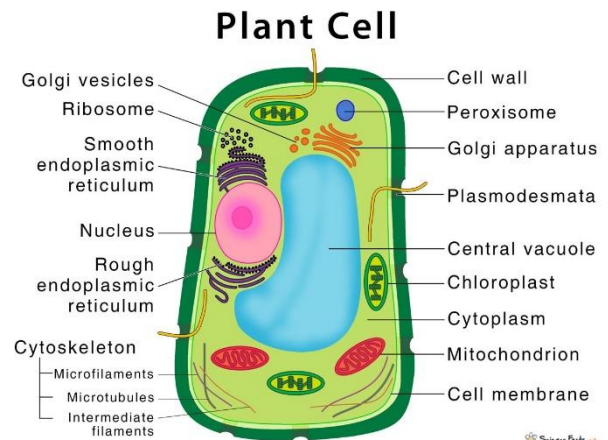


# Zilker Botanical Garden Conservancy 6<sup>th</sup>-8<sup>th</sup> Grade Docent Guide

## Prehistoric Garden:

- **Plant Cells and Anatomy:** Use the plant cell model to identify the many components in the plant cell. What organelles do you recognize? Ask students to point out any leaves that look interesting in the prehistoric garden. Select green organisms of 3 different lineages (could be pond algae) and look at them under the microscope. What structures do you identify? Do you see the nucleus? Chloroplast? Cell Walls? Is anything moving? What is unexpected?  
*TEKS Science.6.13.A; Science.7.13.B; Science.8.13.A*



## Herb Garden:

- **Cultivated Plants:** Botanical Gardens feature high biodiversity, but minimal genetic diversity within each species due to selective cultivation. We discuss the variation in our natural populations versus the clonally propagated cultivars. Use the mints (spearmint, chocolate mint, pineapple mint, peppermint) to demonstrate how the spearmint is a naturally occurring species while chocolate mint is a specific cultivated variety (shortened to cultivar). Discuss flowering and sexual propagation of wild mild, and then the necessity for vegetative propagation of chocolate mint to maintain the same genotype. *TEKS Science.6.13.C; Science.7.13.D; Science.8.13.C*

## Butterfly Garden:

- **Biodiversity in Texas Ecosystems:** Understanding how biodiversity of plants & animals in Texas contributes to a robust ecosystem with dynamic energy and nutrient exchange. Use the Food Web activity with cards & yarn to demonstrate the interconnectedness of organisms in the environment. Students should be able to recognize the predator-prey relationships. *TEKS Science.6.12.A; Science.7.12.B; Science.8.12.C*