



Name: _____



Life Science

Schoolyard Investigation



Important Note: All items with an asterisk (*) are REQUIRED!

C. Concepts Layer

4 Points Each

Maximum 56 Points

Objective: To observe and document the diversity and population of life forms in the schoolyard.

___ *Write and/or draw 10 or more observations of living organisms in the schoolyard.

Listen and take notes or look up brief information of the following concepts and take notes. Be able to do an oral defense on each concept (4 points for each concept):

___ *Ecosystem

___ *Biodiversity

___ *Population

___ Watch the "Pole to Pole" episode of Planet Earth and actively participate in the discussion that follows on diversity and ecosystems in our schoolyard and world

Objective: To be able to describe a schoolyard ecosystem organism and how its characteristics help it to survive in its habitat.

Listen and take notes or look up brief information of the following concepts and take notes. Be able to do an oral defense on each concept (4 points for each concept):

___ *Structure

___ *Function

___ *Adaptation

___ *Behavior

Select a schoolyard organism of your choice and:

___ *Write and/or draw detailed observations of the organism. Be able to orally explain its structures and their function

___ *Orally explain how this organism is adapted to its schoolyard habitat.

Objective: To identify organisms to kingdom by their characteristics

* ___ As a group, discuss and fill out the "Is it an Animal?" and "Is it a Plant?" assessment probes. Share in the class discussion.

* ___ At the end of this unit, redo both the plant and animal assessment probes on your own as a "quiz".

***Choose 1:**

___ Listen to the “hand diagram” lecture on the 5 kingdoms. Take notes and participate in the discussion to get credit.

___ Use the internet or a text to research and take notes on the following kingdoms and their characteristics: Monera, Protista, Fungi, Plants, Animals.

___ Watch the video clip and take notes on the following kingdoms and their characteristics: Monera, Protista, Fungi, Plants, Animals.

___ *Take an oral or written quiz on the kingdoms of schoolyard organisms. Be able to defend your choice of kingdoms for each organism.

B. Investigation Layer **Groups Choose 1** **Maximum 20 Points**

Objective: To design and present an investigation related to an organism in the schoolyard.

*Design an investigation related to any organism in the schoolyard. (Get your question approved for safety, first!) Write up all of the following in your notebook:

___ *Question

___ *Procedure

___ *Data

___ *Conclusion

___ *2 Further Questions

A. Critical Thinking **Choose 1** **Maximum 8 Points**

Objective: To analyze a real-world topic related to the schoolyard and larger habitats.

Select a question below and read one of the articles available in the classroom on that topic. Get together with others that read the same article (limit 4 in a group) and use the whiteboard to report out the main points of the article and your opinion on the topic question below.

***Choose 1:**

Author Richard Louv talks about kids suffering from “Nature Deficit Disorder” in his book *Last Child in the Woods*. Is this a real disorder? Why is it a big deal?

Biodiversity is decreasing in the world. So what?

Why should hunters care about biodiversity?

___ Whiteboard report out

___ Opinion, backed up with reasons