

Plant Classification

Purpose:

This lesson serves to introduce students to the plant kingdom. Students will become familiar with plant classification as well as basic characteristics. An introductory lesson will be provided before assigning students a packet that they will complete at their own pace the following week. This packet will include an online tutorial, a fruit lab, a flower lab, and a final assessment. Students will then have an opportunity to extend their learning outdoors.

VA SOLs:

BIO. 4. The student will investigate and understand relationships between cell structure and function. Key concepts include the following:
b. Exploring the diversity and variation of eukaryotes

BIO. 5. The student will investigate and understand life functions of archaeobacteria, monerans (eubacteria), protists, fungi, plants, and animals (including humans). Key concepts include the following:
a. How their structures and functions vary between and within the kingdoms
c. Analyses of their responses to the environment

BIO. 7. The student will investigate and understand bases for modern classification systems. Key concepts include the following:
a. Structural similarities in organisms
b. Systems of classification that are adaptable to new scientific discoveries

Materials and Resources:

Fruit samples
Flower samples
PowerPoint
Notes outline
Laptop/Internet
Online tutorial activity sheet

Classroom Management and Safety Issues:

Students are expected to follow the HVHS AUP while working online.

Procedures:

Engage (5 minutes)

1. Students will be prompted to share with the class how they think plants are classified. The teacher will take a quick assessment on student prior knowledge.

Explore (150 minutes/3 periods)

2. Students will be provided with a packet that they will complete throughout the week at their own pace. This packet includes various activities to familiarize students with the plant kingdom.

Explain (throughout the week)

3. Throughout the week, the teacher will check for student understanding.

Elaborate (50 minutes)

4. Students will explore plants outside of the classroom by taking a walk on the nature trail that surrounds the school. They will applied knowledge learned throughout the week.

Evaluate

5. Student will complete a final online assessment (50 points).