Lesson: “Why do birds lay eggs in the spring?”

VIDEO TRANSCRIPT

EXPLORATION VIDEO 1

Hi, it's Doug. When I'm outside anywhere there are trees or bushes, I like to look up into the branches. Sometimes, if I'm lucky, I might spot one of these. It's a bird nest. A bird, called a yellow warbler, made this nest with grass and other plants. Where I live, there are also tiny birds called hummingbirds. A hummingbird made this tiny nest using spiderwebs and bits of fluff. It's a little cup that's barely big enough to hold a penny. The very best time to look for bird nests is in the springtime. Spring is the time of year when snow melts and flowers start to bloom. Plants start growing leaves again, but if you pay close attention, you might also notice this: birds picking up little twigs off the ground and carrying them in their beaks. You might know they're gathering material to build nests where they can lay their eggs. So many birds build their nests and lay their eggs in springtime and not other seasons. Why do you think that is? Why do birds lay their eggs in the spring?

EXPLORATION VIDEO 2

Well, you could probably guess why birds don't lay their eggs in winter. In places that have snowy winters, it's just too cold outside. You might know that birds need to keep their eggs warm, or else the eggs won't hatch. But in wintertime, there's also not a lot of food available to

birds. Plants have dropped their leaves. There aren't bugs out. Unless you're a penguin, the cold temperatures of winter make it too hard for most birds to raise their babies. But remember, there are four seasons: spring, summer, fall, and winter. Could birds lay their eggs in summer or fall? It seems like those seasons wouldn't be too bad. After all, summer is warm, and fall has lots of leaves and twigs available, which birds could use for building nests. And yet, most birds still lay their eggs in spring. Why is that? To figure out the answer, you need to think about how baby birds grow into adult birds. Some birds, when they're first born, look something like this. They're totally helpless. These are American robin chicks. That's another word for bird babies: chicks. These chicks haven't grown any feathers. Their eyes are still covered with skin. They can't even see. It'll be weeks until these birds grow big enough to even start looking like what you might consider a bird. Robins that have just hatched have a lot of growing to do. What do mother robins and father robins do to help their babies grow up?

EXPLORATION VIDEO 3

Maybe all those open mouths gave you a clue. With open mouths and lots of chirping, baby birds let their parents know they're hungry. Scientists call this begging behavior. We say they're begging for food. They're hungry. Chicks will just eat and eat. They're growing so much every day, and their parents work really hard to feed them, going out over and over, finding food, and bringing it back to the nest. After a few weeks, most chicks are finally big enough to leave the nest. But they're not leaving their parents for good, at least not yet. Since their feathers have grown in, it's time for them to practice flying. They hop around and they practice doing short flights. At this point, we call them fledglings. You can think of this as being like the bird equivalent of a teenager. Even though fledglings are about the same size as their parents, they still can't take care of themselves completely. They'll follow their parents around and beg for

food. In fact, this is something you might notice yourself if you pay attention in late spring. If you ever see something like a bird walking around and making loud noises at another bird, it's probably a fledgling begging its parent for food. All of this—hatching from eggs, growing bigger, getting feathers, learning to fly—all of this takes time. For most bird parents, if they were to wait to lay their eggs until summer or fall, there just wouldn't be enough time before winter for their chicks to grow up. So most birds lay their eggs in spring because spring is a special season. Not only does springtime have warmer weather and more food than winter, but babies hatched in the spring have more time to grow before winter than they would if they were born in summer or fall. Now that you know why birds lay their eggs in the spring, think about this: Why do birds make nests? How does having a nest help the bird?

ACTIVITY INTRODUCTION VIDEO

In today's activity, you're going to make a bird nest. A nest is a safe place for a bird to lay its eggs, a place where the eggs won't roll away or break. It's a place where birds can sit on their eggs to keep the eggs warm so that they'll hatch. When the eggs have hatched, the nest is home for the bird's chicks, the baby birds. The chicks stay in the nest until they're old enough to fly. Now, imagine that you're a bird that needs to build a nest. You have to figure out how to do it. When you're done, you'll have a cozy nest that will keep eggs and baby birds safe. We'll show you how to get started, step by step.

ACTIVITY STEP 1

When birds want to build a nest, they gather all the stuff they need. You need to gather some things, too. Get your supplies. When you're done with this step, click the arrow on the right.

ACTIVITY STEP 2

Find a partner. You and your partner will help each other build your nest. If you're working alone, that's okay, too.

ACTIVITY STEP 3

Some birds use twigs to make a nest that's shaped like a bowl. You don't have twigs, but you do have a paper bag. Discuss.

ACTIVITY STEP 4

We came up with an easy way to turn a bag into a bowl. It's a lot easier than building a bowl with sticks. Put your bag on your table or desk, like this. Stand up and put your hand in the bag. Have your partner use both hands to squash down the sides of the bag. If you don't have a partner, you can put one hand in the bag and use your other hand to squash the sides down.

ACTIVITY STEP 5

Your bag started out flat. Suppose a bird laid an egg on that flat bag. Watch what would happen. Now, watch what would happen if a bird laid an egg in the nest you made from a bag. Discuss.

ACTIVITY STEP 6

Your nest is off to a great start, but you aren't done yet. Watch this little bird to figure out what might make your nest better. Discuss.

ACTIVITY STEP 7

Eggs break easily. To keep their egg safe, birds pad their nests with soft stuff, like dog fur and moss and feathers. You probably don't have a big dog to supply fur for your nest, but you have some things you could use to make your nest soft inside. Feel each one. Decide which would make the paper bag a softer place for eggs and chicks.

ACTIVITY STEP 8

Now you have to figure out how to use the soft things you have. Experiment with what you have. If you only have a little bit of something, maybe you can tear it apart so you can spread it around. Maybe you can crumble things up so they fit better. Make the inside of your nest soft and cozy.

ACTIVITY STEP 9

Now it's time to make a bird for your nest. You can make a bird from a piece of paper. Make your hand into a fist, like this. Then, put your hands on the paper. With the bottom of your hand at the edge of the paper, trace around your hand with a pencil. Your fist will be the bird's body. Your thumb is its head. Draw the bird's eye.

ACTIVITY STEP 10

Color your bird. You can color it so it looks like a real bird or like a bird you made up. Add a tail, like this. I'll set a timer for two minutes in case that's helpful.

ACTIVITY STEP 11

Draw a box around your bird, like this. Now, carefully cut along the lines of the box. Your bird is now ready to sit on its nest.

ACTIVITY STEP 12

Put your bird in your nest. Your nest may not look like ours or like anyone else's nest. That's okay. There are many different kinds of bird nests.

ACTIVITY STEP 13

Take a look at these three bird nests. Discuss.

ACTIVITY STEP 14

Every nest keeps eggs from rolling away, but each nest is made of different stuff. Birds live in different places, so they have to build their nest using what they can find around them. Flamingos use mud, robins use twigs, and hummingbirds use spider webs and bits of plants.

ACTIVITY STEP 15

Just for fun, imagine that you're a bird. Think about what you could use to build your nest. Remember, just like a real bird, you need to use things that you can find around you to build your nest. Have fun, and stay curious.