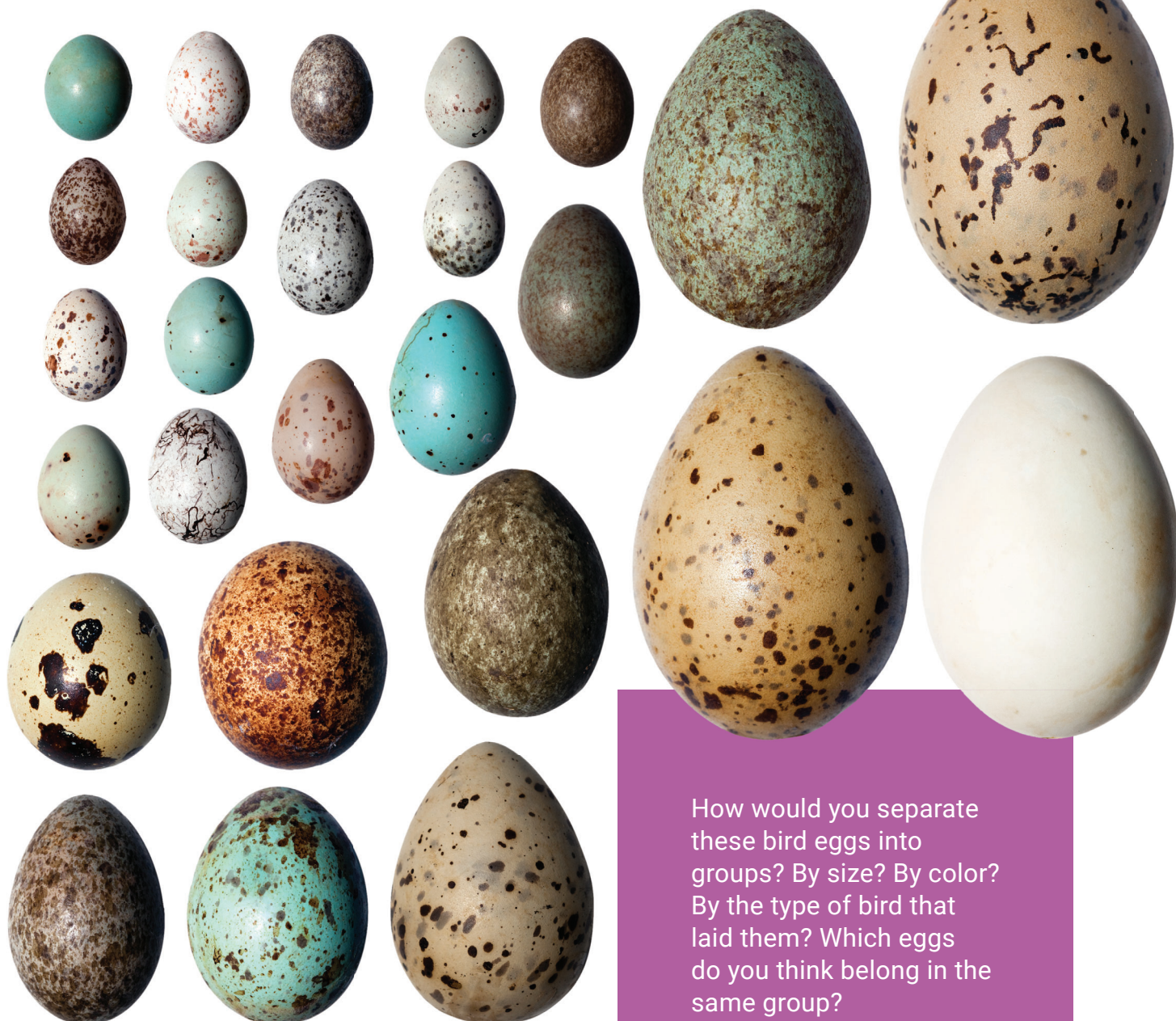


CHAPTER 11: CLASSIFICATION

Classification is the organization of items into groups based on similarities and differences.

Where have you seen items classified into groups?
How is classification useful?



How would you separate these bird eggs into groups? By size? By color? By the type of bird that laid them? Which eggs do you think belong in the same group?

Lunch
Soup or
Pizza?

What are you having for lunch today, Alex? Soup or pizza?

Grilled cheese.



That's a double-crust pizza!

How about you, Lizzie? Soup or pizza?

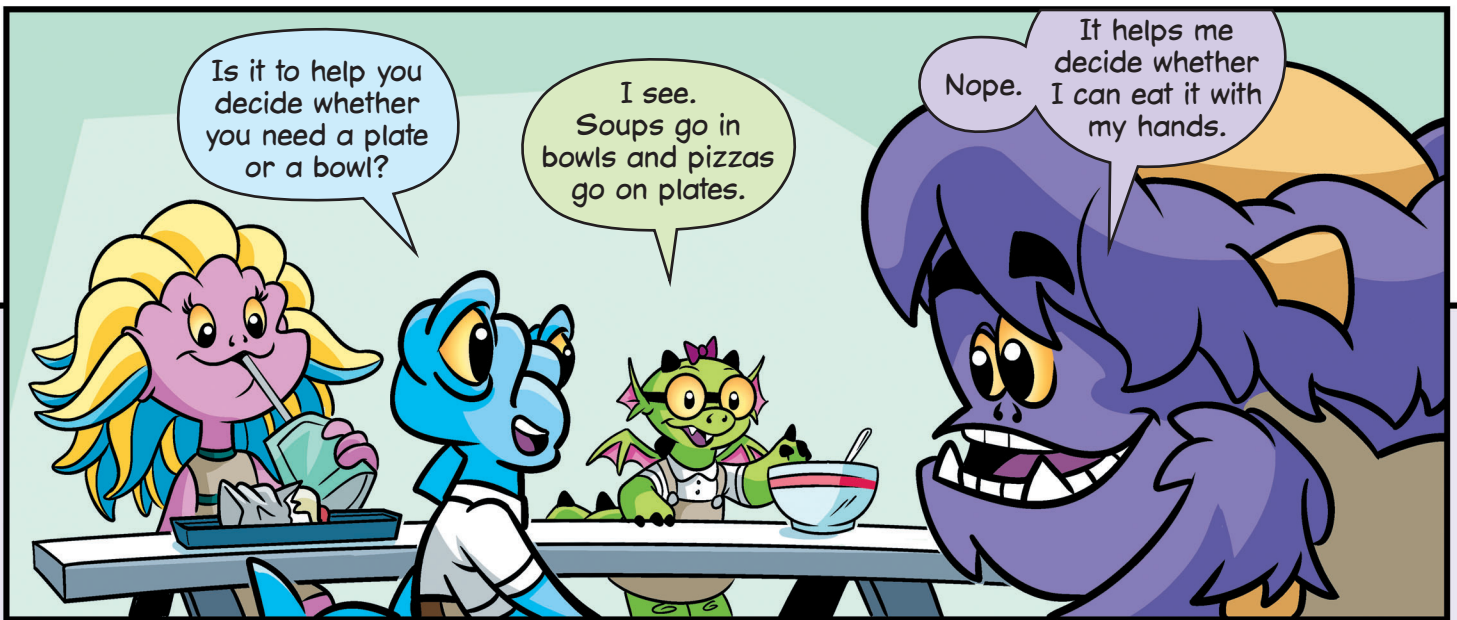
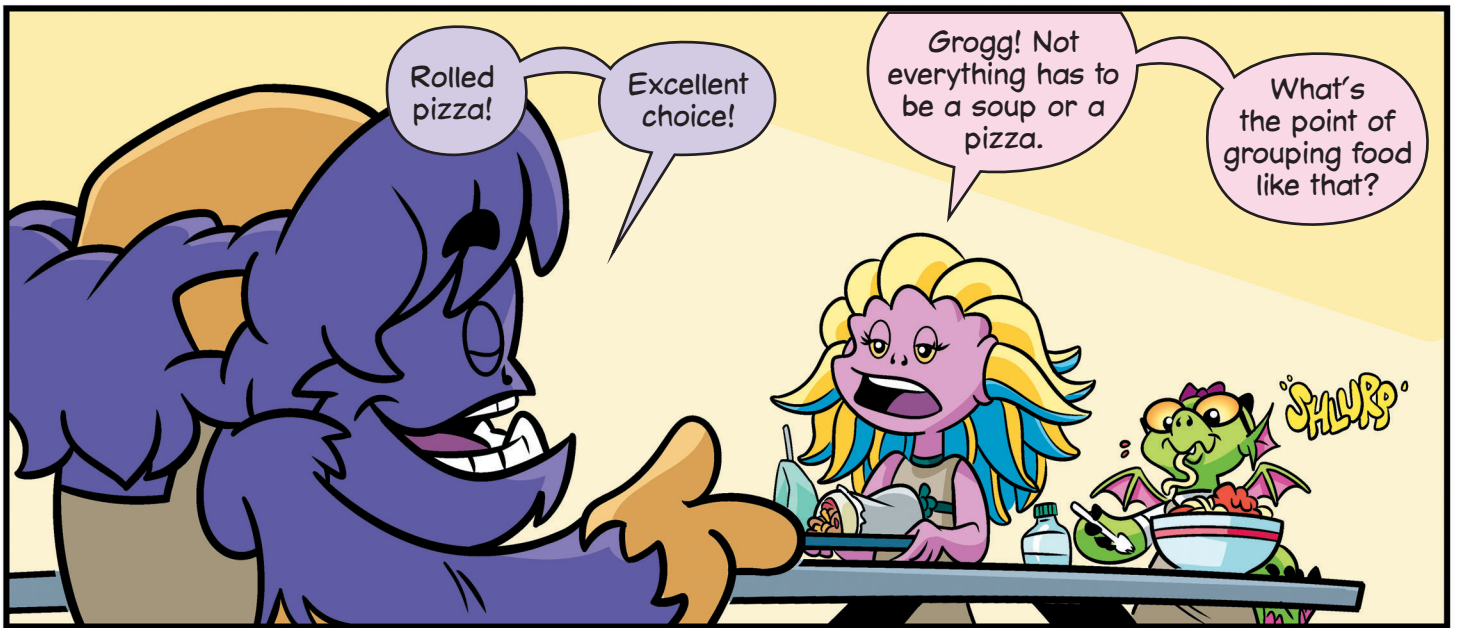
I'm having spaghetti.

Tomato noodle soup. Cool!

I guess you could call it that.

Are you having the soup too, Winnie?

I got a burrito.



WHY CLASSIFY?

When we **classify** items, we group them based on their similarities and differences. Classification keeps things organized. Think about the last time you visited the grocery store. How are foods grouped? By size? By color? Alphabetically? Or some other way?



DISCUSSION:

1 Why don't grocery stores group foods alphabetically?

Foods in a grocery store, medicines in a pharmacy, and books in a library are grouped together in a way that makes it easier to find what you're looking for.

In the grocery store, fruits and vegetables are grouped by their flavor and sweetness. Since the foods pictured here are not very sweet, they are often classified as "vegetables."

Scientists that study plants, however, would group all of these with apples and oranges, calling them all "fruits" since they grew from flowering plants and are filled with seeds.



2 Do you think a chef would call the foods pictured above fruits or vegetables? Explain.

Scientists classify gemstones, animals, stars, clouds, trees, and lots of other things. This helps them find meaningful patterns and connections. Items that are similar in one way are often similar in other ways. We can study the similarities between groups of living things to make predictions.



3 Prey animals are more likely to have:

Eyes that face forward

Eyes that face to the sides

4 Which of the animals below is most likely a predator? (Check one.)



Animals that have side-facing eyes can see more of what is around them, which is useful for spotting a hungry predator. Animals with forward-facing eyes have sharper vision directly in front of them, useful for chasing prey.

Forward-facing eyes also make it easier to estimate how far away objects are.

DISCUSSION:

5 Some tree-dwelling animals that are not predators have forward-facing eyes.

Besides hunting, what are some other ways forward-facing eyes might be useful?

