

LESSON PLAN – THE ANIMAL KINGDOM (CHORDATES)

Title of the Lesson: The Animal Kingdom
 Curriculum Area: Diversity of Living Things
 Unit of Study: B. Grade 11 Biology (University)

Curriculum Expectations:

B1.2 analyse the impact that climate change might have on the diversity of living things (e.g., rising temperatures can result in habitat loss or expansion; changing rainfall levels can cause drought or flooding of habitats) [AI, C]
B2.1 use appropriate terminology related to biodiversity
B2.4 create and apply a dichotomous key to identify and classify organisms from each of the kingdoms [PR, AI, C]
B3.3 describe unifying and distinguishing anatomical and physiological characteristics (e.g., types of reproduction, habitat, general physical structure) of representative organisms from each of the kingdoms

Materials/Resources

- Sticky Notes for Dichotomous Key Activity Prepared
- Dichotomous Key questions
- Individual Whiteboards and Markers
- Student Handout
- Powerpoint + Projector

Students will learn:

- Distinguishing characteristics of animals within the Animal Kingdom
- How to classify chordates into different Classes of Animalia
- How to use and apply a dichotomous key properly
- Specific vocabulary relating to animal morphology for classification into phyla

Assessment:

- Assessment AS/FOR learning: whiteboard activities and student interaction during powerpoint
- Assessment AS/FOR learning: Dichotomous Key “Who am I?” activity
- Test Review sheet provided in preparation for Assessment OF learning

Safety Considerations:

- Ensure that there is adequate space for students to interact and walk around the classroom for the Dichotomous Key Activity → may need to push all tables to the back or perimeter of the classroom to create an empty area.
- Emphasize the “no running” rule during the activity.

<p>Minds On:</p> <ul style="list-style-type: none"> - Student choice: (5 mins.) <ul style="list-style-type: none"> o Can wildlife adapt to climate change? Ted-Ed Video o https://www.youtube.com/watch?v=ZCKRjP_DMII o Or “What are sharks so awesome?” Ted-Ed Video o https://www.youtube.com/watch?v=svIEfxTyJQE 	<p>Grouping:</p> <p>Individual</p>
<p>Action:</p> <ul style="list-style-type: none"> - The Animal Kingdom Powerpoint + interactive components (40 mins.) <ul style="list-style-type: none"> o Integrated learning checks during the powerpoint (games/questions/quizzes): Assessment AS/FOR learning o Critical thinking questions & Think. Pair. Shares. o Students follow along using an accompanying handout and fill in information + charts o <i>Knowledge and skills: K/U, T, C</i> 	<p>Class/ Individual</p>
<p>Consolidation:</p> <ul style="list-style-type: none"> - “Who am I?” activity using a Dichotomous Key (previously taught) (15 mins.) <ul style="list-style-type: none"> o Students will be given a sticker with an organism name + Class of chordate o Dichotomous Key: use yes or no questions to identify the specific organism and the class of chordates that it falls into. o Create a class-wide hierarchical classification graph using the sticky notes. o <i>Knowledge and skills: T, A</i> - Vertebrates Review Song: https://www.flocabulary.com/unit/vertebrates/ with lyrics (5 minutes.) 	<p>Class Activity</p>
<p>Accommodations:</p> <ul style="list-style-type: none"> - Print powerpoints for students with specific needs listed in their IEPs. - Powerpoint slide with images and names of all the organisms used in the Dichotomous Key for ELLs. - Captions for all videos/Lyrics for all songs - Mix of individual and group activities/parts of the lesson. - Interactive powerpoint w/student participation to maximize student engagement - Multiple learning styles: auditory, visual, tactile, kinesthetic, text, etc. to benefit different types of learners. 	