

Subject: Science

Grade: Ninth - Biology

Standard: #4 The Living Environment

**Key Concept:** Heritable characteristics can be observed at molecular and whole-organism levels - in structure, chemistry, or behavior.

**Generalization:** Organisms belonging to the animal kingdom have similar structures that perform similar functions.

**Background:**

Students have been studying the animal kingdom. They have looked at organisms in a variety of phyla, observing various structures and systems that each possess. This lesson provides a cumulative look at several systems across organisms.

For each tier, divide students into groups of three or four. You may assign animals or provide student choice. Either way, each group should have five animals, one from each of five phyla. Students are to compare and contrast the animals according to four systems: nervous, digestive, respiratory, and circulatory. Once that has been completed, the groups prepare the product that they have chosen. This will be presented to the class.

Students should have access to supplementary material, the Internet, library, and books such as The Illustrated Five Kingdoms, ISBN 0-06-500843-x.

This lesson is tiered in *product* according to *interest*.

Tier I: *PowerPoint Presentation*

Tier II: *Graphic Organizer*

Tier III: *Wall Hanging*

## Tier IV: *Video*

### Assessment:

Teacher observation and student interviews during the investigation will serve as formative assessments. Rubrics may be developed for each product, but these should be given to the students at the time they select their tier. Time should be allotted for students to share their products during a class sharing time.