

WEEK 2 Lesson 2

Science and Engineering: A Pack of Monsters
Traits Among Siblings

S & E Big Ideas	Animal offspring inherit traits from their parents. Animal offspring siblings have similarities and differences.
S & E Guiding Question	How are animal traits the same and different among siblings?
Content Objective	I can describe how animal traits are the same and different among siblings. (1-LS3-1)
Language Objective	I can discuss how sibling traits are the same and different. (SL1.1)
Vocabulary	siblings: brothers or sisters
Materials and Preparation	<ul style="list-style-type: none"> ● Animal Trait Inheritance sheet, 1 for each child and 1 for teacher modeling ● Monster Pack slides Have this opened to slide 1. ● 5 paper bags or envelopes Label the bags/envelopes: Body Color, Body Pattern, Number of Eyes, Eye Color, Wings or Horns ● Trait cards, copied and cut out Copy the Trait Cards, making enough for each child to choose one trait from each bag. For example, with 20 children, have 10 “blue body”cards and 10 “purple body” cards. Put the traits into the corresponding bags.
Opening 1 minute	<i>Today we will be learning about where animals get their traits, and we will do a fun activity that will help us understand how brothers and sisters, called siblings, look the same or look different.</i>
Investigation	Project the Monster Pack slideshow, showing slide 1, then moving to slide 2

<p>20 minutes</p>	<p>to reveal the guiding question..</p> <p><i>We are going to be building a pack, or group, of monsters today! We are doing this to find out how traits are the same or different among siblings. Remember, siblings are brothers or sisters. Raise your hand if you have a brother or sister.</i></p> <p>Read the scenario to children on slide 3, then go to slide 4.</p> <p><i>First, let's meet the female, or the girl. Her name is Zip; maybe she got her name because she flies quickly with her wings! What traits do you notice Zip has?</i></p> <p>Invite children to share the traits they notice. Be sure to point out the traits on the slide if they don't bring them up on their own.</p> <p><i>Next, let's meet the male, or the boy. His name is Bonk! What traits do you notice Bonk has?</i></p> <p>Invite students to share the traits they notice and be sure to bring up those that are on the slide if children do not mention them.</p> <p><i>Bonk and Zip are going to have offspring to make a big pack, or group of friendly monsters! To do this, we will each get to create a baby, or offspring. Let me explain how we're going to do this, and then we'll begin! I have 5 bags here, and in the bags are different traits. For example, I have one bag for the body color. Zip is blue, so in the bag, there are some cards for a blue body. Bonk is purple, so I also have some cards for a purple body. Because animals get their traits from their parents, you're going to have to put your hand into the bag and without looking, pick out a card. The card will tell you which trait you will use for your offspring. If you pick out the blue card, the offspring will get a trait from Zip! If you get a purple body, that trait will come from Bonk! Once you have your card, you'll go back to your seat to work on your monster, then return to our meeting area to get the next trait from the bag. We will do that for the pattern on the body, the number of eyes, the color of eyes, and whether the offspring has wings or horns! We will start with the number of eyes!</i></p> <p>Proceed to slide 5 to begin the activity.</p> <p>Using the Offspring sheet, model how they will pick out a card for the number of eyes, then draw that number of eyes on their monster. Be sure not to color the eyes in yet as children need to pick out of the next bag to find out the offspring's eye color.</p> <p>Pass out the worksheets to the children and have them line up while you hold the bag. They will each take a turn coming up to pick out a card. After</p>
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	<p>they've taken one, they may go back to their seats to start coloring in the body of their monster and should return to the meeting area once finished with that part. Continue moving through the slides to complete the eye color, body color, body pattern, and last, wings or horns. Be sure to model each step for children.</p>
<p>Discussion 8 minutes</p>	<p>Have all children return to the meeting area and sit in a circle with their papers on the floor in front of them.</p> <p><i>We just made a pack of friendly, baby monsters, who got their traits from their parents. The babies, or offspring, are brothers and sisters. Remember, we call them siblings. Let's take a look at all the offspring you created and I want you to think about how the siblings are the same, and how they are different.</i></p> <p>Invite children to walk safely around the circle, looking at the offspring for a few minutes. Then, have children return to their spots and sit. Use the following questions to guide the conversation.</p> <ul style="list-style-type: none"> ● <i>How are the siblings the same? Can you give an example?</i> ● <i>How are the siblings different? Can you give an example?</i> ● <i>Are there any that look exactly the same?</i> ● <i>Are there any that look entirely different from the others?</i> ● <i>Why do you think they have similarities and differences?</i>
<p>Closing 2 minutes</p>	<p><i>Today we learned that siblings have some traits that are the same and some that are different. During your Science and Engineering Studio this week, you will get to see some live cameras of real animals and their siblings. I can't wait to see what observations you'll make!</i></p>
<p>Standards</p>	<p>Practice 3: Planning and carrying out investigations</p> <p>1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.</p> <p>SL1.1 Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p>
<p>Ongoing assessment</p>	<p>Listen in to children as they create their monsters and during the class discussion at the end of the lesson.</p> <ul style="list-style-type: none"> ● Do children understand that animals inherit traits from their parents? ● Are they making connections between the offspring and how the parents look? Are they able to identify which parent the trait came from? ● Are children able to come up with similarities and differences between the siblings?

Notes

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