Georgia Performance Standards Framework – Kindergarten
Animals

Unit One Organizer:
6 Weeks

OVERVIEW: Kindergarten students have a natural interest in the world around them. In this unit students will recognize, classify and identify the similarities and differences in various animals according to their attributes (color, size, appearance, parent-offspring connection).

STANDARDS ADDRESSED IN THIS UNIT

**SKL1** Students will sort living organisms and non-living materials into groups by observable physical attributes.
- Group animals according to their observable features such as appearance, size, motion, where it lives, etc. (for example: A green frog has four legs and hops. A rabbit also hops.).

**SKL2** Students will compare the similarities and differences in groups of organisms.
- Explain the similarities and differences in animals (color, size, appearance, etc.).
- Recognize the similarities and differences between a parent and a baby.
- Match pictures of animal parents and their offspring explaining your reasoning (for example: dog/puppy; cat/kitten; cow/calf; duck/ducklings, etc.).
- Recognize that you are similar to and different from other students (senses, appearance).

**SKCS5** Students will communicate scientific ideas and activities clearly.
- Describe and compare things in terms of number, shape, texture, size, weight, color, and motion.
- Begin to draw pictures that portray features of the thing being described.

**SKCS1** Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.
- Raise questions about the world around you and be willing to seek answers to some of the questions by making careful observations (5 senses) and trying things out.
### ENDURING UNDERSTANDINGS

- Animals can be grouped together using features than can be observed (appearance, size, movement, etc.)
- Animals are similar and different in many ways.
- There are similarities and differences between parents and offspring.
- A child is similar and different from other children.

### ESSENTIAL QUESTIONS:

1. How can living things be so alike yet so different?
2. How is life continued?
3. How are you alike and different from other students?

### MISCONCEPTIONS

<table>
<thead>
<tr>
<th>MISCONCEPTIONS</th>
<th>PROPER CONCEPTIONS</th>
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</thead>
<tbody>
<tr>
<td>Insects are not animals.</td>
<td>Insects are part of the animal kingdom.</td>
</tr>
<tr>
<td>Humans are not animals.</td>
<td>Humans are part of the animal kingdom.</td>
</tr>
<tr>
<td>Animals are four footed, or furry.</td>
<td>Some animals are four footed and furry; others may have no legs, scales, etc. There is a wide variety of animals in the animal kingdom.</td>
</tr>
<tr>
<td>Animals are large.</td>
<td>Animals can be very small such as ants, ladybugs, etc.</td>
</tr>
<tr>
<td>Animals live on land.</td>
<td>Not all animals live on land. Some live in the oceans, rivers, and lakes.</td>
</tr>
<tr>
<td>Concept</td>
<td>Know/Do</td>
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<td>--------------------------------------------------</td>
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</table>
| Similarities and differences in animals (color, size, appearance, etc) | Group pictures of animals showing their similarities and differences.  
Choose two physical attributes to sort the pictures, such as appearance, size, movement, etc. | Alike, difference, similarities, differences, color, size, appearance, body covering, habitat.  
Movement, physical features | Hands on Inquiry  
Science Journals  
Graphic Organizers |
| Similarities and differences between a parent and a baby. | Match pictures of animal parents and their offspring explaining the observable features that help you know what to match. | Parent, baby, alike different, features, similarities, differences, offspring. | Hands on Inquiry  
Science Journals  
Graphic Organizers  
Collage |
| Similarities and differences between you and other children. | Make a collage of pictures and/or drawings of parents and their babies. | Classmates, alike, different, similarities, differences, individual | Hands on Inquiry  
Science Journal  
“Me” book |
|                                                   | Write and include drawings in a “Me” book to discover how each student is an individual – size, features, names, where you live, parents, etc. |                                                                         |                                              |
EVIDENCE OF LEARNING:

By the conclusion of this unit, students should be able to demonstrate the following competencies:

Culminating Activity:

GRASPS

Goal: Apply knowledge and understanding of the differences and similarities of animals and recognize parent and offspring connections.

Role: Owner of a zoo.

Audience: Zoo Keepers

Scenario: You are the owner of a new zoo. The animals have begun to arrive at your zoo but the animals have not been sorted or classified in any way. In order to make your zoo a success, you will need to make sure all animals that are alike are placed in the same general location. You will also need to make sure the parents and babies are housed together.

Product: Your group will design a model of your zoo including where the animals are to be housed. You will build cages (using Styrofoam trays) or natural looking habitats and place the pictures of the animals in the appropriate areas. You will share your information with zoo keepers who will take care of the animals once they arrive.
Sequence of Activities, Tasks, and Assessments for Organization

**TASKS**

The collection of the following tasks represents the level of depth, rigor and complexity expected of all students to demonstrate evidence of learning.

**Task:** *(Lessons will take more than one day to complete. Time frames are suggested and are dependent on your own class.)*

**Lesson 1 (1 – 2 days)**

**EQ:** How can living things be so alike yet so different?

**Materials:**
- Chart paper

**Procedure:**
In large group ask students to name animals they can think of and write list on the board or on chart paper. Ask students to tell you how some of the animals could be grouped together. Design a web on the board. Discuss with the students different features of animals that we can use to sort the animals into groups (movement, appearance, and habitat.)

**Assessment:**
Teacher observation

**Lesson 2 (2 – 3 days)**

**EQ:** How can living things be so alike yet so different?

**Materials:**
- Chart paper. Pictures of animals (can be obtained from books or website), art materials for construction of a book, animal pictures from web or magazines.

**Procedure:**
Gather students together in a large group and ask students what it means for something to be “alike” and what it means for something to be “different”. Allow time for sharing of a variety of ideas. Suggestions may be written on the board or chart paper.
Show students a couple of pictures of animals and ask what they see things they see that are alike and what things are different. Show a couple of pictures of various animals (example: cats, dogs, horses, snakes, etc). Ask students to explain how they are alike. Ask them how they are different. (You may want to do this activity several times until students get the general concept of “alike” and “different”.)

Give each group of 2 – 4 students a variety of animal pictures (common animals such as dogs, cats, fish, and birds). Have each group construct a book that shows the different sizes and colors of the animals. (Example: If the group book is about dogs, it would show that there are many different types, sizes and colors of dogs).

Assessment:
Self Assessment book checklist.

Lesson 3 (1-2 days)
EQ: How can living things be so alike yet so different?

Materials: Student created books, Alike and Different graphic organizer

Procedure: Gather students together in a large group. Using the books the students created in Lesson 2, ask students to make observations and explain how the animals are alike but also different.

Divide students into small groups. Have them look at their animals in their books and complete a graphic organizer to show how animals, (in their group) are alike but different.

Assessment: Graphic Organizer

Lesson 4 (2-3 days)
EQ: How can living things be so alike yet so different?

Materials:
Book about animal habitats, Kidspiration, cards with animals and habitats for matching

Procedure: Read a book about animal habitats to the class. (Example: Turn & Discover: Where Do the Animals Live? By AnnMarie McLaughlin) Discuss animals' features and why animals live in certain places.
Have students use *Kidspiration* to create a web matching animals and their habitats.

While some students work on *Kidspiration*, other can play a matching game of matching animals and their habitats.

**Assessment:** *Kidspiration* Web

**Lesson 5 (3 - 4 days)**
EQ: How can living things be so alike yet so different?

**Materials:**
Groups of animal pictures, chart paper, art supplies

**Procedure:**
Gather students together in a large group and discuss how things can be placed into groups. (Example: how are children grouped at school, how are products grouped in a store, etc.) Talk about attributes that can be used in animal grouping (movement, body covering, size, habitat, physical features). Using a group of animal pictures, have the class work together to place the animals into groups. Discuss what attribute will be used for grouping, why they would choose that particular attribute, etc. After the first sort, ask students to discuss other ways the animals could be grouped.

Give each group of 2 – 4 students a variety of animal pictures. Have students observe and sort pictures according to body covering and graph their results on chart paper.

Have students use the same pictures, observe and sort them a different way. Allow groups to share with the class how they sorted their animals the second time.

Have students use the same pictures and sort them yet another different way. Allow groups to share with the class how they sorted their animals the third time.

**Assessment:**
Sorting activity and informal observation.
Alternate Activity
Another sorting activity for reinforcement or in place of the above activity would be to divide students into groups of 4 or 5. Give each group the same 10 animals to sort. Each group is told to sort their animals and then the groups share how they sorted their animals. Note: You could assign individual groups to sort according to: movement, body covering, size, habitat, physical features.

Lesson 6  (2 - 3 days)
EQ: How can living things be so alike yet so different?

Materials:
Variety of animal pictures, Animal Comparison Chart

Procedure:
In a large group, review with students the grouping/sorting activities they have been working on during class. Share some of the examples they have completed with the entire group.

Give each group of 2 – 4 students a variety of animal pictures. Ask students to make careful observations and sort them into groups and explain how they sorted the animals.

Have the group choose 2 pictures (of two very different animals, example: lion, elephant) and use a graphic organizer to show how the two animals are alike and different.

Assessment:
Informal observation and graphic organizer (Animal Comparison Chart)
Formal Assessment
Alternate Self Assessment

Alternate Activity
If you have access to the internet and an LCD projector the following website has an E-book that talks about animals, differences, and similarities. http://www.scienccenetlinks.com/Esheet.cfm?DocID=103
This could be used as a whole group activity with the class.
Lesson 7 (2 – 3 days)
EQ: How can living things be so alike yet so different?
   How is life continued?

Materials: Book about baby animals, pictures of baby animals and adult animals,

Procedure: Ask students: “In what ways are you like your parents? In what ways are you different?
Ask students to share what ways they are alike and different from their siblings.

Read aloud a book about baby animals. Ask students to observe ways in which baby animals are similar to and different from
their parents (size, color, covering, etc).

Divide the class into small groups and give each group a set of pictures that contains pairs of baby animals and adult animals.
Ask students to describe ways the animals are alike and ways they are different, using direct observation. Have groups group
their pictures and explain how they grouped their pictures to the large group. Ask students if there are other ways they could have
grouped their pictures.

Have students group their pictures according to what baby animal goes with the adult animal. Ask students to explain how the
baby animal and the adult animals are different and how they are alike.

Tell students that each of them is now going to look at a picture of a baby animal and the adult animal. Their data is to be
recorded on the Look Alikes sheet.
Assessment: Look Alikes

Lesson 8 (2 – 3 days)
EQ: How can living things be so alike yet so different?
   How is life continued?

Materials:
Pictures of baby animals and adult animals (see Adult and Baby Animals 2)

Procedure:
Around the room place several pictures of baby animals. Provide the students with the pictures of the adult animal. Walking
around the room, they need to try and place their adult with the baby picture of their animal.
Bring class together after activity and ask students what kinds of things they observed about the babies. What kind of things did they observe about the adults? How are the baby animals and adult animals alike? How are they different?

Assessment:
Teacher Observation and checklist of matched animals.

Alternate Activity
Another activity that can be done at this point is to tape an animal picture (adult or baby) on the back of each student’s clothing without the student seeing the animal. Students then ask each other yes or no questions to determine what animal they are and who their parent animal is. Students must ask a minimum of 5 questions before guessing their animal.

Extension Activity
For students who finish the alternate activity early have them research their animal in a class set of books, draw a picture of their animal in its habitat, or write/draw a picture story about their animal.
A Head Start on Science: Encouraging a Sense of Wonder: 89 Activities for Children ages 3 – 7 by Williams C. Ritz, Editor. (NSTA Press)
AIMS Education Foundation  Cycles of Knowing and Growing
AIMS Education Foundation  Exploring Environments
Project Wild: K-12 Curriculum and Activity Guide. Animal cards are in the Project Wild book that can be used for classification purposes.

Websites
http://www.proteacher.com/110006.shtml  Free animal clipart and other animal information: If you scroll down the web page you will find a section of free animal clipart that can be printed out and used for classifying and sorting activities.
http://www.enchantedlearning.com/Home.html  Animal printouts
http://www.abcteach.com/abclists/animalbabies.htm  List of parent animals and babies
http://www.babyanimalz.com/  Pictures of baby animals
http://www.sandiegozoo.org/videos/indexbaby.html  Site with video of baby animals
http://www.agr.state.il.us/kidspage/babies.html  Farm animals’ pictures. Click on the adult to show baby & name.
http://www.zoobooks.com/newfrontpage/animals/virtualzoo/petanimalbabies.htm  Hear the sounds of baby animals
http://www.zoobooks.com/teachers/thematicCurriculum/animalBabies/index.html  Thematic unit on Baby Animals
http://www.eduplace.com/graphicorganizer/  Web site with a variety of graphic organizers
http://ksnn.larc.nasa.gov/k2newsbreaks.cfm  Website with a variety of science movies

Literature Connections
From Tadpole to Frog by Wendy Pfeffer
What’s It Like to be a Fish by Wendy Pfeffer
From Caterpillar to Butterfly by Deborah Heliligman
Baby Whales Drink Milk by Barbara Juster Esbensen
A Nest Full of Eggs by Priscillia Belz Jenkins
Animal Comparison Chart

<table>
<thead>
<tr>
<th>Name of Animal</th>
<th>Alike</th>
<th>Different</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Adult and Baby Animals
Adult & Baby Animals 2
Adult & Baby Animals 3
## Alike and Different

<table>
<thead>
<tr>
<th>Our animals are alike because….</th>
<th>Our animals are different because…</th>
</tr>
</thead>
</table>

- Our animals are alike because….
- Our animals are different because…

![Lion](image1.png)  ![Lion Cub](image2.png)
Animal Adults and Babies

- Deer
- Canada geese
- Bison
- Calf
- Baboon
- Baby baboon
- Giraffe
- Baby giraffe
- Hippopotamus

Georgia Department of Education
Kathy Cox, State Superintendent of Schools
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Animal Adults and Babies 2
Free Response

Look at the two animal pictures below. Draw ways they are alike.

Look at the two animal pictures below. Draw ways they are different.
Look Alikes

Draw a picture of your baby and adult animal here.

Draw some ways your baby and adult animal are alike.

Draw some ways your baby and adult animal are different.
Venn Diagram

The Venn diagram below is comparing two animals. Put how the animals are different in each section. In the center put characteristics that they have in common.

Animal: ________  

Same

Animal: ________