Kingdom Animalia:
A look at the five major classes

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Grade:

Seventh Grade Biology/Life Science

Objective:

To understand and comprehend the five major classes in the animal kingdom and phylum chordata (birds, mammals, reptiles, amphibians, and fish). To understand the different characteristics that make these classes unique from each other.

Standard:

Standard IV B: Diversity of Organisms: The Student will understand that living systems, at every level of organization, demonstrate the complementary nature of structure and function.

Intro to: Kingdom Animalia
Grade: 7

This unit will be used to inform students on the main classes of Animalia. We will be describing similar and different characteristics of species. There will also be a brief history and overview of the taxonomic groups.

Day One

- Brief overview of taxonomic groups (kings play chess on fine green silk)
- Go over history…who invented it? why it was invented? What is it?
- Introduction to Class Aves…Birds
    - Characteristics
    - Reproduction
- Matching Handout

Day Two

- Go over Handout from day one
- Introduction to Reptilian
    - Characteristics
    - Reproduction
- 15 minute video

Day Three

- Introduction to Amphibians
    - Characteristics
    - Reproduction
- Show Specimens of Reptilia and Amphibians
- Compare and contrast

Day Four

- Introduction to Mammalian
    - Characteristics
    - Reproduction

Day Five

- Introduction to Actinopterygii (fish)
    - Salt water vs. freshwater
        - Characteristics
    - Reproduction
- Quiz /lab on specimens
- Homework: paragraph on favorite animal….include: **Characteristics, Reproduction, and what Class its in!**

Grade Level	Strand	Sub-Strand	Standard	Benchmarks
GRADE 7	I. HISTORY AND NATURE OF SCIENCE	D. Historic Perspectives	The student will understand how scientific discovery, culture, societal norms and technology have influenced one another in different time periods.	1. The student will cite examples of individuals throughout history who made discoveries and contributions in science and technology. 2. The student will cite examples of how culture influences scientific and technological advances.
GRADE 7	IV. LIFE SCIENCE	A. Cells	The student will understand that all organisms are composed of cells that carry on the many functions needed to sustain life.	1. The student will know that cells are the fundamental units of life. 2. The student will distinguish between single-cellular and multi-cellular organisms. 3. The student will distinguish between plant and animal cells. 4. The student will recognize that cells repeatedly divide for growth and repair. 5. The student will recognize that cells convert energy from food for the production of molecules necessary for life, and for life processes including cell growth and cell division. 6. The student will recognize that specialized cells in multi-cellular organisms perform specialized functions.
GRADE 7	IV. LIFE SCIENCE	B. Diversity of Organisms	The student will understand that living systems, at every level of organization, demonstrate the complementary nature of structure and function.	1. The student will explain that individuals are composed of specialized cells, tissues, organs and organ systems that perform specialized functions. 2. The student will recognize that an organism's body plan and its ability to regulate its internal environment enable it to make or find food, grow and reproduce in a constantly changing environment. 3. The student will recognize that behavioral responses of organisms may be determined by heredity and past experience. 4. The student will use and create dichotomous keys. 5. The student will use the characteristics of an organism to identify the kingdom to which it belongs.

Kingdom: Animalia

Part 1: Intro/Birds

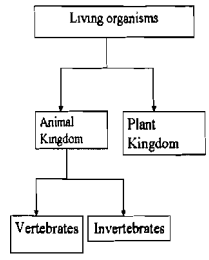
By:

Ms. Sunsdahl

Mr. Grover

Taxonomic Grouping

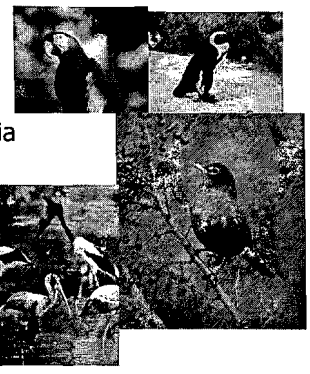
- **The Method that Biologist us to categorize all living organisms.**
- Kingdom
- Phylum
- Class
- Order
- Family
- Genus
- Species
  - To remember: *Kings, Play, Chess, On, Fine, Green, Silk*



Binomial Nomenclature

- Scientific Name give to a species
  - Humans: *Homo sapiens*
  - Latin for "Wise Men" "Knowing Man"
- Created by Carl Linnaeus
- 18th Century

Birds



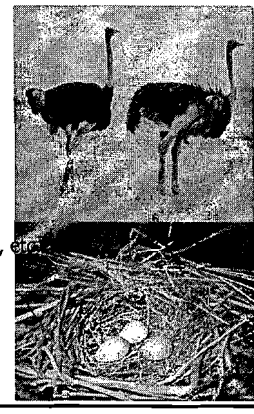
- Kingdom: Animalia
- Phylum: Chordata
- Class: Aves

Characteristics of All Birds

- Feathers
- Wings
- Lay eggs
- Wishbone
- Beaks
- Four Chambered Hearts
- Warm Blooded
- Light/Hollow Bones

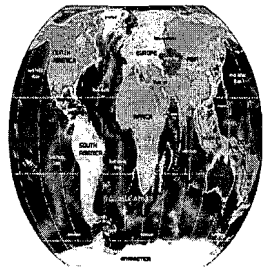
Common Traits

- Flight
  - Flying Birds
    - Ducks, Eagles, Parrots, etc.
  - Non-flying
    - Penguins, Ostrich
- Swimming
  - Seagulls, Penguins, Loons, etc.
- Nesting
  - Number of Eggs
  - Locations
  - Gender



Where are birds Found?

- Everywhere
  - Arctic
  - Tropics
  - Forests
  - Desert
  - Mountains
  - Plains
- How?
  - Adapted to Environment



Whos Who of Birds?

Directions:

Birds come in a variety of shapes, sizes, colors, and locations. Read the description of the birds listed below. Than match each species of bird to the correct description. Use each bird only once.

Bird Species:

A.) Mallard (duck)	B.) Ostrich	C.) Parot
D.) Pinguin	E.) Hawk	F.) Pheasant
G.) Owl	H.) Sparrow	I.) Peacock

Description:

_____1.) I am part of the Raptor family. My beak and talons are made for catching prey. You can find me perched in trees. My closest cousin is the Eagle.
_____2.) I am a tropical bird. Usually I am brightly colored. My beak is made for eating seeds and fruits.
_____3.) I have very long and colorful tail feathers. I one of very few birds that cannot fly.
_____4.) I can be found in both water and on land. I migrate south every winter. My beak is designed for eating freshwater invetebrates and plants.
_____5.) I am a member of the raptor family. I usually sleep during the day, and hunt at night.
_____6.) I am on of the largest birds in the word. I am not able to fly, but you might find me with my head in the sand.
_____7.) I spend most of my life in the freezing cold. I cannot fly, however my wings are designed for swimming.
_____8.) I am very small. There are many different kinds of me. I can be found in trees, barns, praires, and cities.
_____9.) I am not a native bird of North America. I spend most of my life in tall grasses. The male of my species is very brightly colored.