## Alike and Different

**Key Words:** alike, animal, baby, different, living, non-living, parent, plant, similar

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**Goals:**

**SKL1. Students will sort living organisms and non-living materials into groups by observable physical attributes.**

- Recognize the difference between living organisms and nonliving materials.
- 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.).
- Group plants according to their observable features such as appearance, size, etc.

**SKL2. Students will compare the similarities and differences in groups of organisms.**

- Explain the similarities and differences in animals (color, size, appearance, etc.).
- Explain the similarities and differences in plants (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).

*Teacher note: Be sensitive to the fact that some children have parents who are not their biological parents.*

**SKCS4. Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.**

- Use a model –such as a toy or a picture- to describe a feature of the primary thing.
- Describe changes in size, weight, color, or movement and note which of their other qualities remains the same.
- Compare very different sizes (large/small), ages (parent/baby), speeds (fast/slow), and weights (heavy/light) of both manmade and natural things.

**SKCS6. Students will understand the important features of the process of scientific inquiry.** Students will apply the following to inquiry learning practices:

- Much can be learned about plants and animals by observing them closely, but care must be taken to know the needs of living things and how to provide for them.

**ELAKR1. The student demonstrates knowledge of concepts of print. The student**

- Recognizes that print and pictures can inform, entertain, and persuade.
- Demonstrates that print has meaning and represents spoken language in written form.

**ELAKR5. The student acquires and uses grade-level words to communicate effectively. The student**

- Listens to a variety of texts and uses new vocabulary in oral language.

**ELAKR6. The student gains meaning from orally presented text. The student**

- Listens to and reads a variety of literary and informational texts and materials to gain knowledge and for pleasure.
b. Makes predictions from pictures and titles.
c. Asks and answers questions about essential narrative elements.

**ELAKW1. The student begins to understand the principles of writing. The student**

a. Writes or dictates to describe familiar persons, places, objects, or experiences.
b. Uses drawings, letters, and phonetically spelled words to create meaning.

### Understandings: Students will understand that...

- Babies resemble their parents; and
- all things can be sorted by observable physical attributes.

### Essential Questions:

- How are you similar to your parents/classmates?
- How are you different than your parents/classmates?

### Students will know...

- multiple ways in which objects can be sorted;
- similarities and differences in animals;
- similarities and differences in plants;
- ways in which a parent and a baby are similar and different; and
- how they are similar to and different from other students.

### Students will be able to...

- sort objects;
- match animal parents and their offspring;
- explain reasoning;
- recognize how they are similar to and different from other students; and
- recognize the difference between living and non-living things.

### Lesson Hook:

- Show students a picture of yourself as a baby. Have them discuss ways you are similar to and different from your baby self. Show them pictures of your parents or children.
- Have every child bring in their favorite stuffed animals. Discuss if they are living or non-living. Group animals based on appearance, size, etc.
- Show students pictures of different objects and have them sort into two groups: living and non-living

### Assessment

**Performance Tasks:**

- Students will match pictures of parent animals to baby animals
- Create a drawing illustrating a way you are important (The Important Book activity below)
- Sort plastic animals and pictures of animals into groups
- Performance Task #1: Match the Parent to the Child

**Other Evidence:**

- Class chart on living and non-living things
### Plan of Action

**Tasks:**

Begin this unit by creating a chart for living and non-living things. This chart should be posted in the classroom. Show students a variety of pictures as you study this unit and have them help you decide which category/column to place each picture in. Label each picture after you have decided which column to place it in. Old magazines are a good source for pictures. You may also find items for this by using Microsoft Word Clip Art or the internet.

**Are You My Mother?** by P. D. Eastman (1960 Random House).

1. Read the book aloud to the children. Have them discuss why each of the other animals is not his mother. What characters in the book are living things? Which are non-living things (the big crane)? How is the baby bird like his mother bird? Find a baby for the other characters in the book.

2. Give half of the class a picture of an adult animal. Give the other half of the class pictures of the same animals but as babies (example: Dog, puppy; Cat, kitten; etc.) Line the parents up across the room and then have students take turns finding their mothers/parent.

3. Explain to children that some parents recognize their babies by smell (bats are examples). Pick 4 students to represent parents and place them in the four corners of the room. Give each student a film canister filed with cotton balls that have been soaked in the scents that are found in the spice section of a grocery store (liquid imitation pineapple extract, peppermint extract, coconut, strawberry, etc.). Poke a few holes in the lid of the film canister so that students can smell the contents of the container without having to open it up. Now, make up additional scent canisters to match each of the 4 scents you choose. Distribute these to the rest of the class. The students can take turns approaching each of the 4 “parents” (located in the corner) and asking, “Are you my mother/father?” If they think the scent matches, they are to stay with their parent. The “parent” student should agree that their scent matches. You can color code the canisters by placing small matching stickers on the bottom of each canister or you can smell each one and double check! Congratulate students for using their sense of smell to locate their parents/children.

4. Buy sets of cheap plastic animals and give a sample to students. Explain that these are models of real animals. Ask them to sort the model animals based on how the actual animals move, their appearance (number of legs, fur, etc), size, and where they live.

**The Important Book** by Margaret Wise Brown (1949 Harper Collins).

1. Read the book aloud to students. Let them tell you about something that is important to them.
2. Talk about how each of the students are similar to and different from other students (senses, appearance).

3. Create a class important book. Each child should tell what is important about them and they should illustrate it (You may wish to write what the child says depending on ability, invented spelling is allowed too!) Bind all the pages together to create the classes very own important book. Be sure to include a page for the teachers too.

4. You may also want to read, **We Are All Alike We Are All Different** created by the Cheltenham Elementary School Kindergartners. They have done multiple ones in multiple years. It is published by Scholastic. There are photos of actual children. This is a must have for every kindergarten classroom!

**What is a Plant?**, by Bobbie Kalman (1998 Crabtree Publishing)

1. Show students the cover of the book and ask them to predict what the book is going to be about. Show students an artificial plant and a real plant. Have them compare and contrast. Discuss using the terms “living” and “non-living.” Can the artificial plant grow? Can you get seeds from it to make another artificial plant? Read the book.

2. Explain to students that trees are plants, but so are tomatoes, apples, etc. Plants can vary in size a great deal.

**Additional Resources:**

**Books**

- What is a Living Thing?, by Bobbie Kalman (1998 Crabtree Publishing.)
- The Velveteen Rabbit, by Margery Williams (1999 reissue Avon). Discuss fiction and use of imagination. Use as a springboard to discuss what really is “real/living.”
- Scholastic Puzzles Lynn Has info on these!
- Books and stories about Owen and Mzee. The hippo and tortoise that became friends after Owen, the hippo, lost his pod during the Tsunami. This is a fascinating story in which students can realize that our physical differences do not matter when it comes to friendship. There are multiple stories about this unusual duo. Amazon.com sells several.

** Websites**

- [http://www.bbc.co.uk/schools/scienceclips/ages/5_6/ourselves.shtml](http://www.bbc.co.uk/schools/scienceclips/ages/5_6/ourselves.shtml)
  Animated and interactive -designed for young children.
Performance Task #1
Matching

NAME: __________________________________

Draw a line to match the baby to its parent.

Source for Graphics: Microsoft Word