1. Living things have similarities and differences.

2. Classifying living things helps us understand the diversity of life.

3. Magnifying tools make the invisible world visible.

4. Living things adapt to their environments.
Welcome to life—the most amazing show on Earth! Our planet is crawling, swimming, hopping, and buzzing with living things. They come in every colour, shape, and size you can imagine, from giant trees that tower over us to tiny bacteria that can only be seen with a microscope. There is life on barren mountaintops, in sunbaked deserts, in the deepest oceans, and in the icy waters of the Antarctic Ocean. In fact, there isn’t any place on Earth where life doesn’t exist. Even more amazing, Earth is the only place where life does exist—as far as we know.

Look at the photo on this page. How many different living things can you see? Why does life come in so many different forms? Do you know what makes all forms of life alike in some ways? Do you know what makes them like you?

In this unit, you will discover the answers to these questions and many other questions about living things. You will learn how scientists observe living things and classify them into groups. Like a scientist, you will use a microscope to investigate living things that are too tiny for just your eyes to see. As you do these activities, you will follow the same steps that scientists follow as they explore the incredible diversity of living things. What you discover might surprise you!

**TRY THIS: MAKE A LIVING WORLD WEB**

**Skills Focus:** questioning, predicting

1. Create a web that shows what you already know about the variety of life on Earth. Write the words “Life on Earth” in the centre. Radiating from the centre, write different questions about the diversity of life on Earth. For example, you could include questions such as these: What does it mean to be living? What kinds of living things exist? How do living things adapt to survive? What do I know about living things?

2. Beside each question, write a “best guess” answer. Do not worry about being correct. Use your imagination!