

Create Your Own Dichotomous Key

Purpose / Rationale:

This lesson serves to provide students with the opportunity to create their own dichotomous keys based upon their own classification methods. Additionally, students will then name their organisms based upon obvious physical features. This same method is often used in real-world naming procedures.

VA SOLs:

- BIO. 7.** The student will investigate and understand bases for modern classification systems. Key concepts include the following:
- Structural similarities in organisms.

Materials and Resources:

Activity sheet
List of Latin names written on board
Blank dichotomous key handout
Colored pencils

Class Management and Safety Issues:

There are no specific class management and safety issues for this activity.

Procedures:

Engage (5 minutes)

- “Remote Jungle Reveals New Species” (online article w/ photos) – Discussion of real-world application of today’s activity (occurred recently in Papua New Guinea).

Scenario: Congratulations!!! You are a scientist working in the Roanoke Valley who is part of a collaborative team that has just discovered numerous new species. You must now decide, within your collaborative group, how you are going to classify and name your organisms.

Explore (30 minutes)

- First, student teams must discuss what characteristics should be used to classify the organisms. Second, students should then develop their classification systems and dichotomous keys. While doing both, students should fill in the activity sheet. Lastly, students need to name each critter.

Explain (5 minutes)

3. The class will go over developed classification systems and the names given to the organisms. Students and the teacher will reflect upon issues that arose during this process. Students should also complete the provided activity sheet.

Elaborate (5 minutes at end of class and then taken home for completion)

4. Find the Latin names of 5 different organisms. Where did their names originate from? For example, *Xiphias gladius* is Latin for swordfish. *Gladius* means sword.

Evaluate

Section	# Parts	Points Each	Points Total
Activity sheet*			5
Dichotomous Key	10	10	10
Latin Names	10	1	10
Total			25

*Checked for completion