

Science and Literacy Grade 1			
Content Area		Grade Level	
Literacy			Elementary
Approximate Time Needed: Four Weeks			
UNIT OVERVIEW		KEY STANDARDS	
This unit combines literacy and science by exploring and researching various animals.		1-LS1-2 LS1.A LS3.A RI.1.10 W1.2	
COMMON ASSIGNMENTS		LDC TEACHING TASK	
LDC Task Formative Class assessments and activities during the ten day unit		LDC Task IE2: After reading an informational text about an animal of your choice, create a brochure in which you describe the animal. Support your topic in with details from the text (i.e. mom and baby relationship, survival parts/adaptations, looks, etc.)	
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Stage 1—Identify Desired Results	
Established Goals/Standards	1-LS1-2 Students should be able to read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. LS1.A Tell how animals use their body parts to help them survive. LS3.A Identify the parents of young animals. RI.1.10 With prompting and support, read informational texts appropriately complex for grade. W1.2 Students will write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.
Transfer	<i>Students will be able to independently use their learning to ...</i> comprehend informational texts, and it will create awareness of the text features and purposes of informational texts and write for a variety of purposes and collaborate with peers effectively.

Meaning	<p>Understandings/Big Ideas</p> <p><i>Students will understand that ...</i></p> <ul style="list-style-type: none"> animals use their external parts to help them survive, grow, and meet their basic needs. how the behaviors of parents help the offspring survive. Students will develop and understanding that the purpose of informational texts is to inform. 	<p>Essential Questions</p> <p><i>Students will keep considering ...</i></p> <ul style="list-style-type: none"> What are some ways plants and animals meet their needs so that they can survive and grow? How are parents and their children similar and different?
	<p>Acquisition</p> <p>Know (Content)</p> <p><i>Students will know ...</i></p> <ul style="list-style-type: none"> Animals have basic needs for survival Animals meet their basic needs for survival in different ways Animal features that are used for survival How animal features assist in survival How to use supporting details <p>Do (Skills)</p> <p>Discipline Skills</p> <p>Literacy Skills <i>[Should include reference to LDC task type—e.g., argumentative, cause-effect, etc.]</i></p> <p>LDC Task IE2:</p> <p>After reading an informational text about an animal of your choice, create a brochure in which you describe the animal. Support your topic in with details from the text (i.e. mom and baby relationship, survival parts/adaptations, looks, etc.)</p>	

Stage 2—Determine Acceptable Evidence	
<p>Assessments--including Performance Tasks</p> <p>LDC task</p> <p>Project Based Learning presentation</p>	<p>Evaluative Criteria</p> <p><i>[Rubrics, including LDC rubric]</i></p>
<p>Supports/Scaffolding</p> <ul style="list-style-type: none"> Non-readers will have opportunities to listen to texts read aloud (orally or electronically) in order to assess their mastery of the standard. Texts will be differentiated according to student needs and 	<p>LDC Rubric</p>

<p>interests.</p> <ul style="list-style-type: none"> • Students will be provided with a choice in the writing product. 	
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Stage 3—Plan Learning Experiences and Instruction

U n i t T e x t s a n d M a t e r i a l s	<p>Various informational texts about animals on a variety of reading levels</p> <p>https://www.thedodo.com/protective-animal-moms-1225565790.html</p> <p>https://www.opened.com/video/zoo-animals-how-do-gorillas-communicate-youtube/1031198</p> <p>http://www.kidsplanet.org/games/js/whoami.html</p> <p>http://activities.macmillanmh.com/reading/treasures/stories/olteachres/2204090.html</p> <p>https://www.youtube.com/watch?v=4vq8ci4RTUs</p> <p>http://ngexplorer.cengage.com/ngyoungexplorer/1501/readstory.html</p> <p>http://ngexplorer.cengage.com/ngyoungexplorer/pdfs/YEJTGGrade12015.pdf</p> <p>https://www.youtube.com/watch?v=75okexRzWMk</p>
	<p>Materials for Optional Tasks</p> <ul style="list-style-type: none"> • Blue Whales: Giant Mammals (Level H) – grade 1 • Elephants: Giant Mammals (Level H) – grade 1 • Extreme Insects (Level I) – grade 1 • Animals, Animals (Level E) – grade 1 • Animals, Animals (Level H) – grade 1 • Animals, Animals (Level K) – grade 2 • Extreme Animals (Level K) – grade 2 • Big and Small Cats (Level G) – grade 1 • Ants, Ants, and More Ants (Level G) – grade 1 • Deep in the Ocean (Level L)- grade 2 • PBL –Letter to Parents
A s s e s s m e n t T a	<p>Formative Assessment(s)</p> <ul style="list-style-type: none"> • Animal Baby/Parent Match • Animal Baby/Parent Comparison • Parent /Offspring Magazine Hunt • Who Am I? • Animal Smell Experiment – National Geographic Junior Explorer • Create your own Animal

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- Alligator Expectations
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- Wild Ideas – National Geographic Junior Explorer

Summative/unit assessment(s)

- LDC TASK: Animal Brochure
- PBL – Presentations

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<u>Monday</u>	<u>Tuesday:</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
<p>Do animal babies look like their parents?</p> <p>-Explain situation of rainforests tsunami. Groups work as scientists to complete the <i>Animal Parent Match</i>.</p> <p>-Group discussion about how they were matched.</p> <p>-Chart similarities and differences among parents.</p>	<p>Do animal babies look like their parents?</p> <p>-Review knowledge from previous lesson</p> <p>-Reading and discussion of science textbook for Kids</p>	<p>Do adult animals look like their babies?</p> <p>-Project <i>image # 1</i> and ask students if this is a duck swimming with her baby. Discuss why or why not.</p> <p>-Explain that all animals are classified into 5 groups: mammals, birds, fish, amphibians, & reptiles</p> <p>-Watch the Brainpop Jr. Classifying Animals.</p> <p>-Students will complete <i>Animal Parents & Their Offspring</i> to check</p>	<p>Do animal mommies and daddies take care of their babies?</p> <p>-Visit the site: http://chinhoiye.blogspot.com/2011/11/animals-that-take-care-of-their-young.html OR https://www.thedodo.com/protective-animal-moms-1225565790.html</p> <p>To begin discussion of animals that take care of their young. Focus on HOW & WHAT they use to take care of their offspring.</p> <p>-Ask if students if they think there are animals who do not take care of their young.</p> <p><u>Personal Narrative Entry:</u> Students may journal about how their parents take care of them and help them survive.</p>	<p>How do animal babies tell their parents they need something?</p> <p>Explain to students that when human babies need something because they are cold, hungry, or scared they cry. When they get a bit older they can tell their parents what they need or ask for a sandwich.</p> <p>Ask students if they have ever talked to an animal and if the animal spoke back to them?</p> <p>Next, ask students to discuss with their shoulder partners how they think animal babies let their parents know when they need something. Discuss their thoughts as a group.</p> <p>Visit OpenEd and watch the following: https://www.opened.com/video/zoo-animals-how-do-gorillas-communicate-youtube/1031198</p> <p>Separate students into groups and provide them with the "Who Am I" game board. Students will listen to the animal sounds at the following site and compete to see which group can identify the most animal sounds. http://www.kidsplanet.org/games/js/whoami.html</p>

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Vocabulary: parents, offspring, nurture, logic, pattern, learned behavior, instincts, needs, survive

Week 2:

Monday	Tuesday	Wednesday	Thursday	Friday
<p>What do animals need to survive?</p> <p>-Review knowledge from previous lesson</p> <p>-Animal Needs PowerPoint Presentation</p> <p>Divide students into shoulder partners. Students will work together on Activity 1 & 2.</p> <p>http://activities.macmillanmh.com/reading/treasures/stories/olteachres/2204090.html</p>	<p>How do animals meet their basic needs to survive</p> <p>-Animal Senses and behaviors that help them survive. View and discuss Animal Parts PPT</p> <p>-Conduct the National Geographic for Kids: <i>Animal Smell Experiment.</i></p>	<p>What parts do animals use to help them survive?</p> <p>-Review knowledge from previous lesson</p> <p>As a group students will brainstorm a list of animals and parts they use to survive. Students will then be given the opportunity to create/draw their own animal made of various animals parts. Students will then need to explain what their animal can do and how it uses those parts to survive.</p>	<p>How does an alligator use its parts to meet basic needs?</p> <p>Review knowledge about animal survival and parts</p> <p>Display Image #2</p> <p>Explain to students they are to independently identify three parts/features the alligator uses for survival and explain how these parts</p>	<p>What in the world is biomimicry?</p> <p>Ask students what they think that might biomimicry might mean. Explain that it is when people solve problems and copy things that plants or animals do in nature.</p> <p>Allow students to watch the video: Nature Is Smarter Than Us at: https://www.youtube.com/watch?v=4vq8ci4RTUs</p> <p>Discuss with students the inventions that were featured. Now read the article: Wild Ideas by</p> <p>National Geographic Young Explorers at: http://ngexplorer.cengage.com/ngyoungexplorer/1501/readstory.html Brainstorm the many inventions and their inspirations that students remember from today.</p>

			help it to meet it's basic needs.	
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Vocabulary: environment, basic needs, protection, camouflage, senses, biomimicry, mimic

Week 3:

<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
<p>Remind students that biomimicry is using nature to solve people problems.</p> <p>Explain that today we are going to look closer at how people used parts of nature to solve problems. Students will view and discuss the PPT of nature and solutions. Students will identify the object, feature copied, problem, and what was made.</p> <p>** Attached organizer</p>	<p>Ex: planes shaped like birds, boats shaped like fish, helmets like turtle shells, etc.</p> <p>Lesson from National Geographic: http://ngexplorer.cengage.com/ngyoungexplorer/pdfs/YEJTGrade12015.pdf</p> <p>Students will then watch how Kid President solved his problem. https://www.youtube.com/watch?v=75okexRzWMk</p> <p>Students will analyze local plant and animal pictures and work as a group to develop a solution to a problem.</p>	<p>Utilize documents:</p> <p>Solving Problems by Mimicking Nature</p> <p>https://www.teacherspayteachers.com/Product/Solving-Problems-by-Mimicking-Nature-Biomimicry-NGSS-Grade-1LS1-1-standard-1255192</p> <p>This unit allows students to draw and create solutions to real world problem based upon the specified elements of nature.</p>	<p>Utilize documents from:</p> <p>Solving Problems by Mimicking Nature https://www.teacherspayteachers.com/Product/Solving-Problems-by-Mimicking-Nature-Biomimicry-NGSS-Grade-1LS1-1-standard-1255192</p> <p>This unit allows students to draw and create solutions to real world problem based upon the specified elements of nature.</p>	<p>Students will analyze local plant and animal pictures and work as a group to develop a solution to a problem.</p> <p>They will then draw or use materials to create an example of this solution to present to their peers.</p>

Vocabulary: biomimicry, mimic, solve, problem, Real-world, solution, invent, create

Week 4 :

<u>Monday</u>	<u>Tuesday</u>			
Students will present their work to their peers and explain their creations.	Students will present their work to their peers and explain their creations.			

Based on Understanding by Design, Wiggins and McTighe