Grade Level	Content Area	Course Title *(9-12 Samples Only)*	Unit Title
2nd Grade	**Writing**	**N/A**	**Biology—*Body Functions of Animals***

Length of Unit	Time of Year Taught	Expected Prior Knowledge
3-4 months	**1st Semester (Aug-Dec)**	✓ Developing mathematical mind ✓ Opportunities for experiences with plants & animals ✓ Word level vocabulary enrichment ✓ *External Parts of Vertebrates* 3-part cards presentations ✓ *External Parts of Familiar Plants* 3-part cards presentations ✓ *First Knowledge of The Animal Kingdom* 3-part cards presentations ✓ *"Question & Answer Games"* for Zoology

Unit Description

This curricular sample illustrates a guided and structured method for research and composition.

Montessori methods, such as the 3-part card materials, are presented to aid students in organizing and classifying information concerning animal and plant life--***observe, classify, then abstract***. We believe that the common core areas of math and language (reading & writing) are tools students must master in order to access deeper and more meaningful learning in what we refer to as our "Cultural Curriculum". Cultural subjects (history, biology, geography, etc.) are clustered around our five main themes ("Great Lessons"—***see A.3 Program of Instruction***) that comprise the full span of our elementary curriculum (K-6th grade). Composition and writing skills are taught within the context of our cultural presentations and lessons, as are other areas of language. By presenting curricular knowledge and structures of knowledge through the use of specially designed stories and 3-part card materials students are exposed to *concrete examples of informative and explanatory textual structures*. Presentations and student follow-up practice with the concrete booklets and cut card materials are *activities that lead to student mastery* for this sample's required standard of writing informative/explanatory texts in which the student introduces a topic, uses facts and definitions to develop points, and provides a concluding statement or section. Once students are familiar with labeling, defining, and generating questions about a topic, they have the tools necessary *to compose original texts* of individually chosen, and/or assigned topics.

Biological studies are presented in an interdisciplinary way so that they support geological and cultural subjects which help students orient themselves in the universe, both historically and taxonomically. Biology is the study of life and life processes, including the study of structure, functioning, growth, origin, evolution, and distribution of living organisms. Students at this age tend to be extremely interested in these studies which facilitates active engagement and deeper more meaningful learning.

Points of Interest *that may lead to student research:*

✓ Animals and care of animals
✓ Plants and care of plants

- ✓ Anthropomorphism

Points of Consciousness *that may lead to student research:*

- ✓ All forms of life must perform the same basic functions in order to survive
- ✓ All forms of life are specially adapted for their own survival as well as for their own special contributions to the survival of others
- ✓ Humans are specially endowed with the ability to adapt consciously

Presentations & Lessons *that lead to mastery of this writing standard:*

- ✓ Teacher-facilitated discussions about the topic areas
- ✓ Demonstrations of use of card materials and charts
- ✓ Guided research projects, compositions
- ✓ Impressionistic experiences with animals & plants

Standards:	**Strand:** Writing **Cluster:** Text Types and Purposes ***Standard #2:*** Write information/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
Summative Assessment	✓ **"3 Part Cards" material is the *structural model* used for teaching & assessing many areas in reading and writing**—student practice with the cards and their specific lay-outs leads to the final outcome of an original written composition/research about a plant or animal—usually after Lesson 5. ✓ Student progress data & observation notes recorded in MRX system
Scoring for Summative Assessment	✓ **Assessment Tool: Writing Assessment Rubric--*Animal or Plant Report*** ✓ **Criteria for Mastery:** **8-10 points (80%) = meets standard** **11-15 points exceeds objective** ✓ **Scoring Key: 1=Approaching—needs more practice 2=Meets Standard 3=Exceeds Standard** ✓ **Rubric Assessment Elements:** ✓ (2 pts) Identifies & names a specific animal or plant. (Topic) ✓ (5-6 pts) Provides *facts & definitions*— o identifies and names parts of the animal or plant o classifies the animal or plant from Kingdom to phyla level. o shares additional knowledge and understanding of the life functions of the animal or plant o (2 pts) Provides closing statement—for example, a positive or negative opinion or reflection about the

chosen animal or plant

✓ Sample Rubric below

2nd Grade Writing Assessment Rubric SAMPLE

Student:		Date:	
Text Structure: Informative/Explanatory—*Animal or Plant Report*			
Standard/Objective: *Student will write an animal or plant report (information/explanatory texts) in which they introduce a specific animal or plant (topic), use facts and definitions to develop points about the animal or plant, and provide a concluding statement or section for their report.*			
Criteria for Mastery: 8-10 pts	**1 = Approaching—needs more practice**	**2 = Meets standard**	**3 = Exceeds standard**
Main Idea/Topic Identifies & names a specific animal or plant.	Did not include specific name and/or indentifying information about specific animal—too general	Includes **specific common name** of animal or plant.	Includes specific common name of animal or plant. Includes etymology of common name & word origin (e.g., Latin or Greek roots). Sentence(s) express complete thought(s)
Supporting Detail 1- -Facts & Definitions	Identifies and names 1 or 2 parts of the animal or plant Identification incorrect or unclear or not provided at all-- may have incomplete sentences or thoughts	**Identifies and names** at least 3 parts of the animal or plant Sentence(s) express complete thought(s)	Identifies more than 3 parts of the animal or plant and provides some detail for each. Sentence(s) express complete thought(s)
Supporting Detail 2- -Facts & Definitions	Does not classify the animal or plant or classifies but is still too general for required level-- may have incomplete sentences or thoughts	**Classifies the animal or plant** from *Kingdom to species/phyla level.* Sentence(s) express complete thought(s)	Classifies the animal or plant from *Kingdom to species/phyla level and provides some additional details at classification levels.* Sentence(s) express complete thought(s)
Supporting Detail 3- -Facts & Definitions	Does not provide facts about life functions or May provide some facts about general life functions, e.g., omnivore or carnivore; lives on land—not expressed as complete thoughts or may be presented as list	**Provides information regarding the understanding of 3 or 4 life functions** (habitat, nutrition, movement, defense, etc.) of the animal or plant Sentence(s) express complete thought(s)	Extensive detail regarding life functions of plant or animal. Covers most identified functions covered/taught Sentence(s) express complete thought(s)
Conclusion	Ending unclear or does not exist. Made an attempt, such as, "and that's my animal report"	**Provides closing statement**—for example, a positive or negative opinion or reflection about the chosen animal or plant	Provides thought provoking statement, question and/or opinion or humorous closing.
		TOTAL POINTS	
OBSERVATION NOTES:			

Materials/Resources Needed

Library resources

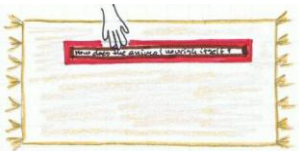
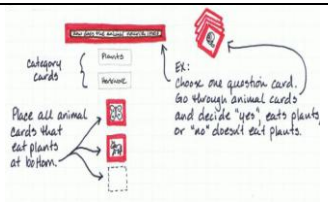
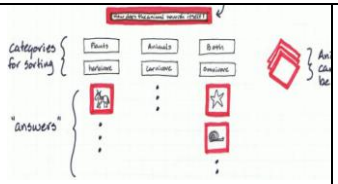
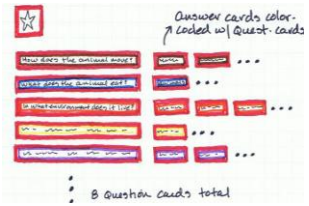
Writing materials—pencils, colored pencils, paper, etc.

Montessori hand-made materials:

"First Knowledge"--Pictures, labels, and stories representing animals from each of the 5 Kingdoms (8 pictures per box/5 boxes total)

"Question & Answer" cards—color coded (e.g., brown for movement, blue for food, orange for habitat, etc.)

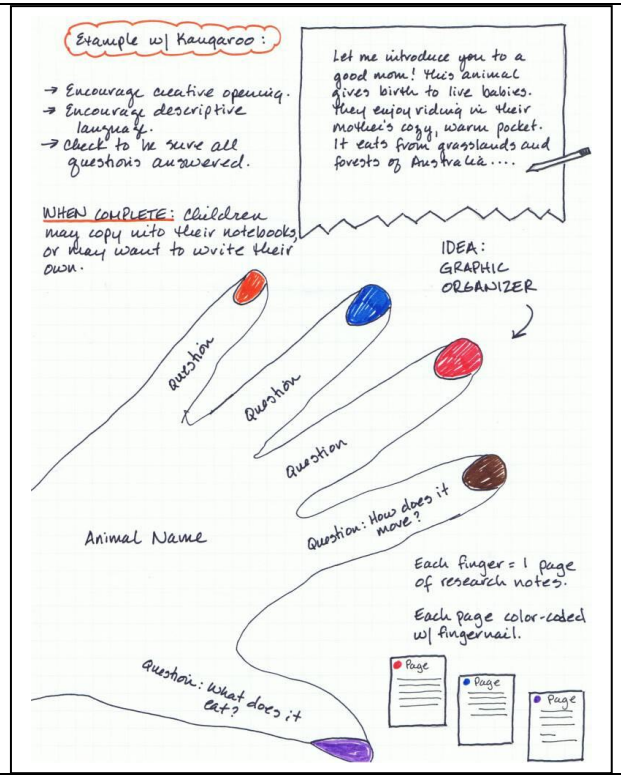
	Lesson 1 Introduction: Question & Answer Cards	**Lesson 2** Presentation: One Question, One Answer—All Animals	**Lesson 3** Presentation: One Question, All Answers—All Animals	**Lesson 4** Presentation: Characteristics of One Animal	**Lesson 5** Guided Written Composition
Instruction and Timeline	***Timeline: 15 minutes*** **Aim:** ✓ Model & demonstrate lay-out of all possible questions questions & answers for one animal as way of organizing information about the specific animal Invite a small group of students to play a game. Once gathered, select one of the prepared question cards and introduce it with an explanation: *"How does the animal nourish itself? By nourish, what I mean here is how does the animal get the nutrients, the vitamins and minerals that it needs to live? What does it eat? Some animals eat plants, some*	***Timeline: 20-30 minutes for the lesson & several days to a week for practice.*** **Aim:** ✓ To demonstrate & provide a model lay out with *ONE question and ONE answer for ALL animals* Gather the group together and choose a question, e.g., How does the animal nourish itself? Place the question at the top of the work space. Choose one of the possible answers, e.g., "plants". Place the answer card beneath the question.	***Timeline: 20-30 minutes for the lesson & several days to a week for practice.*** **Aim:** ✓ To model & demonstrate a model lay-out of ONE question and ALL answers for ALL animals Gather the group together and choose a question, e.g., How does the animal nourish itself? Lay out all of the possible answers in a horizontal line under the question. Sort through all of the pictures, making three piles, e.g., "eats animals", "eats plants", and "eats animals & plants".	***Timeline: 20-30 minutes for the lesson & several days to a week for practice.*** **Aim:** ✓ To model & demonstrate lay-out that illustrates all of the characteristics of one animal (ALL questions for ONE animal) Gather the group together and choose one animal to research. Place the animal picture at the top of the work space to serve as a title. Lay out all of the questions in a vertical line under the picture. Choose the answers to the questions so that they tell the information about the animal. Place the appropriate	***Timeline: 20-30 minutes for guided writing & 1-2 weeks for Writer's Process.*** **Aim:** ✓ Student will write an animal report With the previous lesson, a layout demonstrating an outline for the composition of a simple research was presented. This is a good opportunity to model the process for the group first, and then can be followed by individual researches. The questions and answers provide a framework for completing sentences. For example, "what does the animal eat?" may become "The lion is a ferocious hunter. The female kills most of the animals that the lion family eats."

	eat other animals, and some eat both." Place the question card at the top of the rug area.  Continue reviewing and laying out all question cards: ✓ Where does the animal live (habitat/range)? ✓ How does the animal protect itself? ✓ How does the animal reproduce? ✓ What is the animal's life cycle? ETC.	 Sort through the animal pictures, making two piles, e.g., "eats plants", "doesn't eat plants".		answers to the right of the questions. 	***SEE ATTACHMENT at the end for an example of connecting the lay-out structure with another simple graphic organizer used for writing and organizing information.*** When the composition is completed, students are invited to copy it into their notebooks, or they may wish to write their own version.

Lesson 5 Additional Notes:

The illustration to the right gives an overview of the group story/composition process. The hand is used as a structural model: each finger represents one question (like the question strips in the layout) and each nail color corresponds to one section (few phrases, sentences, whole pages) of notes for the specific question.

Writer's Process has been taught and is actively used in the classroom. During this composition work students will draft, revise, share, edit, and publish their work. At the end, students may share their writing with the group and/or whole class at the "Author's Chair".



	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Student Activities and Timeline	***Timeline: Throughout unit*** Explore classroom library resources for animals you would like to research on your own & begin gathering information that answer the same questions as in the	***Timeline: 1 week*** Choose a question from the cards and complete the layout answers for ALL animals--on your own or with a partner Continue gathering research for your selected animal.	***Timeline: 1 week*** Choose ONE questions with ALL answers for ALL animals—on your own or with a partner. Continue gathering research for your selected animal.	***Timeline: 1 week*** Complete the layout on your own or with a partner—ALL questions with ALL answers for ONE animal Decide which animal you want to research and write a report	**Timeline: 2-3 weeks** Writer's Process—mini sessions—***Complete an individual research and composition for animal of your choice***

	presentation. Revisit First Knowledge work with a partner & share the reading and laying out of cards.			about. DUE by Lesson 5.	