Dolphins are mammals, just like we are. Mammals are alike in certain ways. Both dolphins and humans breathe air and need regular sleep. Their babies are born alive instead of hatching from eggs. Dolphins and humans both have a backbone. However, dolphins do not have a nose like we do. And, instead of four limbs, they have flippers and a tail.

Most animals that breathe air live on land. But because dolphins live in water, they have special adaptations that land mammals do not have. A dolphin breathes through a blowhole on top of its head. When a dolphin swims to the surface, it uses strong muscles to open its blowhole.
Congratulations on your purchase of some of the finest teaching materials in the world.

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Week 1

Why do flowers have different colors and scents?

This week, students learn about plants’ adaptations. Since plants cannot move, they have developed adaptations to enable them to reproduce. Colors and scents are examples of these adaptations. Different animals are attracted to different colors and scents. They create a symbiotic relationship with flowering plants. Plants offer birds and insects food and sometimes shelter, and the animals in turn help pollinate the plants.

Day One

Vocabulary: adaptation, reproduce
Materials: pictures of regional flowers

Distribute page 9 and introduce the vocabulary. Have volunteers read the introduction aloud. Then point out the pictures on the page and have volunteers read the name of each flower. Ask: Have you ever seen any of these flowers? What color were they? What did they smell like? Have students complete the first two activities. For activity C, show students pictures of local flowers and have them pick one to describe.

Day Two

Vocabulary: pollen, pollinates

Distribute page 10 and introduce the vocabulary. Then have volunteers read the introduction aloud. Point out that the words pollen and pollinates have related meanings and that knowing the word pollen can help them remember pollinates. Then direct students to complete activities A and B. For the oral activity, pair students or discuss possible answers as a group. (e.g., Wind and water carry pollen; people pollinate plants that they want to grow; etc.)

Day Three

Distribute page 11 and have volunteers read the introduction aloud. Have students name some of their favorite foods and describe how the foods look or smell. (e.g., spicy, juicy, sweet, gooey, etc.) Say: Just like we do, animals prefer different kinds of food. Then read the descriptions of the plants and animals pictured on the page and have students complete the activity. Review the answers together.

Day Four

Materials: pictures of a rafflesia (optional)

Ask: Can you imagine a flower that stinks? Distribute page 12 and read the introduction together. If you have them, show students pictures of the rafflesia. Have students complete activity A. For activity B, say: The rafflesia uses scent to attract insects, but some plants and animals use scent to keep others away. If necessary, help students brainstorm ideas before writing their responses. (e.g., skunk, stink bug, eucalyptus, etc.)

Day Five

Tell students they will review everything they have learned about plants’ adaptations. Have them complete page 13. Go over the answers together.
Weekly Question

Why do flowers have different colors and scents?

Nine out of every ten plants on Earth have flowers. Flowers are beautiful to look at and to smell, but they are also important to the plant because they make seeds. Plants need seeds to reproduce, or make new plants.

The sizes, colors, and scents of flowers are all different. Scientists call these differences adaptations. Adaptations help plants grow and survive.

A. Name two adaptations that flowers have.

1. ___________________________  2. ___________________________

B. Write a vocabulary word to complete each sentence.

1. Seeds help plants make new plants, or _________________.

2. A flower’s color is one ________________ that helps the plant survive.

C. Describe a flower that grows where you live. What color is it? What does it smell like?

__________________________________________________________________________
Weekly Question

Why do flowers have different colors and scents?

Flowers make seeds when pollen travels from the male part of a flower to the female part. Insects help carry pollen from one flower to another. When an insect lands on a flower, pollen sticks to the insect. When the insect visits another flower, some of the pollen falls off its body and pollinates that flower.

A. Number the events below in the correct order.

   ____ The bee flies to another flower.
   ____ The bee lands on a flower to eat and drink.
   ____ The flower makes seeds.
   ____ Pollen falls off the bee.
   ____ Pollen sticks to the bee.

B. Write the vocabulary words to complete the sentence.

   When a bee carries _________________ from one flower to another, the bee _________________ the flower.

Talk

How else might pollen get from one flower to another? Discuss it with a partner.
Weekly Question

Why do flowers have different colors and scents?

Because flowers need help getting pollen from one to another, they use color and scent to attract animals. Insects and birds eat pollen and drink nectar (NEK-tuhr), a sweet liquid that flowers make. A flower’s color and scent tell these animals that food is available. Different colors and scents invite different animals.

Use the clues to decide which flower invites which animal. Then draw a line to connect them.

- Violets are purple flowers with a sweet scent.
- Moths are active at night. They like flowers with strong scents.
- Honeysuckles open at night. They have a very strong scent.
- Bees like colors, but they can’t see red. They also like sweet scents.
- The bright red hibiscus doesn’t have much scent, but it has lots of nectar.
- Hummingbirds like red flowers with lots of nectar.