product.
Oxygen (O_2)	Terrestrial Plants	Pollination	Photosynthesis

Plants and animals depend on one another for survival in many ways and have developed special adaptations to benefit from other organisms. The oxygen cycle, pollination, and seed dispersal are 3 types of interdependence.	Flat green parts of plants that grow in various shapes from the stems or branches and are the main sites of **photosynthesis** and **transpiration** (water loss by evaporation) in plants.	An **aquatic** flower of extraordinary beauty, its petals open to the sun and close at night. The lotus is a symbol of beauty, rising out of muddy waters to elevate itself above the surface, unblemished and supremely elegant.	A climate distinguished by hot, dry summers, and mild, wet winters. The Santa Barbara region is one of only five places with a Mediterranean climate in the world.
Interdependence	Leaves	Lotus	Mediterranean Climate

No longer in existence, having died out or ceased to exist. Some plants are “extinct in the wild” but can be seen in protected environments such as botanic gardens.	A species of deciduous tree that dates back 370 million years. It was widespread during the age of the dinosaurs. Ginkgo has been used in Asian medicine for hundreds, perhaps thousands, of years.	A sugar formed in the process of **photosynthesis** that provides food for plants.	Short for ‘biological diversity’, biodiversity is the variety of organisms within any ecosystem. A biodiverse place has many species. Biodiversity is good because it makes ecosystems stronger and provides more materials to support all of life.
Extinct	Ginkgo biloba	Glucose	Biodiversity

Trees and shrubs that shed their leaves in the fall: opposed to an evergreen that has green leaves throughout the year. This is an example of an **adaptation**.	A long period of extremely dry weather when there is not enough rain for successful growing or living conditions.	Endangered species are in danger of becoming extinct because there are so few organisms of that species left in the world. Humans can help endangered species by protecting and making more plant and animal homes	Also known as “air plants” have special root systems that help attach the plant to its host. A plant that grows on top of or is supported by another plant but does not depend on it for nutrition. Epiphytic plants can grow on other non-plant surfaces too.
Deciduous	Drought	Endangered	Epiphytic Plants

A tree that does not lose its leaves in the winter. Some trees are evergreen in one climate and **deciduous** in another. This is an example of an **adaptation**.	The protection of things found in nature. It requires the sensible use of all Earth's water, soil, plants, and animals so they will still be around in the future.	A waxy protective coating over the outer surface of plants that reduces transpiration. Cacti have a very thick cuticle layer. The cuticle also serves as a "sunscreen" for plants in sunny, hot climates.	Resembling palm trees in appearance, cycads are seed-bearing plants that evolved 250 million years ago and were a dominant plant group during the dinosaur era and a food source for them. Cycads are rare; most are endangered, and some are extinct in the wild.
Evergreen	Conservation	Cuticle	Cycad

Plants that may be **epiphytic** (growing on other plants or rocks) or **terrestrial** (growing in the ground). Many have silvery leaf hairs that reduce **transpiration**. Tank types have overlapping leaf bases that act as **reservoirs**. The most well-known bromeliad is the pineapple.	Plants adapted to dry regions. Some **adaptations** include a reduced leaf area, hairs, spines, sunken **stomata**, rolled leaves and thick cuticles; all to slow **transpiration**.	A colorless, odorless gas that passes out of the lungs during **respiration** (when we exhale). In **photosynthesis**, carbon dioxide (CO_2) is absorbed by plants to help in making glucose, the food it eats.	Green coloring (pigment) in plants that absorbs energy from sunlight and enables photosynthesis to occur. Used in dyes and medicines.
Bromeliad	Cacti	Carbon Dioxide	Chlorophyll

A particular structure or activity of a plant or animal that helps it in adjusting to its environment.	**Succulent** plants with fleshy leaves that are spiny along the edge. Mostly **native** to Africa. *Aloe vera*: known for its medicinal value and in ancient times for its superstitious value to ward off evil. *Aloe vera* was used as a cemetery plant in ancient Egypt.	Plants that grow or living in or upon water. This includes water lilies, lotuses, and duckweed	The scientific study of plants.
Adaptation	Aloe	Aquatic Plants	Botany