

# Science Homework #26

SECTIONS 3A, B, C, D, & E

APRIL 21-25 2025

## Homework

- Complete the Study Guide

## Vocabulary

[Topic 4 Plants Vocabulary](#)



## Reminders

- HW due by Thursday, 4/24
- Topic 4 Test Friday 4/25



Contact Me

[laura.hernandez@archimedean.org](mailto:laura.hernandez@archimedean.org)

## Topic 4 Plants Study Guide

Part of the Plant	Draw it	What is its Job?
root		
Stem		
leaf		
flower		
fruit		
seed		

### **Word Bank**

**Negative radicle positive cell wall seed decrease increase germination  
water force wilt gravity rigid stem vacuole seed coat plumule support  
downward upward turgor**

Forces affect plant activities in many ways. In fact, such forces are seen as early as at the \_\_\_\_\_ stage.

When conditions are right, \_\_\_\_\_ is absorbed into the seed causing it to swell. This exerts a tremendous \_\_\_\_\_ on the seed coat, the tough covering of a seed.

The force applied eventually splits the \_\_\_\_\_ open allowing the embryonic root or \_\_\_\_\_ and the embryonic shoot tip or \_\_\_\_\_ to emerge.

This process in which plants emerge from seeds to begin growth is called \_\_\_\_\_.

Another force seen affecting plant growth is the force of \_\_\_\_\_.

Different parts of a plant respond differently to gravity. Roots always grow \_\_\_\_\_ toward gravity. This is called \_\_\_\_\_ geotropism.

Stems always grow against gravity. This is \_\_\_\_\_ geotropism.

Geotropism can be seen in adult plants as well. The growing parts of the \_\_\_\_\_ change direction and bend \_\_\_\_\_ while the roots bend downward.

Force also helps keep plants \_\_\_\_\_ and upright. When water moves into a plant cell, it collects inside the \_\_\_\_\_.

The vacuole expands and applies pressure on the \_\_\_\_\_. This makes the cell tightly filled, similar to a bicycle tire filled with air.

The pressure resulting from the outward force exerted by water on the cell wall is called \_\_\_\_\_ pressure.

It helps nonwoody plants remain upright and keeps plant cells stiff enough to \_\_\_\_\_ the different parts of the plant, such as the leaves and stems.

When a plant loses water, turgor pressure drops due to a \_\_\_\_\_ in the outward force exerted by water on the cell wall. This causes the plant to droop or \_\_\_\_\_.

Soon after the wilted plant is watered, turgor pressure \_\_\_\_\_ and the plant looks healthy again.