



INTRODUCTION TO TRAITS GRADES K-2



SUMMARY

Students will match pictures of babies to pictures of their parents and make observations about similarities and differences. Duration: 30 minutes.



1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Science & Engineering Practices

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 evidencebased accounts of natural phenomena and designing solutions.

Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena. (1-LS3-1)

Connections to Classroom Activity

 Students will sort pictures of parents and offspring and match pairs. They will use evidence from the photos to support their reasoning of why they matched the pairs the way they did.

Disciplinary Core Ideas

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)

Connections to Classroom Activity

 Students will observe photos of adult animals and young animals and match parents to offspring.



Crosscutting Concepts

Connections to Classroom Activity

Patterns

Patterns in the natural world can be observed, used to describe phenomena and used as evidence. (1-LS1-2),(1-LS3-1)

 Students will observe that parents and offspring have similar traits.



ENGAGE

Show students a family photo (either your own or one from a quick Google search). Ask students to discuss with a partner, "What do you notice about this family?" After a minute or so ask students to share out loud what they discussed. If they don't offer observations about how the family appearances compare to each other, prompt with, "How are the family members alike?" "How are they different?" Segue to the lesson by telling students that today they will be observing animal parents and babies and noting similarities and differences.

MATERIALS

- Attached photos of animal parents and their offspring
- Ziploc bag
- Family photo (optional)

DIY Activity

- Set of animal pictures (download here)
- Pair of scissors
- Glue stick
- Pack of index cards



EXPLORE

Prior to the lesson, copy and cut apart the attached pictures and put a set in a baggie for each group. The table shows zebras, pandas, cheetahs, lions and birds.

- Part 1: Students should work in small groups to match the parents with the babies. They should support their sorting by stating evidence of similarities from the pictures.
- Part 2: Identify differences between the parents and babies. Students can keep track of their ideas in a science notebook or on a piece of paper. The key point here is that babies look similar to, but not exactly like their parents.



EXPLAIN

Once students have had a chance to sort and record similarities and differences of each animal, allow student groups to share out loud. To learn more about traits...



WATCH THE GENERATION GENIUS INTRODUCTION TO TRAITS VIDEO AS A GROUP

Then facilitate using the Discussion Questions.





Refer to the family photo from the engagement. Have students look more closely at the parents and children and identify specific traits that the children got from each parent. For example, if the mom in the picture has blond hair and one child has blond hair, students can infer that the child got the blond hair from their mom. This conversation can continue with other traits such as eye color, skin color and other visible traits.



Students can play the online Kahoot! quiz game located below the video which provides downloadable scores at the end of the quiz game. Alternatively, you can use the paper quiz or the exit ticket questions. All these resources are located below the video in the Assessment section.



For more advanced students, you could extend the conversation to discussing genes and how students get some genes from their mom and some from their dad. Some genes are stronger than others, so those are the genes that show.



PARENT









BABY









