mystery science

Grades K-5
Mini-Lesson + Activity: “What’s that red thing on a turkey?”

VIDEO TRANSCRIPT

MINI-LESSON VIDEO 1

Hi, it's Doug! So, my friend Amy is letting me borrow this. It's a feather that she got from a turkey. She's an artist, and she likes to paint turkeys. I asked her: why do you like to paint turkeys? And she said she loves how colorful they are. Look at her artwork. Isn't that incredible? They really are colorful. Someone named Nikita has a question about turkeys. Let's give him a call now.

[Video Call]

- Hi, Doug!

- Hi, Nikita!

- I have a question for you. What's that red thing on a turkey?

- That's a great question.

Here's an actual turkey seen in the wild. You can see all that weird-looking red stuff on its head. Let's get a closer look. There, what is this stuff? Well, it's made of loose skin. This part right here has a name—it's called a wattle. And then you probably noticed this other funny-looking part hanging over the turkey's beak. It has a name, too—it's called a snood. I promise I'm not making these names up. A wattle and a snood! But now check this out. Here's an entire group of turkeys. What do you notice?

MINI-LESSON VIDEO 2

Well, you might have noticed that not all of the turkeys have that red, brightly colored skin on their heads. Only some of them have it. Here's the difference. This turkey is a girl turkey—a female. This one is a boy turkey—a male. It's only the male turkeys that have that red wattle and the brightly colored skin on their head. In fact, the males also have shiny feathers on their body and tail feathers that have stripes. The females, they don't have that. They look more plain. Why are the male turkeys more brightly colored than the females? Well, here's one clue. This is a male turkey. Watch what the male turkey does. There, you see that? Here's another male turkey doing this. The male turkeys puff themselves up to look big, and they show off all those colorful features they have, like the red wattle on their head and all those striped feathers on their tail. Scientists have figured out that the reason the male turkeys do this is because they're trying to impress the female. It's a behavior that's called a display behavior. It might seem weird, but there are actually lots of birds besides just turkeys where the male looks more fancy and tries to show off, like chickens, for example. You can probably guess which one of these is the male. It's this one—a rooster. You might have noticed before that a rooster—a male chicken—has this thing on top of its head. Look, it also has a wattle on its neck just like a turkey does. Roosters even puff themselves up and do a display. Here's another one you might know—it's a peacock. This is the male, and here's the female. Do you notice how she's more plain-looking? The male peacock doesn't have a wattle, but it does do a display, and it has some of the fanciest tail feathers of any bird. Check out its display, whoa! Or look at these. These are mallard ducks. It's only the males that have the fancy green heads. The females are the more plain-looking ones. Now it might not seem fair that the males look fancy while the females look plain, but with many of these examples, it's usually the female that sits on the nest with the eggs. Remember, the

males are more colorful. If they stayed in the nest with the eggs, it'd be easier for a predator to find the nest. But that said, it's not always the males that look fancy. This kind of bird is called a phalarope, and with phalaropes, the female is more colorful than the male. And guess what? The male phalarope stays on the nest, and it's the female phalarope that tries to impress the male by doing a fancy display in flight. So in summary, the red thing on a turkey's neck is called a wattle. Only the male turkeys have them. Males display for females, and wattles are one of the fancy features that they use to show off. Lots of birds have either a male or a female that looks colorful and fancy, while the other one looks plain. That's all for this week's question. Thanks, Nikita, for asking it. Now, after this video's done playing, my friends and I here at Mystery Science have created a special activity where you'll build and decorate your very own dancing Gobble Wobbler. I hope you'll try it. Have fun and stay curious!

ACTIVITY: GRADES K-2

ACTIVITY INTRODUCTION VIDEO

In today's activity, you're going to create something that we're calling the Gobble Wobbler. It's a model of a turkey and it does a wobbly dance, similar to the real dance that turkeys do. First, you'll build and decorate your very own dancing Gobble Wobbler. Then, you'll think about what your Gobble Wobbler model needs in order to be the fanciest turkey in town. I'll show you how to get started, step by step.

ACTIVITY STEP 1

Find a partner. Decide who will be Gobble and who will be Wobble. You'll be helping each other build and test your Gobble Wobblers. 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

Get your supplies. You'll get more supplies later.

ACTIVITY STEP 3

Each of the printouts has two Gobble Wobblers. So you'll need to separate those first. Gobble: fold the paper along the dark center line like this. Use your fingernail to make a strong crease. Then, Wobble: cut along this dotted line. Once you've done that, you'll keep one Gobble Wobbler for yourself and give the other one to your partner.

ACTIVITY STEP 4a

Before you start decorating your Gobble Wobbler, take a look at these pictures of turkey feathers. What do you notice? Discuss.

ACTIVITY STEP 4b

Here are a few different things we noticed. We noticed that turkey feathers have lots of shiny feathers and striped patterns. Lots of dark colors next to light colors. We also noticed that they can waive these fancy feathers around when they dance. Notice there are different kinds of

turkeys too. Some are even more colorful. This one is called an ocellated turkey and it lives in Mexico and parts of Central America.

ACTIVITY STEP 5

Now it's time for you to add colors to your turkey model. You can use these pictures of real turkey feathers as inspiration if you'd like. Start with coloring one side and if you have time, you can color the other side. I'll set a timer, in case that's helpful. Okay, if you're ready, go to the next step.

ACTIVITY STEP 6

Now you'll cut out your Gobble Wobbler so that it looks a bit more like the shape of a real turkey. Cut carefully along each of the dotted lines, all the way to the edge of the paper, like this.

ACTIVITY STEP 7

To hold your Gobble Wobbler together, you'll use a paper clip. First, find the paper clip mark near the turkey's tail feathers. Then, add one paper clip over the mark like this.

ACTIVITY STEP 8

To help your Gobble Wobbler dance, take a piece of straw and place it inside the paper, right here. To hold the straw in place, pinch the paper closed, and then add a paper clip to this paper clip mark. Make sure that the paper clip is right next to the straw and that you can see the paper clip on both sides of the paper.

ACTIVITY STEP 9

The next few steps are a little tricky, so we suggest you work with your partner. Gobble: hold your partner's turkey on the table, with the turkey's head facing away from you, like this. Wobble: find one end of your yarn and roll it between your fingers so that the end is a little pointy. Then, gently push it through the straw. Pull it through until your turkey's at the center of the yarn. Make sure to switch roles and repeat these steps, so that both you and your partner have a piece of yarn going through the straw.

ACTIVITY STEP 10

To make sure that the yarn doesn't fall back through the straw, you'll attach stickers to both ends of the yarn. Wobble: hold up a sticker. Gobble: lay one end of the yarn in the middle, and then wrap it around like this. Wobble: then fold the sticker in half. Repeat this for the other end of the yarn. Make sure to switch roles and repeat these steps. Your Gobble Wobblers are almost ready to dance.

ACTIVITY STEP 11

Now it's time to test your Gobble Wobblers. Gobble: you'll test yours first. Gobble: hold the end of your yarn that is closest to the turkey's feet, like this. Then take the other end of the yarn and pull it up. We suggest you hold the yarn and not the tape. Wobble: gently pull the turkey to the top of the yarn and then let it go. The turkey should do a little wobbly dance all the way down. Switch roles and test your partner's Gobble Wobbler too. If your turkey doesn't dance that well yet, that's okay. Just go to the next step.

ACTIVITY STEP 12

If your turkey doesn't dance, that's okay. It might be because you're holding the yarn too loosely. Make sure to hold it tight, like this. If it still doesn't dance, make sure your paper clips are in the right places. Also, you can check that the edges of the turkey are lined up.

ACTIVITY STEP 13

Okay, go ahead and get the rest of your supplies.

ACTIVITY STEP 14

Now you'll have the chance to make your Gobble Wobbler the fanciest turkey in town. You'll do that by adding more feathers to its tail. We'll pretend these Post-its are colorful feathers. Take a Post-it note and find the part that's sticky. Then, press that part onto your turkey tail like this. You still want your Gobble Wobbler to dance, so experiment to see how many feathers you can add while keeping your turkey dancing.

ACTIVITY STEP 15

If you have time, keep experimenting with your Gobble Wobbler. You can add feathers around different parts of the turkey, or you can add extra-long feathers. When you're done, show your Gobble Wobbler to someone at home, and share what you learned about turkey dances. Have fun and stay curious!

ACTIVITY: GRADES 3-5

ACTIVITY INTRODUCTION VIDEO

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ACTIVITY STEP 1

Find a partner. Decide who will be Gobble and who will be Wobble. You'll be helping each other build and test your Gobble Wobblers. 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

Get your supplies. You'll get more supplies later.

ACTIVITY STEP 3

Each of the printouts has two Gobble Wobblers so you'll need to separate those first. Gobble: fold the paper along the dark center line, like this. Use your fingernail to make a strong crease. Then Wobble: cut along this dotted line. Once you've done that, you'll keep one Gobble Wobbler for yourself and give the other one to your partner.

ACTIVITY STEP 4a

Before you start decorating your Gobble Wobbler, take a look at these pictures of turkey feathers. What do you notice? Discuss.

ACTIVITY STEP 4b

Here are a few different things we noticed. We noticed that turkey feathers have lots of shiny feathers and striped patterns, lots of dark colors next to light colors. We also noticed that they can wave these fancy feathers around when they dance. Notice there are different kinds of turkeys, too. Some are even more colorful. This one is called an oscillated turkey, and it lives in Mexico and parts of Central America.

ACTIVITY STEP 5

Now it's time for you to add colors to your turkey model. You can use these pictures of real turkey feathers as inspiration if you'd like. Start with coloring one side, and if you have time, you can color the other side. I'll set a timer, in case that's helpful. Okay, if you're ready, go to the next step.

ACTIVITY STEP 6

Now you'll cut out your Gobble Wobbler so that it looks a bit more like the shape of a real turkey. Cut carefully along each of the dotted lines. All the way to the edge of the paper, like this.

ACTIVITY STEP 7

To hold your Gobble Wobbler together, you'll use a paper clip. First, find the paper clip mark near the turkey's tail feathers. Then, add one paper clip over the mark, like this.

ACTIVITY STEP 8

To help your Gobble Wobbler dance, take a piece of straw and place it inside the paper right here. To hold the straw in place, pinch the paper closed and then add a paper clip to this paper clip mark. Make sure that the paper clip is right next to the straw, and that you can see the paper clip on both sides of the paper.

ACTIVITY STEP 9

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ACTIVITY STEP 10

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yarn. Make sure to switch roles and repeat these steps. Your Gobble Wobblers are almost ready to dance.

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Now it's time to test your Gobble Wobblers. Gobble: you'll test yours first. Gobble: hold the end of your yarn that is closest to the turkey's feet, like this. Then take the other end of the yarn and pull it up. We suggest you hold the yarn and not the tape. Wobble: gently pull the turkey to the top of the yarn, and then, let it go! The turkey should do a little wobbly dance all the way down. Switch roles and test your partner's Gobble Wobbler too. If your turkey doesn't dance that well yet, that's okay, just go to the next step.

ACTIVITY STEP 12

If your turkey doesn't dance, that's okay. It might be because you're holding the yarn too loosely. Make sure to hold it tight, like this. If it still doesn't dance, make sure your paper clips are in the right places. Also, you can check that the edges of the turkey are lined up.

ACTIVITY STEP 13

In a moment, you'll have the chance to make your Gobble Wobbler the fanciest turkey in town. To do that, get the rest of your supplies.

ACTIVITY STEP 14

Each of the printouts has two sets of fancy feathers, so you'll need to separate them. Cut along the center dotted line so that both you and your partner have a half sheet.

ACTIVITY STEP 15

You'll be adding these clusters of feathers to your Gobble Wobbler, so go ahead and color them now. I'll set a timer, in case that's helpful. Okay, if you're ready, go to the next step.

ACTIVITY STEP 16

Now you'll separate each cluster of feathers. To do that, first cut along the circle like this. Then, cut along each of the other dotted lines, like this.

ACTIVITY STEP 17

Now that you have your fancy feathers ready, you can use paper clips to add as many as you'd like to your Gobble Wobbler. Your challenge is to add as many feathers as you can, but remember, your turkey still has to dance. If your turkey stops wobbling or drops down the yarn too quickly, try experimenting to figure out what the best number of feathers is.

ACTIVITY STEP 18a

Discuss.

ACTIVITY STEP 18b

Here's something we noticed. When we added a few extra feathers, our turkey was still able to dance. But when we added lots and lots of feathers, eventually it stopped dancing. Now, of course, real-life turkeys don't dance along a piece of yarn. But a similar thing would happen if a real turkey had too many feathers. You've noticed that turkeys have colorful feathers to show off

during their dances, but at a certain point, having too many might make them lose their balance when they dance, or maybe all their feathers would get in the way.

ACTIVITY STEP 19

If you have time, continue experimenting with your Gobble Wobbler. You can add feathers around different parts of the turkey, to see how that changes its dance. Show your Gobble Wobbler to someone at home, and share what you learned about turkey dances. Have fun and stay curious!