

Grade Level: 1st **Duration of Lesson:** 45 minutes **Subject:** SCIENCE

Lesson Name: Baby and Adult Animals

Overarching Phenomenon:
<ul style="list-style-type: none">• Why are baby animals so cute?
NGSS Performance Expectation/s:
1-LS3-1 Make observations to construct an evidence-based account that young Plants and animals are like, but not exactly like, their parents. [Clarification Statement: Examples of patterns could include features plants or animals share. Examples of observations could include leaves from the same kind of plant are the same shape but can differ in size; and, a particular breed of dog looks like its parents but is not exactly the same.] [Assessment Boundary: Assessment does not include inheritance or animals that undergo metamorphosis or hybrids.]
NGSS Disciplinary Core Idea/s:
<ul style="list-style-type: none">• LS3.A Inheritance of Traits Young animals are very much, but not exactly like, their parents. Plants also are very much, but not exactly, like their parents. (1-LS3-1)• LS3.B: Variation of Traits Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways. (1-LS3-1)
NGSS Science and Engineering Practice/s:
<ul style="list-style-type: none">• Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.<ul style="list-style-type: none">- Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena. (1-LS3-1)
NGSS Crosscutting Concept/s:
<ul style="list-style-type: none">• Patterns Patterns in the natural and human designee world can be observed, used to describe phenomena, and used as evidence. (1-LS3-1)

Learning Objectives/Goals:
1. Students will differentiate that young animals are similar to their parents, but not

exactly the same.

2. Students will explain that baby animals look like their parents because they come from the same family or species.
3. Students will be able to pair off and sort cards that contain pictures of animals representing a baby animal and an adult animal.
4. Students will be able to explain that baby animals are cute because they look like babies who need help in their earlier stages of life.

Differentiated Instruction:

There are no GATE students in our classroom, but there are 4 students who have an IEP and 5 ELs. When discussing the differences and similarities between baby animals and adult animals, I will provide frames both verbally and on chart paper so that they can reference it when giving a response. For example, in first grade whenever a teacher asks a question, the students must respond with a complete answer. We always provide a sentence starter not only to ELs but to other students in the classroom. If I asked the question, “Why do you think baby animals look like their parents?” Every child responding would hear me start the answer by saying, “Baby animals look like their parents because _____.” The student would repeat the same sentence starter and complete the sentence with his/her thought. The activities in this lesson will also be supported with pictures which will be shown during the lesson.

Assessments:

- Formative assessment – through discussion, students will tell what they already know. Drawing from the prior knowledge or the introduced phenomena.
- Summative assessment – student will write an informative piece on what they learned. This will include at least four sentences with an introduction, two facts and a conclusion. Although many of the students write informative pieces without a frame, the picture below shows an example of what the first graders use for an informative frame.

Graphic Organizer

Introduction Transitions Conclusions Conclusions

There are many facts about _____

Did you know that _____

Also, _____

Now you know a little about _____

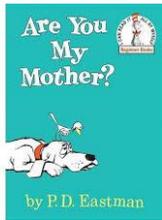
INSTRUCTIONAL SEQUENCE- ***Depending on your lessons you may use all of these, some of these, some of them multiple times, or even in a different order****.**

INTRODUCTION:

Instruction [Anticipatory stage/Engage]:

Do you remember how we looked at baby animals and their parents? We talked about how they were similar and different. We also made comments about baby animals and whether they looked like their parents or not. While we learn more about this topic, the question I want you to think about is, “Why are baby animals so cute?”

First, we are going to read a book that some of you might be familiar with...it’s called, *Are you My Mother?* By P.D. Eastman



I will read the book and stop at key points during the story. The students will have turn and talk opportunities with classmates before sharing out with the rest of the class.

Questions I will ask:

1. p. 9 Does the baby bird look similar to the mother bird?
2. p. 15 Has he ever seen his mother before?
How do you think he will know, what she looks like?
 - p. 23 Do the bird and cat look similar?
 - p. 25 Do the hen and bird look similar?
 - p. 33 So far, 3 out of the 4 animals he comes across can talk. Do they look similar to the baby bird?
 - p. 41 Now the baby bird has come across a car and boat. Do they look like the bird?
 - p. 46 Why do you think he believes the crane is his mother?
 - p. 63 Does the baby bird look similar to the mother bird?

MAIN PORTION (BODY) OF THE LESSON

Instruction [Exploratory stage/Explore]:

Before the students head back to their seats, I will explain the animal card sort game. Students are divided in their table groups. There are 5 groups of 4 students at a table and 1 group of 5 students at a table. Just like the baby bird in the book, *Are You My Mother?* We are going to help these baby animals find their parent. I have a bunch of cards with animals on them that are all mixed up. I need you to match the baby with their parent. As you match them, I want you to look at the similarities and differences between the baby animal and its parent.

They will take turns matching the cards together. They will observe and see that baby animals and adults are similar. I expect my students to see that animals from the same family are similar but not exactly alike. When students are at their seats, I will walk around and hand each group a

set of cards. While they are playing, I will walk around and ask them how the animals are similar and different. They will also tell someone in their table why they think baby animals are similar/different from their parents.

Instruction [Student Explanation stage/Explain]:

Based on the data collected from the students, I will have a pre-made class poster that will show their thoughts regarding the similarities and differences between baby and adult animals. This is where we will talk about their findings from the previous science probe.

When we meet back on the carpet, we will talk about the card sort game and see if there is any new information, we want to add to our class poster. Define traits for students and teach them that we get our traits from our parents. **Trait** defined in kid friendly terms - a characteristic or quality that makes a person or animal different from others. (I will have this word and definition on my chart paper.) Ask them, "Who can give me some example of different traits?" Give students a chance to answer and right down some response.

I will also explain that baby animals look like adult animals because they are from the same family or species. **Species** defined in kid friendly terms - a group of similar living things. (I will have this word and definition on my chart paper.) Ask them, "Who can give me some example of the different species we saw in our card game?" Give students a chance to answer and write down some responses.

We will talk about the proposed phenomena. Why are baby animals so cute? They are so cute because they are a combination of their parents. They have similar traits and they are meant to look cute when they are young. Babies are helpless and need care for the first years of life. We think baby animals are so cute because they, too, are helpless and may resemble cute, baby humans.

Instruction [Student Elaboration stage/Elaborate]:

By now, students will have the understanding that baby animals look similar to adult animals. Students will further enhance their knowledge by watching a video that shows baby animals who grow up to look completely different, from when they were a baby.

Baby Animals Who Grow Up To Look Totally Different
<https://www.youtube.com/watch?v=-0TkOoakcP0>

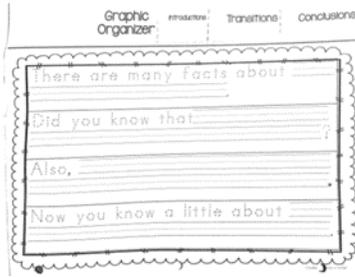
First, we will watch the video all the way through. The second time, we will pause at certain pictures to discuss the similarities and differences. At the end of the video, I can clear up any misconceptions. The goal of the video is to reinforce their thinking and to point out the idea that baby animals and their parents look similar, but are not exactly the same.

CLOSURE:

Instruction [Closure/Evaluate]:

Students will write an informative piece on baby and adult animals. They will have an

introduction, two facts and a conclusion. This is the frame that the students may use if needed.



Supplementary Material/Student Handouts/Visuals

[Attach all student handouts, PowerPoint slides [6 slides per page], etc. referenced in the lesson. Summaries may be provided for longer readings.]

<u>Similarities</u>	<u>Differences</u>
1. noses	1. small
2. same animal	2.
3. same family (species)	3.
4. color	4.
5. same face	5.
6.	6.

Are You My Mother? **ARE YOU MY MOTHER?**
 by P.D. Eastman **Book Printable Activity**
 Matching Mother & Baby Animals

www.totschooling.net

The above card sort game will be used at six different tables.

The teacher will also use chart paper for frames and definitions. A doc cam will be used to show the pre-made poster of their prior thoughts regarding similarities and differences.

A laptop will be used to show a 2-minute video.

JUSTIFICATION

This lesson plan builds off students' ideas identified in parts one and two by using the data collected when introducing the phenomena. During the science probe, students were shown a PowerPoint presentation and were asked to observe the similarities and differences between baby animals and their parents. They looked at lions, polar bears, penguins, swans, pandas and dogs. As a class, we discussed the similarities and differences between the baby and adult animals. I also collected their ideas on whether they thought baby animals looked like or didn't look like their parents. In addition, they had to provide a reason why. The students wrote their ideas on a worksheet that was handed out.

There were various reasons why students believed that baby animals looked like their parents. Some thought they looked similar because they had the same noses. Others thought they were similar because they are the same animal and come from the same family. Being the same color and having similar faces were other reasons why the two looked alike. In contrast, two students thought that they were not similar because they were small. From this data alone, I was able to make a lesson plan that will further their knowledge on why baby animals look like their parents but are not exactly the same. The Explain part of the lesson will highlight the ideas they found during the science probe. By looking at their ideas on a chart and adding new ideas (traits) we can look at the similarities and differences amongst a baby animal and its parent.