mystery science

Lesson: “How can you help a lost baby animal find its parents?”

VIDEO TRANSCRIPT

EXPLORATION VIDEO 1

Hey, it's Esther from the Mystery Science Team. I'm looking for one of my favorite animals. This animal is very shy, so I'm trying to be as quiet as I can. Shh. Wait, do you hear that? I think I hear something over there. Wow, do you see that deer? Not just one, but two—a mother and her baby. A baby deer is called a fawn. Aw, look at them. That is so cool. Here in Indiana, spring is the best time to see deer and fawns together. Last spring, while I was walking here, I saw a fawn sitting alone. I wondered if it would be okay sitting alone like that, so I decided to call my local wildlife rescue center for advice. A wildlife rescue center is a place that cares for wild animals that need help. Most cities and towns have one. The people who work at wildlife rescue centers are experts. They know how to provide the special food and medical care that wild animals need. The people at my wildlife rescue told me that the fawn would be just fine. They mentioned how fawns are often left alone during the day while their parents look for food. Because baby deer can't run very fast, hiding low to the ground like this is the safest place for them to be. But I still wondered—would the mom come back? I checked on the fawn a few times that day, and I was starting to get a little worried, when, look! The mom came back. Watching them together, you're probably noticing so many cool things about how they're acting, like the mother licking the fawn and the fawn scratching behind its ears. I'm also noticing things about

the way they look, and maybe you are too. What do you see about the mother and baby that is the same? What do you see that is different?

EXPLORATION VIDEO 2

Okay, I'm not sure what you noticed, but maybe you saw how they both had long, thin legs; big, black noses; and dark, round eyes. And maybe you noticed how their ears, and their tails, looked almost the same. But I wonder if you spotted anything different between the mom and fawn. One thing you might have noticed was how the fawn had white spots on its back, while the mother did not. So, as you just discovered, the baby and the mother don't look exactly the same, but almost. Seeing the similarities between this mom and baby deer got me thinking: what other baby animals that look like their parents live in my neighborhood? I might see foxes, like this mother with its baby. Maybe you're already noticing some things about the mother and the baby that are the same, like the pointed ears and their reddish fur. Or maybe you're noticing some things that are different, like their sizes. The mother is big, and the baby is little. Raccoons are another kind of animal that lives around here. As you've probably noticed, baby raccoons almost look like little copies of their parents. They all have that same black fur around their eyes and the same fluffy, striped tail. It's fun looking for things that baby animals have in common with their parents, but there are important reasons for doing this, too. For example, wildlife rescuers will sometimes find injured or lost wild animal babies. And by looking closely at the baby, they can figure out what kind of animal it is. At the wildlife rescue center in Indiana, where I live, rescuers take care of baby raccoons, deer, and foxes. But at the wildlife rescue center where you live, there might be different kinds of animals. For example, California has a number of seal rescues. And at this place in Arizona, they rescue baby bobcats. And there are rescues all around the world, too. Like this one in Costa Rica that helps sloths. These pictures show three

wild animal babies; they were all brought into different rescue centers around the world. The rescues want to try and match them with their parents. Because you've been noticing things that are similar between babies and their parents, I wonder how you would match them up. It might seem easy to do, but think about which parts of each animal—like fur, eyes, or feet—you're noticing that helps you match them.

EXPLORATION VIDEO 3

Okay, I'm guessing you probably didn't match this baby with this parent or with this one. I'll bet you could tell which baby went with each parent just by looking at them. Now let's look at one of the babies and its parent a little more closely. These cute sloths. Maybe you're noticing some things about this mother and baby that are the same. Like this special sloth smile, or that round, black nose. Maybe it's that long, sandy-colored hair, or those three very long claws on each foot. Whatever you noticed about the way the sloths look—the smile, the hair, the claws—those things are called traits. “Traits” is a word that scientists use to describe things about how an animal looks. So every time you've noticed something about how an animal looks, you've been identifying traits. The cool thing is it's something you already know how to do! Observing traits helps wildlife rescuers match babies with their parents. Like this rescuer in Costa Rica, who, as you can see, is handing a lost baby sloth back to its parent in the tree. And even though we don't have sloths in Indiana, seeing this really made me curious about what kinds of animal babies might be at my local wildlife rescue. I learned that sometimes they find babies like this one. Look at that. Pink skin, big eyes that are still closed, long tail. Hmm. Looking at the traits, at first, I couldn't figure out what kind of animal this was. A mouse, maybe? A squirrel? Or a tiny baby pig? Hmm. I really didn't know. But check this out. A week or two later, it looks like this. So different. It's starting to grow fur. And then, a few weeks after that, you can probably tell what

kind of animal this is now: a squirrel. It's so cool to see how the squirrel's traits change so quickly, going from this…to this, in just a few weeks. Now it looks like a miniature version of the grown-up squirrels I see in my backyard. This made me wonder: what other animals are born looking so different from their parents? And the answer to my question was sitting and singing and flying right in my own backyard: birds! Baby birds look very different from their parents. It's almost funny how different they look, especially baby bald eagles. I see a lot of bald eagles where I live. I think they're so fun to watch. As you can see, bald eagle babies look very different from their parents. Check out those wispy gray feathers. You might be wondering, when do bald eagles start to look more like, well, bald eagles? Remember how the squirrel started to look like its grown-up self pretty quickly, in just a few weeks? Well, eagles are different. It actually takes them years to look like grown-ups. And during those years, some of the baby's traits change a lot. And with all those changes, I wonder: are there any traits that stay the same? Check out this baby eagle and adult eagle. Which traits stay the same? Which traits change?

EXPLORATION VIDEO 4

One thing you probably noticed about the baby and the adult eagle is how the feathers changed color. Maybe you were surprised by how different the eagle looked at each age. From the tiny baby with light-colored feathers and a black beak, to the large adult eagle with its white head and bright yellow beak. The changes were pretty big. You might have noticed something about the eagle that stayed the same: the shape of its beak. The color changed, but the shape did not. And here's something cool—check out those feet. Baby eagles and adult eagles both have similar large yellow feet. Eagle feet are very noticeable, with four long toes and a bright yellow color. It's funny to see that even as tiny babies, eagles still have those big yellow feet. Knowing how to recognize the trait of yellow feet helps rescuers identify this bird as an eagle, even when

it's gray and fuzzy and looks very different from its grown-up self. Those feet are an important clue. And it's not just eagles. This happens with lots of birds, like these baby parrots. With most kinds of birds, traits can change a lot between when it's a baby and when it's an adult. So if some of the traits of a baby bird change as they grow, how would you match a baby bird with an adult bird?

ACTIVITY INTRODUCTION VIDEO

In today's activity, you're going to help Brenda's Baby Bird Rescue. Brenda works at an animal rescue and she often finds young birds who are lost and need a bit of help. Today, it'll be your job to help Brenda. The first thing that Brenda needs to do when she finds a lost baby bird is figure out what kind of bird she's found. So today, Brenda will show you a picture of a lost baby bird. Then she'll show you three adult birds that live in the same place as the baby. Your challenge is to figure out which adult might be the parent of the baby bird. But Brenda needs to know why you're matching the baby with an adult. Just like you've been doing, you'll need to look closely at each bird's traits and decide which traits of the young bird are the best clues. And because some traits change as baby birds grow up, you want to find as many trait clues as you can. Brenda has three lost baby bird challenges for you today. For each challenge, you'll have to look closely at the bird's traits, talk with a partner, and share your ideas. Each challenge that Brenda brings you will get a little bit harder, so you'll have to look very carefully to find the traits that will give you clues. We'll show you how to get started, step by step.

ACTIVITY STEP 1

Find a partner. You'll work together and share your ideas. If you're working alone, that's okay, too. When you're done with this step, click the arrow on the right.

ACTIVITY STEP 2

First, let's do a practice round together. Brenda shows you this picture of a lost baby bird. Then she shows you three adult birds that live in the same place. Discuss.

ACTIVITY STEP 3

Here's what we noticed. We noticed that the baby bird has a big, round eye with a dark center, similar to the eye of bird number three. We also noticed the super fuzzy feet of the baby bird. When we looked closely at the adults, we noticed that bird number three also has fuzzy feet. We also noticed that this baby bird has a beak with a sharp hook at the end of it. Bird number one and bird number two have pointy beaks with no sharp hook. Bird number three's beak does have a sharp hook at the end. So, looking at all of these traits together, we think that bird number three is most likely the parent of the lost baby bird. Now that you've had a chance to practice, click the arrow on the right when you're ready to start helping Brenda.

ACTIVITY STEP 4

Now that you've had the chance to practice, it's time to get your supplies.

ACTIVITY STEP 5

Let's start your first challenge from Brenda. She recently found a lost baby bird in the forest. Go ahead and open the envelope labeled A with your partner to see the lost baby bird that Brenda rescued.

ACTIVITY STEP 6

Brenda also noticed three adult birds that live in the forest. Talk with your partner about which of these adult birds—one, two or three—you think may be the parent of the baby bird that was found. Remember, you'll have to look closely at all their traits for clues.

ACTIVITY STEP 7a

Okay, now that you've had the chance to discuss with your partner, you'll circle all the traits of the baby bird that helped you decide which adult bird is most likely its parent. For example, maybe you notice that the shape of the beak for both the baby bird and bird number one look the same. This trait gave you a clue, so you'll circle that trait. Okay, go ahead and circle any traits that gave you clues.

ACTIVITY STEP 7b

Here's what we noticed. The first thing we noticed about the baby bird is that short, curved beak. When we looked at the adult birds, only bird number one had that curved beak. We also noticed the feet of the baby bird looked big compared to the size of its body, and bird number one also has pretty large feet. We also noticed the baby bird's eye was light on the outside, but with a dark circle in the middle. We noticed that bird number one was the only adult that also had eyes like that. You may have noticed other traits, too. All these clues gave us evidence that bird number one is most likely the parent of the baby bird. Go to the next slide for your next challenge.

ACTIVITY STEP 8

Okay, it's time for your next challenge. This time, the challenge is a little bit trickier. Brenda recently rescued a young bird near the lake that needed help. With your partner, open the envelope labeled B to see what kind of bird she found.

ACTIVITY STEP 9

Brenda looked around to see if she could find any adult birds near the lake. Here are the three adult birds that she found. Talk with your partner about which of these birds you think may be the parent of the baby bird that Brenda found. Remember, this challenge is a little harder, so you may have to look really closely for those traits that will give you clues.

ACTIVITY STEP 10a

Now that you've had the chance to discuss with your partner, go ahead and circle the traits of the baby bird that helped you decide which adult bird is most likely its parent.

ACTIVITY STEP 10b

Here's what we noticed. We first noticed the baby bird's feet. Bird number three has webbed feet, but the baby bird does not. So we thought the parent was probably bird number one or bird number two. But bird number one has really long legs. The legs of the baby bird are shorter and look similar to the legs of bird number two. We also noticed that the baby bird's beak is most similar to the beak of bird number two. So, looking at all these traits together, we thought that bird number two is most likely the parent bird. Go to the next step for your final challenge.

ACTIVITY STEP 11

Okay, it's time for your final challenge, and this one is the hardest challenge yet. Brenda recently found a young bird in the middle of town that was lost and needed help. Open your envelope labeled C to see what kind of bird she found.

ACTIVITY STEP 12

Here are three adult birds Brenda noticed that also live in the town where she found the lost baby bird. Talk with your partner about which of these birds you think may be the parent of the baby bird that Brenda found. This is Brenda's final challenge for you, so you'll have to look very closely to find those trait clues.

ACTIVITY STEP 13a

Now that you've had the chance to discuss with your partner, go ahead and circle the traits of the baby bird that helped you decide which adult bird is most likely its parent.

ACTIVITY STEP 13b

Here's what we noticed. When we first looked, all the adult birds seemed pretty similar, so this challenge was tricky. We thought the skinny feet of the baby bird looked similar to either bird number one or bird number three, but the best clue we could find was the beak. When we looked closely at the baby bird's beak, we noticed it didn't have the curved shape like bird number two. When we looked really closely, we noticed that the shape of the baby bird's beak was thin and long and looked more like the beak of bird number three. So, we think adult bird number three is most likely the parent.

ACTIVITY STEP 14

Congratulations, you've now helped Brenda identify all the lost baby birds that she rescued! You're on your way to becoming an expert at identifying baby birds and their traits. Brenda has one final question for you. Discuss.

WRAP-UP VIDEO

In today's activity, you saw how baby birds can look pretty different from their parents. But when you took a closer look, you discovered something surprising. All of the baby birds had at least one or two traits that were the same as their parents. Most birds, like the ones you studied today, take a bit of time before they look like their parents. But for many other kinds of animals, like the baby deer we saw earlier, they're born looking very similar to their parents. Learning how to recognize these traits is fun, but there's also a really important reason to do this—to help animals. Think about this: Before a wildlife rescuer can do anything, before giving food or medicine, before figuring out where a parent might be, they first have to figure out what kind of animal it is. So, identifying traits definitely helps wildlife rescuers do their job. As we've seen, wildlife rescuers find all kinds of animals. But one of the most common types of animals found by rescuers is actually the one you studied today: baby birds. Lots of baby birds are seen on the ground in the spring because this is how they learn to fly. And though they might look a little funny just sitting there flapping their wings, this is actually a normal part of how they grow up. Most of these babies are just fine, but some might need help. A big part of how a rescuer figures this out is by doing what you did today—looking at the bird's traits. No matter what kind of bird a rescuer finds, there are special traits that have to do with a bird's age. Observing these traits tells the rescuer what to do next. Check this out. You probably notice that this bird is missing its

feathers and that its eyes are closed. The rescuer noticed these things, too. These traits gave the rescuer clues that this bird is too young to be out of its nest, so the rescuer put the baby back into the nest with its parents. But now check this out. You probably noticed that this bird does have feathers and its eyes are open. These traits gave the rescuers clues about the baby bird's age. This bird is old enough to be out of its nest. Oh, and look at that, this bird's dad is bringing it something to eat. So, if you spot a baby animal that may be lost, you should always ask an expert at your local wildlife rescue center before doing anything. One thing you can do right now, though, is practice your observation skills. No matter where you live, next time you go outside, look for animals. You can identify traits right in your own neighborhood. You might be surprised to see how many baby animals and their parents are living where you live. You just have to look. Especially in the spring, you can see wild baby animals and their parents in all kinds of places, like on a hike, at a park, even at a zoo. You can also see this with the animals that live in our homes. I'm talking about pets—cats with kittens, dogs with puppies, even guinea pigs with their babies. Look closely at all their traits. Which ones are the same, and which ones look just a little bit different? It's fun, and you'll be practicing your skills, just like a wildlife rescuer. Have fun, and stay curious.