Grade 6

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SKILL SHARPENERS

STEAM

Grade 6

Connecting School and Home

Downloadable

Teaching Guide

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How to Use This Guide

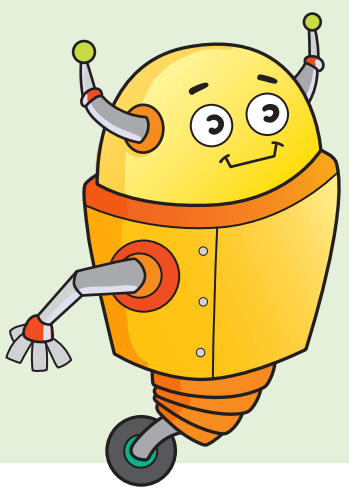
This guide provides suggestions and support to help you use *Skill Sharpeners: STEAM* as part of your core curriculum. The information and practice in *Skill Sharpeners: STEAM* introduce students to real-world problems in relatable contexts. The activities and projects focus on Science, Technology, Engineering, Art, and Math and provide hands-on experiences as well as connections to real-world scenarios and careers. The discussion questions and field trip suggestions provided in this guide will help you extend learning through additional conversations and real-world experiences.

How to Use the STEAM Approach to Education

STEAM is an approach to education that focuses on using Science, Technology, Engineering, Art, and Math to solve real-world problems. Empathy is at the core of STEAM education. Understanding how people, animals, or things are affected by a problem is an important part of the problem-solving and solution-seeking process. Teaching children how to think creatively prepares them for new unknown technologies, industries, and careers.

With STEAM activities and tasks, the final product is not as important as the process. Through the process of experimenting and exploring, your child is using creative and critical thinking skills. Scientists, mathematicians, engineers, and artists use the same critical thinking skills to find new and innovative solutions.

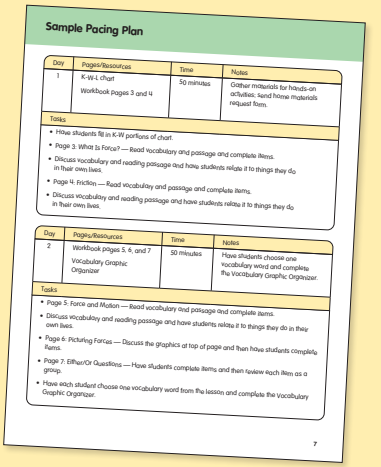




How to Use the Sample Pacing Plan and Template

The number of days you spend on each unit will depend on how you are using this resource. You may be using it to supplement your core curriculum or as part of a hybrid learning model.

The sample pacing plan is based on a 7-day lesson plan. Each day includes the *Skill Sharpeners: STEAM* workbook page numbers and suggested resources, the duration of the practice, relevant notes, and the tasks for that day. Refer to the sample plan to see examples of how and when to incorporate discussion questions, literature references, and field trips into your lesson plans.


Sample Pacing Plan

Day	Pages/Resources	Time	Notes
1	K-W-L Chart Workbook pages 3 and 4	50 minutes	Gather materials for hands-on activities; send home materials request form.

Tasks

- Have students fill in K-W portions of chart.
- Page 3: What Is Force? — Read vocabulary and passage and complete items.
- Discuss vocabulary and reading passage and have students relate it to things they do in their own lives.
- Page 4: Friction — Read vocabulary and passage and complete items.
- Discuss vocabulary and reading passage and have students relate it to things they do in their own lives.

Day	Pages/Resources	Time	Notes
2	Workbook pages 5, 6, and 7 Vocabulary Graphic Organizer	50 minutes	Have students choose one vocabulary word and complete the Vocabulary Graphic Organizer.

Tasks

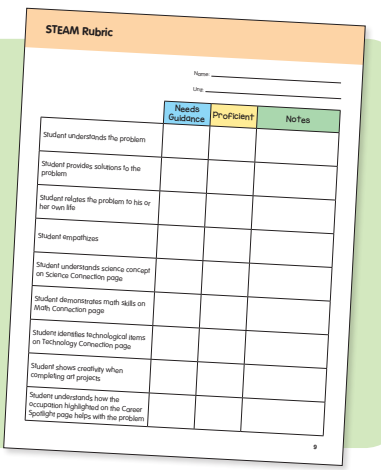
- Page 5: Force and Motion — Read vocabulary and passage and complete items.
- Discuss vocabulary and reading passage and have students relate it to things they do in their own lives.
- Page 6: Picturing Forces — Discuss the graphics at top of page and then have students complete items.
- Page 7: Either/Or Questions — Have students complete items and then review each item as a group.
- Have each student choose one vocabulary word from the lesson and complete the Vocabulary Graphic Organizer.

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How to Use the STEAM Rubric and the Graphic Organizers

The STEAM Rubric can be used to measure and summarize students' understandings and competencies after they complete each unit.

The graphic organizers are intended to be used for field trips and virtual field trips. They provide a structure for students to record information as well as their observations and feelings.


STEAM Rubric

Name: _____

Unit: _____

	Needs Guidance	Proficient	Notes
Student understands the problem			
Student provides solutions to the problem			
Student relates the problem to his or her own life			
Student empathizes			
Student understands science concept on Science Connection page			
Student demonstrates math skills on Math Connection page			
Student identifies technological items on Technology Connection page			
Student shows creativity when completing art projects			
Student understands how the occupation highlighted on the Career Spotlight page helps with the problem			

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How to Use the Discussion Questions

This guide includes discussion questions for each Learn About the Problem nonfiction text. The discussion questions are intended to help students connect the topic to their own lives and deepen their understanding of how a problem can affect people, animals, a community, or a whole city—a problem can even affect an entire region. After students read the Learn About the Problem text, engage them in discussion about the topic. Explain to students that there are no right answers, and encourage them to share their experiences and opinions.



How to Use the Literature Suggestions

The literature suggestions in this guide focus on different aspects of a topic. You may choose to read the fiction and nonfiction books to students before beginning the unit, during the unit, or after the unit. Encourage students to think about how they would feel if they were the person in the story or they were experiencing the situation the story describes.

When to Do the Field Trips

The field trips may be most valuable after students complete the Connections activities and have read and completed the Career Spotlight.

The field trips and virtual field trips are intended to deepen students' understanding of the topic and extend their learning by having authentic or virtual experiences. As students participate in the field trips, encourage them to share their observations and ideas. At the end of the field trip, you may wish to have students share any solutions they come up with and have them think about how they can apply what they have experienced to their STEAM task.



Sample Pacing Plan

Unit: Cultural Differences

Day	Pages/Resources	Time	Notes
1	Workbook pages 6 and 7 Workbook pages 8 and 9 Discussion questions, page 14 of this guide	60 minutes	Assign students partners for shared reading. Preview discussion questions on page 14 of this guide before the lesson.

Tasks

- Page 6: "A Cultural Surprise Party" Discuss the title and photos and have students share what they think the story is about.
- Assign students partners and have them read "A Cultural Surprise Party" together.
- Page 7: "Cultural Differences" Have students complete the activity independently.
- After students complete the activity, have them share their responses with the class.
- Pages 8 and 9: "Culture Shock and Understanding" Preview the photos with students and have them share how they feel about what they see. Then have students read the text silently to themselves.
- Use the discussion questions or some of your own questions to engage students in discussing the topic and sharing their thoughts, opinions, and experiences.

Day	Pages/Resources	Time	Notes
2	Workbook pages 10 and 11	90–120 minutes	Gather the materials students need for the project.

Tasks

- Page 10: "Flying Colors" Guide students through reading the focus box and the project requirements.
- Page 11: Have students work independently to sketch their flag.
- Lastly, have students make their flag and show it to their classmates.

Day	Pages/Resources	Time	Notes
3	Workbook pages 13 and 14	30 minutes	

Tasks

- Page 13: "Changing Money" Read the focus box to students. Then have them re-read it silently on their own and complete the activity independently. After they finish, review the answers as a group.
- Page 14: "What's Your Sign?" Read the focus box to students. Then have them re-read it silently on their own and complete the activity independently. After they finish, review the answers as a group.

Day	Pages/Resources	Time	Notes
4	Workbook page 15 Literature suggestions	10 minutes 30 minutes	In advance of the lesson, read the literature suggestions on page 14 of this guide

Tasks

- Page 15: "Cultural Careers" Have students read the directions and complete the items independently.
- Use the literature suggestions on page 14 of this guide to share stories and additional information about this topic with students.

Day	Pages/Resources	Time	Notes
5, 6, 7	Workbook pages 16, 17, 18, and 19	60-minute sessions for 2–3 days	Have students gather materials for the STEAM task.

Tasks

- Page 16: "Problem to Solve" Have students read the problem and task and then discuss it as a group.
- Page 17: "Research Board Games and Culture Facts" Have students complete the items and conduct their research independently.
- Page 18: "Write and Design" Have students complete the brainstorm and design activity independently.
- Page 19: "Create and Play Your Game" Have students create the game and play it with friends. Then have them complete the items on page 19.

Pacing Template

Unit: _____

Day	Pages/Resources	Time	Notes

Tasks

Day	Pages/Resources	Time	Notes

Tasks

Day	Pages/Resources	Time	Notes

Tasks

STEAM Rubric

Name: _____

Unit: _____

	Needs Guidance	Proficient	Notes
Student understands the problem			
Student provides solutions to the problem			
Student relates the problem to his or her own life			
Student empathizes			
Student understands science concept on Science Connection page			
Student demonstrates math skills on Math Connection page			
Student identifies technological items on Technology Connection page			
Student shows creativity when completing art projects			
Student understands how the occupation highlighted on the Career Spotlight page helps with the problem			

KWLF Graphic Organizer

Name: _____

Topic: _____

K What I know

W What I want to know

L What I learned

F How I feel

Design Process

Name: _____

What is the problem?



How can I help?



What I made.



What I will do next time.



Organization of Each Unit

Each unit in *Skill Sharpeners: STEAM* focuses on a real-world problem and features a realistic fiction text, a nonfiction text, an art project, and a variety of activities that focus on science, technology, engineering, and math. In addition, each unit includes a career connection that features real-world jobs. Following is a description of each component of the unit and the role it plays and its value for students.

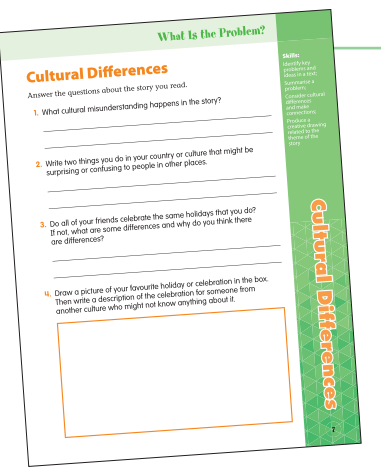
Real-World Connection

Each unit begins with a Real-World Connection text that focuses on the topic through a one-page realistic fiction story. The story provides context for students to understand the problem and possibly empathize with the people or animals that this problem affects. The story often includes multiple problems connected to the topic. Some problems are First World, such as inclusive playgrounds, and some are Third World, such as clean drinking water.



What Is the Problem?

The What Is the Problem? page follows the Real-World Connection story, and it focuses on having students identify one or more problems in the story. The items in this activity will help students think about the problem or problems that were presented and identify possible solutions from the story or from his or her own thoughts.



Learn About the Problem

Each unit includes a nonfiction text that provides students with more detailed information about the problem in the real world. Meaningful photos and illustrations provide context and enrich students' understanding of the problem.



Art Connection

Each unit includes an art connection that incorporates creativity into finding solutions. These activities provide an opportunity to be creative and to learn about how to relate topics to art and present information in an engaging way.



Science, Technology, Engineering, and Math Connections

The science, technology, and engineering connections present additional information about how these emphases are used to solve problems. The math connection activities relate the problems to a variety of real-world situations in which math concepts can be used to figure out solutions.



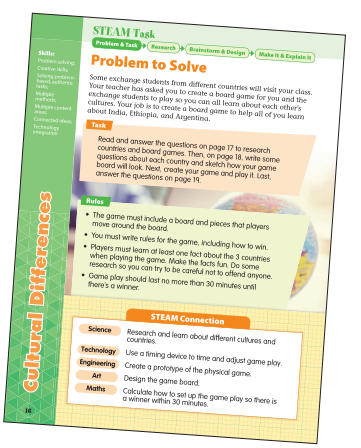
Career Spotlight

The career spotlight activities present a variety of careers related to the problems or solutions in the unit. These activities provide students with a real-world view of science, technology, engineering, arts, and math jobs and careers.



STEAM Task

Each unit culminates with a STEAM task. The STEAM task gives students a real-world scenario and a problem to solve using the following design process: Problem & Task, Research, Brainstorm & Design, Make It & Explain It. Students present their finished project, product, video, or other creation to an authentic audience.

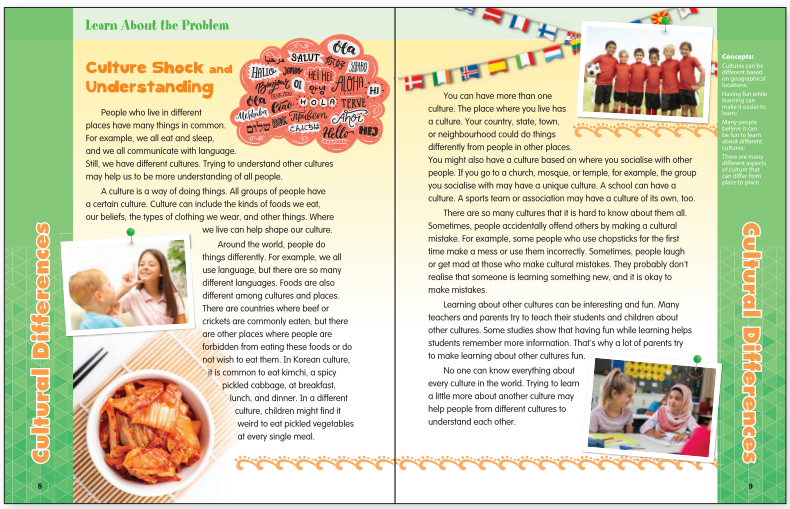


Cultural Differences

Discussion Questions

Discussion questions for "Culture Shock and Understanding," pages 8 and 9

After students read "Culture Shock and Understanding," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic.


Learn About the Problem

Culture Shock and Understanding

People who live in different places have many things in common. For example, we all eat and sleep, and we all communicate with language. Still, we have different cultures. Trying to understand other cultures may help us to be more understanding of all people.

A culture is a way of doing things. All groups of people have a certain culture. Culture can include the kinds of foods we eat, our beliefs, the types of clothing we wear, and other things. Where we live can help shape our culture.

Around the world, people do things differently. For example, we all use language, but there are so many different languages. Foods are also different among cultures and places. There are countries where beef or crickets are commonly eaten, but there are other places where people are forbidden from eating these foods or do not wish to eat them. In Korean culture, it is common to eat kimchi, a spicy pickled cabbage, at breakfast, lunch, and dinner. In a different culture, children might find it weird to eat pickled vegetables at every single meal.

Cultural Differences

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You can have more than one culture. The place where you live has a culture. Your country, state, town, or neighbourhood could do things differently from people in other places. You might also have a culture based on where you socialise with other people. If you go to a church, mosque, or temple, for example, the group you socialise with may have a unique culture. A school can have a culture. A sports team or association may have a culture of its own, too.

There are so many cultures that it is hard to know about them all. Sometimes, people accidentally offend others by making a cultural mistake. For example, some people who use chopsticks for the first time make a mess or use them incorrectly. Sometimes, people laugh or get mad at those who make cultural mistakes. They probably don't realise that someone is learning something new, and it is okay to make mistakes.

Learning about other cultures can be interesting and fun. Many teachers and parents try to teach their students and children about other cultures. Some studies show that having fun while learning helps students remember more information. That's why a lot of parents try to make learning about other cultures fun.

No one can know everything about every culture in the world. Trying to learn a little more about another culture may help people from different cultures to understand each other.

Concepts:
Cultures can be different based on geographical locations.
Having fun while learning can make it easier to learn.
Many people believe it can be fun to learn about different cultures.
There are many different aspects of culture that can differ from place to place.

Cultural Differences

9

What do you know about your family's culture?

Have you eaten foods from different cultures? Tell about the foods.

Do you know someone from a different culture who speaks a different language from what you speak? Tell about that person.

Do you think it is important to learn about different cultures? Why or why not?

Literature Suggestions

Consider reading students these stories about children from different cultures.

The Arabic Quilt: An Immigrant Story, written by Aya Khalil

This Is My World, written by Lonely Planet Kids

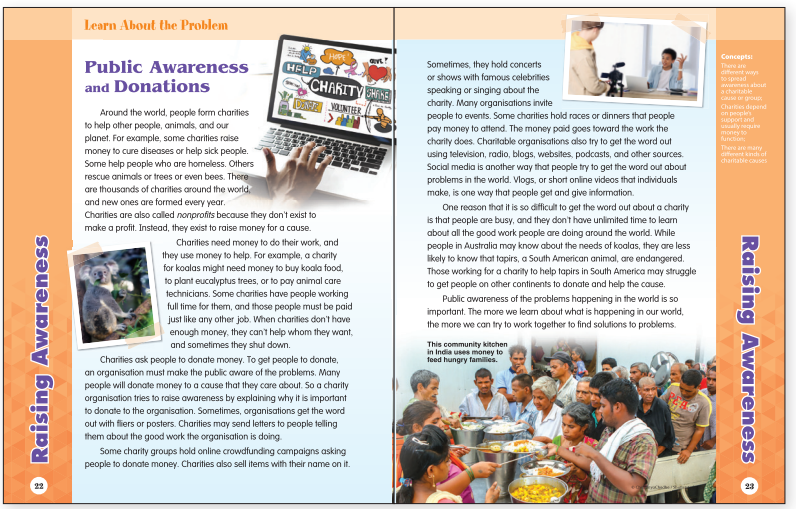


Raising Awareness

Discussion Questions

Discussion questions for "Public Awareness and Donations," pages 22 and 23

After students read "Public Awareness and Donations," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic.


Learn About the Problem

Public Awareness and Donations

Around the world, people form charities to help other people, animals, and our planet. For example, some charities raise money to cure diseases or help sick people. Some help people who are homeless. Others rescue animals or trees or even bees. There are thousands of charities around the world, and new ones are formed every year.

Charities are also called *nonprofits* because they don't exist to make a profit. Instead, they exist to raise money for a cause.

Charities need money to do their work, and they use money to help. For example, a charity for koalas might need money to buy koala food, to plant eucalyptus trees, or to pay animal care technicians. Some charities have people working full time for them, and those people must be paid just like any other job. When charities don't have enough money, they can't help whom they want, and sometimes they shut down.

Charities ask people to donate money. To get people to donate, an organisation must make the public aware of the problems. Many people will donate money to a cause that they care about. So a charity organisation tries to raise awareness by explaining why it is important to donate to the organisation. Sometimes, organisations get the word out with fliers or posters. Charities may send letters to people telling them about the good work the organisation is doing.

Some charity groups hold online crowdfunding campaigns asking people to donate money. Charities also sell items with their name on it.

Sometimes, they hold concerts or shows with famous celebrities speaking or singing about the charity. Many organisations invite people to events. Some charities hold races or dinners that people pay money to attend. The money paid goes toward the work the charity does. Charitable organisations also try to get the word out using television, radio, blogs, websites, podcasts, and other sources. Social media is another way that people try to get the word out about problems in the world. Vlogs, or short online videos that individuals make, is one way that people get and give information.

One reason that it is so difficult to get the word out about a charity is that people are busy, and they don't have unlimited time to learn about all the good work people are doing around the world. While people in Australia may know about the needs of koalas, they are less likely to know that tapirs, a South American animal, are endangered. Those working for a charity to help tapirs in South America may struggle to get people on other continents to donate and help the cause.

Public awareness of the problems happening in the world is so important. The more we learn about what is happening in our world, the more we can try to work together to find solutions to problems.

This community kitchen in India uses money to feed hungry families.

Concepts:
There are different ways to spread awareness about a charitable cause or group.
Charities depend on people's support and usually require money to function.
There are many different kinds of charitable causes

Raising Awareness

22

Raising Awareness

23

Did you know about charity organizations before you read the text? If so, tell how you learned of them.

Do you think charity organizations are important? Explain your answer.

What charity organizations would you like to be a part of? Tell why.

Field Trip Suggestions

If you live near a charity organization's headquarters, you might consider organizing a field trip to visit it. Have students notice what kind of work is being done, who is doing the work, and what the goal of the charity is.

If you do not live near a charity organization, consider taking a virtual field trip to an event that a charity organization is hosting. Have students notice what kind of work is being done, who is doing it, and what the goal of the charity is. Then have them discuss whom the charity helps and why it is important.

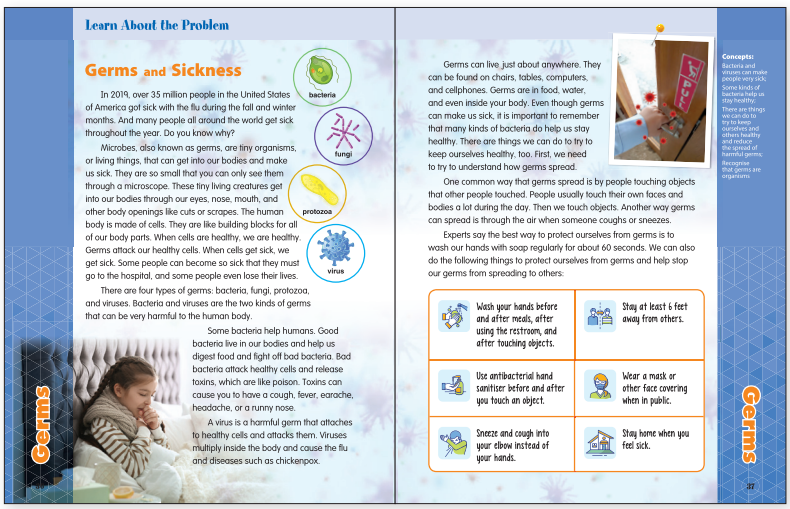


Germs

Discussion Questions

Discussion questions for "Germs and Sickness," pages 36 and 37

After students read "Germs and Sickness," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic. Please keep in mind, because of the 2020 pandemic, this may be a sensitive topic for some students, and they may not wish to share their stories.



Before reading the text, did you know that there are good bacteria and bad bacteria in our bodies? Where did you learn this information?

Tell what you do in your everyday life to stop the spread of germs.

Do you think people do enough to stop the spread of germs? Explain your opinion.

Literature Suggestions

Consider reading students these stories about germs.

A Germ's Journey, written by Thom Rooke, M.D.

Do Not Lick This Book, written by Idan Ben-Barak

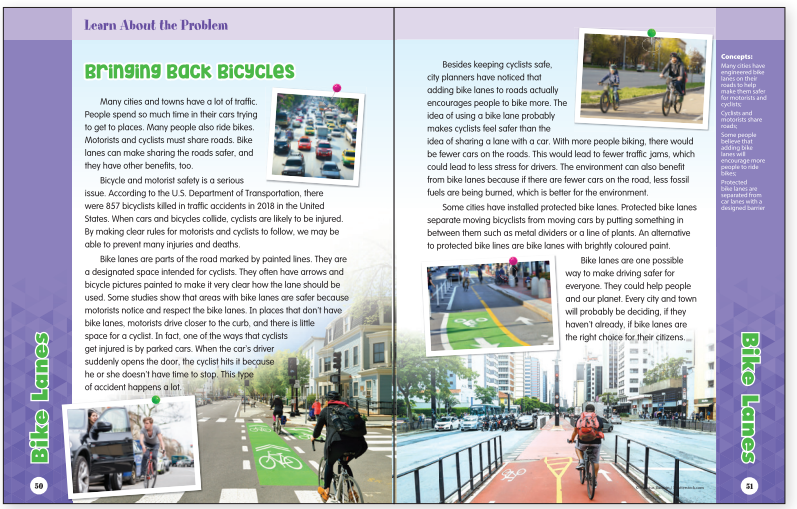


Bike Lanes

Discussion Questions

Discussion questions for "Bringing Back Bicycles," pages 50 and 51

After students read "Bringing Back Bicycles," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic.



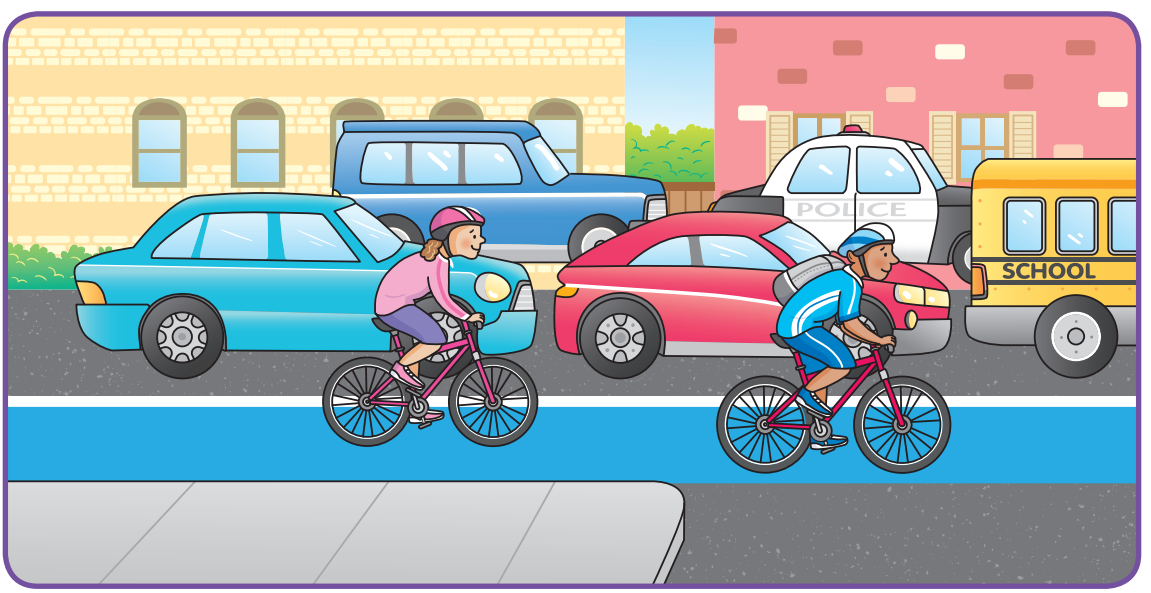
Have you ever ridden in a bike lane? Where? Tell about it.

Do you agree that bike lanes can help the environment? Explain your opinion.

If you could put bike lanes in every city, would you? Tell why or why not.

Field Trip Suggestion

Plan to visit an area of your town that has bike lanes. Have students observe the bicyclists using them and note the proximity to cars and traffic lights. Then have students share their observations with each other and tell whether or not they would feel safe riding their bikes in the bike lanes they observed.



Empty Mall Space

Discussion Questions

Discussion questions for "Abandoned Malls," pages 64 and 65

After students read "Abandoned Malls," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic.



Is there a mall in your area? Tell about it.

Are there abandoned malls in your area? What do you know about them?

Do you agree that abandoned malls should be repurposed for other businesses and services such as gyms and medical facilities? Explain your opinion.

Field Trip Suggestion

Plan a visit to a mall in your area. Have students observe the kinds of businesses that are in the mall and note how many customers are in each business. You may wish to have them interview the mall employees to get information about how busy or not busy the mall is. Have them ask if the employees feel the mall is in danger of closing.

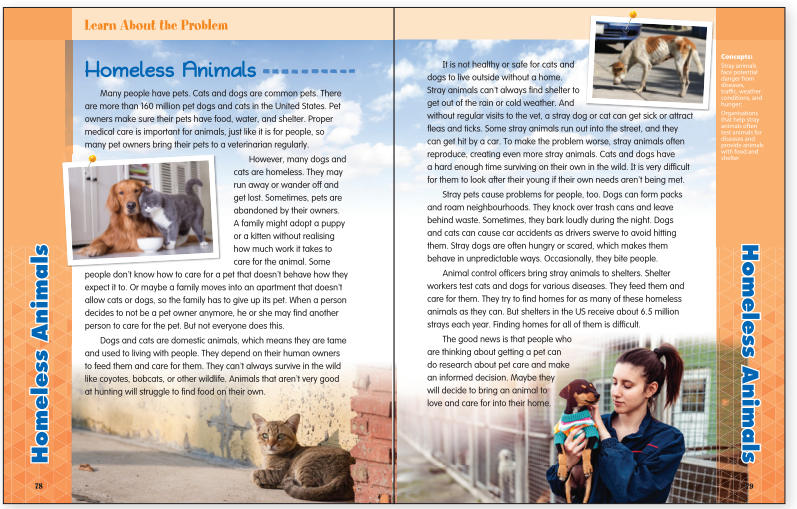


Homeless Animals

Discussion Questions

Discussion questions for "Homeless Animals," pages 78 and 79

After students read "Homeless Animals," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic.


Learn About the Problem

Homeless Animals

Many people have pets. Cats and dogs are common pets. There are more than 160 million pet dogs and cats in the United States. Pet owners make sure their pets have food, water, and shelter. Proper medical care is important for animals, just like it is for people, so many pet owners bring their pets to a veterinarian regularly.

However, many dogs and cats are homeless. They may run away or wander off and get lost. Sometimes, pets are abandoned by their owners. A family might adopt a puppy or a kitten without realising how much work it takes to care for the animal. Some people don't know how to care for a pet that doesn't behave how they expect it to. Or maybe a family moves into an apartment that doesn't allow cats or dogs, so the family has to give up its pet. When a person decides to not be a pet owner anymore, he or she may find another person to care for the pet. But not everyone does this.

Dogs and cats are domestic animals, which means they are tame and used to living with people. They depend on their human owners to feed them and care for them. They can't always survive in the wild like coyotes, bobcats, or other wildlife. Animals that aren't very good at hunting will struggle to find food on their own.

It is not healthy or safe for cats and dogs to live outside without a home. Stray animals can't always find shelter to get out of the rain or cold weather. And without regular visits to the vet, a stray dog or cat can get sick or attract fleas and ticks. Some stray animals run out into the street, and they can get hit by a car. To make the problem worse, stray animals often reproduce, creating even more stray animals. Cats and dogs have a hard enough time surviving on their own in the wild. It is very difficult for them to look after their young if their own needs aren't being met.

Stray pets cause problems for people, too. Dogs can form packs and roam neighbourhoods. They knock over trash cans and leave behind waste. Sometimes, they bark loudly during the night. Dogs and cats can cause car accidents as drivers swerve to avoid hitting them. Stray dogs are often hungry or scared, which makes them behave in unpredictable ways. Occasionally, they bite people.

Animal control officers bring stray animals to shelters. Shelter workers test cats and dogs for various diseases. They feed them and care for them. They try to find homes for as many of these homeless animals as they can. But shelters in the US receive about 6.5 million strays each year. Finding homes for all of them is difficult.

The good news is that people who are thinking about getting a pet can do research about pet care and make an informed decision. Maybe they will decide to bring an animal to love and care for into their home.

Concepts:

Homeless Animals

78

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Do you know of any homeless animals in your neighborhood? Tell about them.

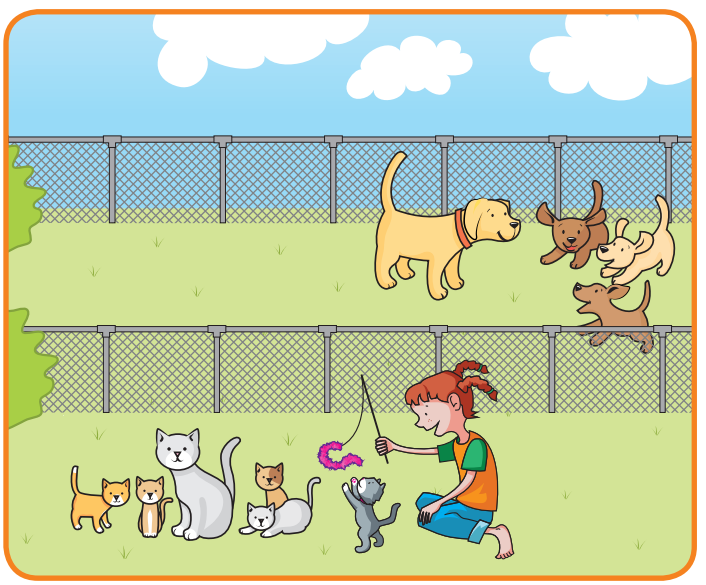
Do you agree that homeless animals are dangerous for the community? Explain your opinion.

Is there an animal shelter in your community? If so, how do you know about it?

Field Trip Suggestions

If you live near an animal shelter, you might consider organizing a field trip to visit it. Have students notice the condition of the animals, where they sleep, how they act, and who takes care of them. Have students share how they feel about the animals and the shelter.

If you do not live near an animal shelter, consider taking a virtual field trip to one. Have students notice the condition of the animals, where they sleep, how they act, and who takes care of them. Have students share how they feel about the animals and the shelter.

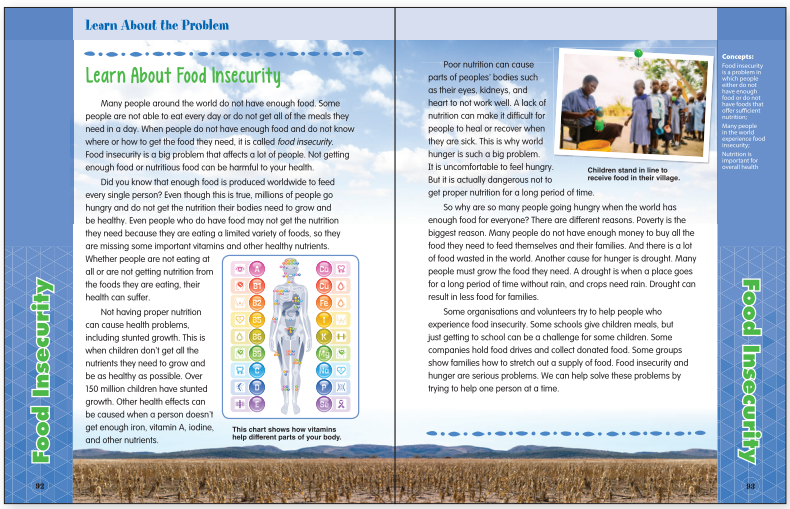


Food Insecurity

Discussion Questions

Discussion questions for "Learn About Food Insecurity," pages 92 and 93

After students read "Learn About Food Insecurity," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic.



Had you heard of food insecurity before you read the text? Where did you hear about it?

How did you feel when you read that some people do not have enough food?

Have you ever felt hungry and not been able to have food? Explain how you felt.

Virtual Field Trip Suggestion

Consider taking a virtual field trip to see a charity providing food to people who do not have enough to eat. A charity such as Action Against Hunger shares stories on their website that tell about the work they do and the people they help. Before the field trip, carefully preview any videos or pictures to make sure they are appropriate for students. After the field trip, have students discuss what they saw, what they think it means, and how they feel.

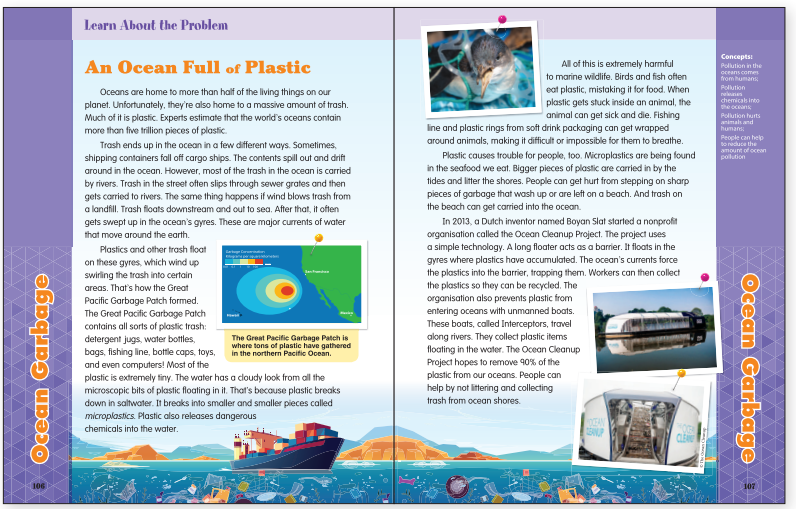


Ocean Garbage

Discussion Questions

Discussion questions for "An Ocean Full of Plastic," pages 106 and 107

After students read "An Ocean Full of Plastic," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic.


Learn About the Problem

An Ocean Full of Plastic

Oceans are home to more than half of the living things on our planet. Unfortunately, they're also home to a massive amount of trash. Much of it is plastic. Experts estimate that the world's oceans contain more than five trillion pieces of plastic.

Trash ends up in the ocean in a few different ways. Sometimes, shipping containers fall off cargo ships. The contents spill out and drift around in the ocean. However, most of the trash in the ocean is carried by rivers. Trash in the street often slips through sewer grates and then gets carried to rivers. The same thing happens if wind blows trash from a landfill. Trash floats downstream and out to sea. After that, it often gets swept up in the ocean's gyres. These are major currents of water that move around the earth.

Plastics and other trash float on these gyres, which wind up swirling the trash into certain areas. That's how the Great Pacific Garbage Patch formed. The Great Pacific Garbage Patch contains all sorts of plastic trash: detergent jugs, water bottles, bags, fishing line, bottle caps, toys, and even computers! Most of the plastic is extremely tiny. The water has a cloudy look from all the microscopic bits of plastic floating in it. That's because plastic breaks down in saltwater. It breaks into smaller and smaller pieces called *microplastics*. Plastic also releases dangerous chemicals into the water.

The Great Pacific Garbage Patch is where tons of plastic have gathered in the northern Pacific Ocean.

All of this is extremely harmful to marine wildlife. Birds and fish often eat plastic, mistaking it for food. When plastic gets stuck inside an animal, the animal can get sick and die. Fishing line and plastic rings from soft drink packaging can get wrapped around animals, making it difficult or impossible for them to breathe.

Plastic causes trouble for people, too. Microplastics are being found in the seafood we eat. Bigger pieces of plastic are carried in by the tides and litter the shores. People can get hurt from stepping on sharp pieces of garbage that wash up or are left on a beach. And trash on the beach can get carried into the ocean.

In 2013, a Dutch inventor named Boyan Slat started a nonprofit organisation called the Ocean Cleanup Project. The project uses a simple technology. A long floater acts as a barrier. It floats in the gyres where plastics have accumulated. The ocean's currents force the plastics into the barrier, trapping them. Workers can then collect the plastics so they can be recycled. The organisation also prevents plastic from entering oceans with unmanned boats. These boats, called Interceptors, travel along rivers. They collect plastic items floating in the water. The Ocean Cleanup Project hopes to remove 90% of the plastic from our oceans. People can help by not littering and collecting trash from ocean shores.

Concepts:
Pollution in the oceans comes from humans.
Pollution releases chemicals into the oceans.
Pollution hurts animals and humans.
People can help to reduce the amount of ocean pollution

Ocean Garbage

106

107

Did you find the information about the Great Pacific Garbage Patch interesting? Why or why not?

How did you feel when you read that wildlife is being harmed by plastics in the ocean?

If you could work with the nonprofit Ocean Cleanup Project, would you like to? Explain your answer.

Field Trip Suggestions

If you live near a beach, you might consider organizing a field trip to visit it. While there, have students count how many pieces of plastic they see. If you have safety equipment such as gloves, trash collection tools, and masks, you may wish to have students participate in a beach cleanup while they are there.

If you do not live near a beach, consider taking a virtual field trip to one. There are many resources online that will take your students on a virtual tour. Have students notice any plastics they see on land or in the ocean.

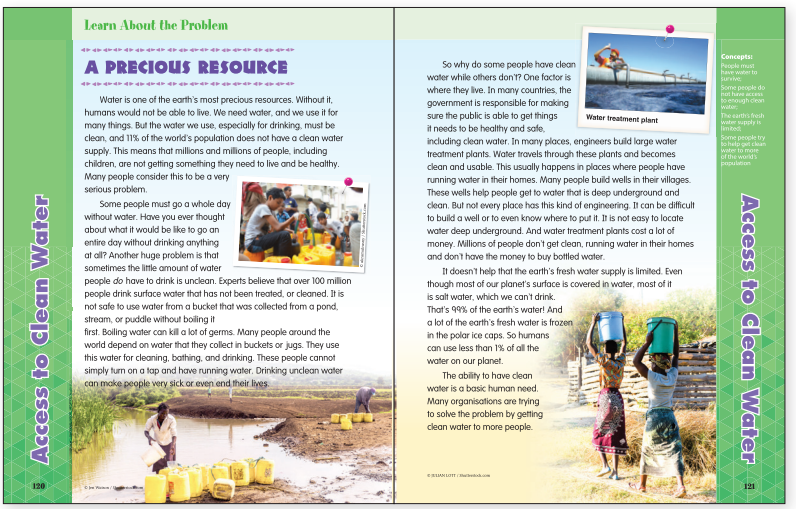


Access to Clean Water

Discussion Questions

Discussion questions for "A Precious Resource," pages 120 and 121

After students read "A Precious Resource," use the following questions along with some of your own to encourage discussion and to deepen students' understanding of the topic.



Were you surprised that over 100 million people drink surface water that is not clean? Explain your answer.

If you had to explain to someone what a water treatment plant does, what would you say?

Did you know before you read the text that humans can only use 1% of the water on Earth? Where did you learn this information? How do you feel about this information?

Literature Suggestions

Consider reading students these stories about clean water.

You Wouldn't Want to Live Without Clean Water! written by Roger Canavan

A Long Walk to Water, written by Linda Sue Park





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