

Lesson: "Have you ever watched a storm?"

VIDEO TRANSCRIPT

EXPLORATION VIDEO 1

Hi, it's Doug. I want to share a story with you about the weather. You see, when I was a kid, I grew up in a place that had summers like this: warm and sunny. When I'd play in the neighborhood, I'd look up into the sky and see just a few clouds here and there. But every once in a while, when I was out there playing, the sun would go away and lots of clouds would start to move above me. And then, I'd hear the sound of thunder and see dark clouds off in the distance. This is when my mom would say, "Okay, Doug, time to come inside. There's a storm coming." And I'd head inside to go play instead. But one day, my grandpa came to visit. I remember a storm was coming, so I started to head inside, yet my grandpa was out on the front porch. He said, "Doug, stay here. Come sit out here on the porch with me." "But Grandpa," I said, "a storm is coming." "That's why I'm out here," he said. "Come on, stand beside me. We're going to watch the storm together." I was a little worried about this. "Is that safe?" I asked. He said, "The storm is still far enough away from us. We can sit here safely on the porch, at least for a little while to watch it. But it's good your mother had you come in from the yard." Then, Grandpa leaned over and said softly, "This is exciting. It's your first storm you're going to watch. I want you to tell me what you notice."

EXPLORATION VIDEO 2

As I sat there on the porch, I could see flashes of lightning off in the distance. I told him, "Look, it's lightning. And I can hear the thunder." "What else do you notice?" Grandpa asked. I didn't notice anything else at first. But as I sat there watching more closely, I did notice something. I could see the tree branches moving and the leaves blowing around. I said, "Grandpa, I notice it's starting to get windy." "I was wondering if you'd notice that," he said. "That always happens before a storm." "Now," he said, "Do you notice anything about how the air feels?" Well, now that he pointed it out, yeah. "It's a little more chilly than it was an hour ago," I said. "I wish I had a jacket now." I'd never paid much attention to the weather before. My grandpa smiled and said, "Doug, you're becoming a weather watcher." "A what?" I asked. "A weather watcher," he said. "You're becoming someone who pays attention to the weather because you're learning how many interesting things there are to see." My grandpa taught me to become a weather watcher. Anyone can be one. You can be one too.

ACTIVITY INTRODUCTION VIDEO

In today's activity you're going to make a Breeze Buddy. Your Breeze Buddy will help you become a weather watcher. That's because your Breeze Buddy will let you see what the wind is doing. The wind is a very important part of the weather. It blows the clouds from one place to another. It brings in storms and it carries storms away. Even when it's not stormy, it's good to know how hard the wind is blowing. The wind can steal your hat.

- "Ah, I just lost my hat—I'll find that later."

Push a sailboat across a lake or lift a kite high in the sky. It's easy to make a Breeze Buddy so you can always tell what the wind is doing. It will look like this when you're done making it, and it

mystery science

Have you ever watched a storm?

will look like this when you hang it in a tree. We'll show you how to make your Breeze Buddy, step by step.

ACTIVITY STEP 1

Get your supplies. When you're done with this step, click the arrow on the right.

ACTIVITY STEP 2

To make this project easy, get everything ready first. Start with your stickers. Peel each sticker off the paper and stick it to the edge of your desk or table, like this. Just stick one end of the sticker to the table so it's easy to pick the sticker up again. Leave the other end hanging off the edge.

ACTIVITY STEP 3

Now get your note card ready. Fold your note card in half, like this. Line up the corners carefully. Run your finger over the fold, to make sure it's really folded. Turn it so you can open it like a book, then unfold it.

ACTIVITY STEP 4

This is a tricky step. You're going to fold your streamers in half. Loop a streamer over your finger. Find the ends and pull them until they are about even. Lay the streamer on the table with the ends together. Do the same thing with the other streamer. When you're done, you'll have two folded streamers, like this.

ACTIVITY STEP 5

Now it's time to add the first streamer to your card. One end of your folded streamer has two tails. The other end has a fold. Find the folded end of one streamer, put that folded end right at the fold in the card. Tape it in place with the sticker, like this.

ACTIVITY STEP 6

Now it's time to add the second streamer to your card. Find the folded end of the streamer. Put that folded end right at the fold in your card. It's okay if it overlaps with your other streamer. Then, tape it in place with a sticker.

ACTIVITY STEP 7

The ends of a pipe cleaner are sharp. You don't want them to poke you. So take a little bit at the end of your pipe cleaner and fold it over, like this. Do the same thing with the other end.

ACTIVITY STEP 8

Lay your pipe cleaner on the card, like this. Then, fold the card with the pipe cleaner inside.

ACTIVITY STEP 9

Pick your card up, like this. Hold the card closed with one hand, and stick one end of a sticker to the card. Then turn the card over and fold the sticker over, like this, sticking it to the other side. Repeat this with the other sticker.

ACTIVITY STEP 10

Now you need to make the pipe cleaner into a loop that you can use to hang up your Breeze Buddy. Bend the ends of the pipe cleaner so they make an X. Then, wrap one arm of the X around the other arm of the X three times, like this.

ACTIVITY STEP 11

Go ahead and write your name on one side of your Breeze Buddy. Then, on the other side, draw some squiggly lines, or a funny face, or an animal—whatever you'd like. I'll set a timer for two minutes in case that's helpful. Okay, if you're ready, go to the next step.

ACTIVITY STEP 12

Okay, now it's time to experiment. Pick up your Breeze Buddy and pretend you're a gentle breeze. Blow at your Breeze Buddy gently. Now pretend you're a big wind, strong enough to shake the branches of a tree. Watch what the streamers do.

ACTIVITY STEP 13

Your Breeze Buddy shows you how hard the wind is blowing. Discuss: What happens when you blow gently at your Breeze Buddy? What happens when you blow harder at your Breeze Buddy?

ACTIVITY STEP 14

When you're done experimenting, you can hang your Breeze Buddy outside in a tree where you can see it through the window. Then you can look and see how windy it is outside. Have fun, and stay curious.