#### Structure and Function

#### LS 1.2 Hierarchical Organization

# Explore!!!

- Go outside and observe a living plant. Get a cutting of at least two plants. Be sure to include the leaves, flowers and the stem (different components). If possible include roots as well.
- Observe and note three to five different phenomena (description of the structure) about different components/parts that make up the entire plant. Consider its possible functions.

# **Microscope Exploration**

Leaf Cell Lab - tear a leaf collected so just the clear dermis layer is present (top and bottom). Observe under a microscope. Complete drawings at 100x or 400x. Note any similarities and differences between the two layers.



# Share Out

 What are different parts/components that make up a plant? Include finding from the microscope lab.

# <u>Question</u>

 Develop a question to investigate the *function of cells* in a plant and *how they are organized* to support the structure of a plant (organism).

### Share Out Your Questions

# **Investigation**

 Plan and carry out an investigation to gather evidence for how different <u>components</u> (cells, tissue, organ, system) make up a plant structure and how they <u>function</u> together to support the entire plant (organism).

# Model Construction

 Construct a drawing/illustration supported by evidence to explain the hierarchical organization that provide specific functions within a plant (organism).

## Share Out

• Share out your group models.

# Individual Assessment

 Develop a model/illustration (with evidence) that explains how the organized systems function together to support a plant.

