



Transcript for *Grandmother Fish* (Feiwei and Friends, an imprint of Macmillan) Preview Video

Preview (approximately 0:00 – 6:26)

Hi everyone! It's Colleen from the KU Natural History Museum, and I'm so excited to remind you about tomorrow's Story Book Science here on Facebook Live at 10am. The book that we're going to be reading is called *Grandmother Fish*; and this book, it's written by Jonathan Tweet and illustrated by Karen Lewis, and we'll be reading it with permission from Feiwei and Friends. Feiwei and Friends is an imprint of Macmillan. Thank you to Feiwei and Friends for giving us permission to read this book.

I'm really excited to read *Grandmother Fish* with you. One of the reasons why I'm excited is because *Grandmother Fish* helps me understand how all things are related to one another: so how humans are related to all other living things in the world.

And one of the ways that we'll talk about these relationships between humans and all living things is by talking about variation. So variation, rather than just describe this to you, I wanted to give you an example. So looking at my face on the screen, things that you probably notice are that I have two eyes; I have a nose; I have a mouth. I also have hair that's growing from the top of my head. These things are features of me; and you probably have some, if not all, of those features too. You probably have eyes, hair growing from the top of your head. So you have features as well. The thing between you and me though, is that our features probably differ. Even though we may both have eyes, our eye color is probably different. Maybe you don't wear glasses to help you see. Additionally, the hair that grows from the top of your head, it probably is a different color than my hair. Also, you might have more hair or less hair. So those differences between our features, those represent variation. So variation is the differences between features of members of the same species, and variation is super important. Variation makes us unique! Those differences, those are things that should be celebrated!

Now we can talk about variation, not just in humans, but we can also talk about variation in other animals as well. So I have a couple of museum specimens that I want to share with you. So let me first grab the house sparrows. Now last week we talked about house sparrows. We talked about male and female house sparrows and how they are dimorphic. So they have plumage that differs between male and females. But what we're going to do this week is look at the house sparrows, and we're going to look specifically at the males and observe variation between male specimens. So here are the two house sparrows, and these are both males. We know that they're males because of that black patch of feathers below their head. And what I want you to do is, I want you to observe variation. I want you to look at these specimens and make observations about variation between the two in regards to that black patch of feathers. So when I look at these house sparrows, one of the things that I notice, one of those things that I observe, is that the black patch of feathers – the size is different between the two birds. For example, this one, um, that I'm holding in my hand here, the black patch of feathers is a little larger than the black patch of feathers on this male house sparrow. Additionally, the black patch of feathers on this house sparrow, there are more of them than on this house sparrow. So what we did is we looked at those two specimens of house sparrows, and we observed variation between the two in that black patch of feathers below their head.

Now what I'm going to do is show you another specimen. I'm just grabbing them; and the specimens that I'm going to show you are cotton rats. Cotton rats, they're mammals. So they have fur, or hair, whichever word you want to use to describe them. And the fur or hair, when you first look at it, it's going to look brown; but when you make observations, you'll notice that there are speckles of gray, white, and some other color of hair. And I want you to observe the differences, the variation between the speckles of hair between the two cotton rats. So here's the first one; and you'll notice that there are those speckles of hair. And then here is the second specimen; and it also has some hair that's speckled white and gray throughout its fur. But when I make observations about these two specimens, this cotton rat has less speckles of hair of different colors than the other.

So what we did is we looked at variation between members of the same species, both cotton rats and house sparrows, and that's what we'll do tomorrow. We'll look at a couple additional species as well. We'll also use a special tool to discuss evolutionary relationships. That tool is a phylogeny tree, and that is what is on the wall behind me. It looks a little different than the trees you think of that are growing outside, but a phylogeny tree is a tool that we can use to better understand evolutionary relationships and how all living things are related.

So I hope you'll join me tomorrow. Again, I will be here on Facebook Live at 10am, and I will read *Grandmother Fish*. I hope to see you then! Bye.