

# Finding Main Ideas, Identifying Supporting Details, and Visualizing

Unit One has two themes. The first theme explores the world of animals. It looks at unusual animals and ways in which animals take care of their young and help each other. The second theme explores the world of robots. It describes some of the main ways in which robots are used—some of which will undoubtedly be surprising to students—and concludes with a story about a pet robot. Place books and articles on the topic in your classroom library. The skills/strategy focus for the first unit is deriving the main idea and supporting details. Visualizing is also introduced.

### **Teaching the Main Idea and Supporting Details**

Grasping the main idea of a selection is a foundational skill. In this book, the main idea is a summary statement that includes the details or ideas in a selection. It is what all the other sentences are about. The main idea is more specific than the topic. Whereas the topic is the subject, the main idea is the general idea that is expressed about the topic. A topic might be "guide dogs." A general idea about guide dogs might be, "Guide dogs are carefully trained." Unless students grasp the main idea, they have no basis for organizing information and run the risk of getting lost in details.

Grasping the main idea is also a prerequisite for summarizing, outlining, and taking notes. Grasping the main ideas requires the ability to see similarities among details, note differences, and classify or categorize details. Without the prerequisite skills of noting likenesses and differences and being able to classify details, students will have difficulty deriving or recognizing main ideas. The major problem that students have with selecting or constructing main ideas is not including all the details. Students tend to select or construct a main idea that is too narrow. Deriving the main idea requires the following subskills:

- Categorizing words and sentences
- Identifying topic sentences
- Using titles and headings to predict the main idea
- Selecting the main idea when directly stated
- Selecting the main idea when implied
- Using graphic organizers to display the main idea and supporting details
- Using a frame to state the main idea and supporting details
- Stating the main idea and supporting details







**Theme A** The Wonderful World of Animals







# **Identifying Topic Sentences**

**Objectives:** To prepare for identifying main ideas, students apply their concept of main idea by choosing from the sentences in a paragraph the one that includes all the others. In preparation for choosing a topic sentence, students categorize groups of words.

**Introduction:** Explain to the students that an important reasoning skill is being able to see similarities and differences and then tell how things are the same or different. Explain that being able to see similarities and differences will help them better understand the materials they read. Using a series of items that are similar, such as those listed next, ask students to tell how they are the same. Then have them provide a category label:

collies, poodles, German shepherds (dogs)

crows, robins, blue jays, eagles (birds)

tigers, lions, leopards, panthers (wild cats)

bass, tuna, flounder, cod (fish)

Explain that just as words can be classified, so too sentences can be classified and given a label. Write the following sentences, or similar ones, on the board, and explain to students that one sentence acts as a label and includes all the other sentences. Ask them to read the sentences and identify which one tells about the others:

Buffalo can smell a pool of water that is three miles away.

Buffalo have sharp senses.

Buffalo can see moving animals or people as far away as a mile.

Buffalo also have good hearing.

Most zebras have large black stripes that cover their bodies.

Some zebras have gray, brown, yellow, or red stripes.

Not all zebras look alike.

Some zebras have spots, instead of stripes, on most parts of their bodies.

Some zebras have stripes, but the stripes are so faded that the zebras appear to be all white.

Discuss why "Buffalo have sharp senses" and "Not all zebras look alike" are the main idea sentences. Emphasize that these sentences include the ideas in the other sentences in their group.



Guided and independent practice: Once students have grasped the idea of classifying sentences, have them complete the exercises on the Student Pages. Discuss students' responses. Help them to see that the sentence that includes all the others is the topic sentence. Explain, too, that they can check their responses by seeing if all the other sentences are included in the topic sentence. If one or more don't fit, then they need to choose another topic sentence. To assess students' progress, note whether students can categorize. In prepublication tryouts of these materials, a number of students demonstrated mastery of this skill, but a smaller number showed a definite need for it. Provide added instruction and practice for those who need it.

**Extension:** Provide added practice if needed. If students have grasped the concept of the inclusive topic sentence, go to Lesson 2. However, continue to have students classify and categorize as the occasion arises. In math they might classify numbers; in geography, places or landforms; in science, rocks or metals or animals.



# **Student Pages**

# The Wonderful World of Animals

The articles in this section will take you into the world of animals. They will tell you about an animal that kills snakes, a two-headed snake, how animals help each other, and how animals keep themselves safe. At the same time, you will be learning how to understand main ideas and their supporting details.

### **Lesson 1: Identifying Topic Sentences**

The *main idea* is what a paragraph or longer piece of writing is all about. Some paragraphs have main idea sentences. The main idea sentence is also known as the *topic sentence*. The topic sentence can be thought of as a box in which all the other sentences in the paragraph can be placed.

To show you how topic sentences work, a paragraph has been broken up. Its sentences are listed below. See if you can find the topic sentence. Keep in mind that it will be the sentence that includes all the other sentences. Underline the topic sentence. Then look at the other sentences to make sure that the main idea sentence tells about them:



Birds sing to tell other birds where they are.

Birds sing for a number of reasons.

Birds sing to find mates.

Birds sing to warn other birds to stay away from their homes.

Credit: Norma Kable.

The topic sentence is, "Birds sing for a number of reasons." It includes all the other sentences. The other sentences explain that birds sing to tell us where they are, to find mates, and to warn other birds to stay away from their homes. All of these sentences help support the main idea: birds sing for a number of reasons.





Now underline the topic sentence in each of the following lists of sentences:

The way a bird sings depends on where it is.

Birds that are low to the ground sing in low sounds.

Birds in bushes sing in medium sounds.

Birds in the treetops sing in high sounds.

Many birds know just one song.

Chipping sparrows and black-capped chickadees sing two or three songs.

The brown thrasher can sing 2,000 or more songs.

Some birds can sing more songs than others.

The pygmy marmoset is so small that it could fit in your hand.

At birth, a pygmy marmoset weighs only about half an ounce (15 grams).

The pygmy marmoset is the smallest monkey in the world.

Grown-up pygmy marmosets are only about 5 inches (13 centimeters) long, but they have an 8-inch (20-centimeter) tail.

The pygmy marmoset weighs just 4 to 7 ounces (113 to 199 grams).



Pouch rats grow to be 13 to 17 inches (33 to 43 centimeters) from the tip of the nose to

The pouch rat's tail is as long as its body.

the base of the tail.

African Gambian pouch rats are the largest rats in the world.

Pouch rats can weigh 6 or more pounds (2.7 kilograms).

The cheetah is built to go fast.

The cheetah has large nostrils and lungs so it can pull in more air.

With its large heart, the cheetah pumps blood faster.

The cheetah has a long, thin body so that it can cut through the wind.

The cheetah has long, powerful legs.

The cheetah has special paw pads and claws that keep it from slipping.



# **Nile Crocodiles**

**Objectives:** Students apply their concept of main idea by choosing from the sentences in a paragraph the one that includes all the others. Students verify their choice by underlining supporting details.

**Introduction:** One strategy for deriving the main idea of a paragraph is to seek out the topic sentence, which is generally, but not always, the first sentence. Of course, the reader can't tell if a particular sentence is the topic sentence until she or he has read all or most of the paragraph. Explain to students that now they will be choosing the topic sentence in a paragraph rather than from a list as they did in Lesson 1.

Model how you determine whether the first sentence seems to be stating a main idea and how, if it does seem to be, you note as you read the paragraph whether the details are supporting the hypothesized main idea. If some sentences are not supporting the main idea, then you seek another main idea sentence. Show how the main idea might be presented in a middle or even the final sentence. Also explain that not all paragraphs have topic sentences. Use the following paragraph or one of your choosing to model the process. As you read the paragraph, tell students what is going on in your mind so that they gain insight into the thinking processes for this lesson.

Indians gave birds names that fit what they did or how they looked. Indians called the woodpecker the "tree digger." The waxwing was given a name that means "top of head sticking up." That is just what the head feathers of the waxwing do. The small but loud house wren was given a name that means "making big noise for its size." The snipe, a bird with a long beak, was known as "bill dragging on the ground."

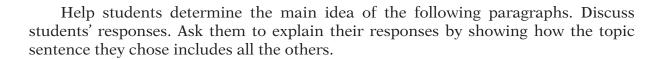
Your think-aloud might go something like this:

Reading the first sentence: "It looks like this might be the main idea. Let's see if the rest of the sentences tell how Indians gave birds names that fit."

Reading the second sentence: "Okay. It tells how the woodpecker got its name. This fits in with the idea of how the Indians gave birds names that fit."

*Reading the third and fourth sentences:* "Yes, these sentences also tell how Indians gave birds names that fit."

Reading the last sentence: "All of these sentences are telling about how the Indians gave birds names that fit, so that's the main idea of the paragraph."



For Indians, buffalo were very important. Buffalo meat was a main food for many tribes. Tents, ropes, and leather bags were made from buffalo hides. Even the horns were useful to the Native Americans. Horns were used to make spoons.

Owls make their homes in a number of different places. Most owls make their homes in trees. As you probably can guess from their name, barn owls often make their homes in barns. But they also make their homes in caves and old mines. Some owls live in giant cactus plants. Some owls even live underground. Burrowing owls make their nests in burrows once used by prairie dogs or foxes.

Guided and independent practice: Have students complete the first item in the Student Pages for Lesson 2 and compare their responses with that provided. Then have students complete the remaining items. When they have finished, discuss their responses. Ask them to explain their responses by showing how the topic sentence they chose includes all the others. To assess students' progress, note whether students can select the correct topic sentence and explain their choice.

**Extension:** Provide additional practice materials. Cut up brief paragraphs that contain a topic sentence. Have students place the topic sentence at the top of a column and the supporting details under the topic sentence. This manipulative activity helps students better see the relationship between the main idea and its supporting details. After students achieve proficiency classifying sentences in a list, have them select the main idea in brief, well-constructed paragraphs. As students are reading in their content-area texts or are reading informational trade books, have them identify topic sentences. Explain and show them how they can use the topic sentence to help them comprehend what they are reading. The topic sentence will enable them to organize the information that they are reading. Also have them compose or develop topic sentences in their writing.



# **Student Pages**

#### **Lesson 2: Nile Crocodiles**

Now see if you can find the topic sentence when it is in a paragraph. Not all paragraphs have a topic sentence, but this one does. Often the topic sentence is found first, but it can come anywhere in the paragraph. As you read, notice the details that support the main idea.

#### Nile Crocodiles

Nile crocodiles are good parents. The mother crocodile lays her eggs in a carefully made nest that she then covers with sand. The mother stands guard over the nest for three months. The father crocodile helps out. He is there to chase away enemies. As the time for the babies to hatch comes near, the mother crocodile listens carefully. When the babies are ready to hatch, they call out. The mother crocodile quickly uncovers the nest. The mother crocodile then carries each newly hatched baby down to the water. If the streams dry up, the mother searches for water holes. Then she carries the babies there.

What is the topic sentence for this paragraph? Write the topic sentence on the line below. Remember that the topic sentence tells the main idea of a paragraph. It tells what the paragraph is all about. The other sentences in the paragraph support the topic sentence.

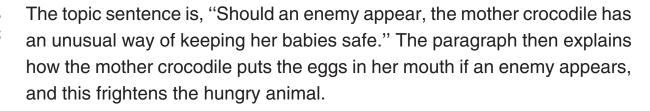




The topic sentence is, "Nile crocodiles are good parents." The paragraph mainly tells why Nile crocodiles are good parents. It tells how the mother and father guard the nest and how the mother crocodile uncovers the nest when it is time for the babies to hatch. It tells how the mother helps the babies get to the water. All of these details tell why Nile crocodiles are good parents.

Now find the topic sentence in the next paragraph. Write the topic sentence on the lines after it.

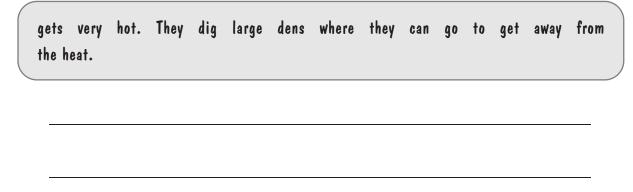
Should an enemy appear, the mother crocodile has an unusual way of keeping her babies safe. She grabs them and tosses them into her mouth. They couldn't be in a safer place. Seeing the large jaws and the many teeth of the Nile crocodile, hungry animals leave in a hurry. They look for food elsewhere.



Find the topic sentence in the following paragraph. Write the topic sentence on the lines.

Nile crocodiles help each other. When a school of fish is headed their way, crocodiles work together. They gather in a half circle and force the fish to swim toward the middle where they are easily snapped up. Nile crocodiles also work together when it





Underline two details from the paragraph that support your answer.

Find the topic sentence in the next paragraph. Write the topic sentence on the lines following it.

Being fierce, the Nile crocodile doesn't have many enemies. However, Nile crocodiles are in danger from people. Nile crocodiles are hunted for their hides, which can be used to makes shoes and boots and belts. Their meat can be eaten, and oil from their bodies can be used to make medicines. Farmers sometimes hunt Nile crocodiles because they attack their sheep, cows, and other animals.

Underline two details from the paragraph that support your answer.

# **Snake Killer**

**Objectives:** Students use titles to help predict main ideas and information from the title and article to identify the main idea.

**Introduction:** Titles, especially those of nonfiction articles, are one of the most useful sources for predicting or creating a hypothesis as to what the main idea might be, but students don't automatically use them. Discuss with students titles of nonfiction books and how those titles announce what the book is about. Explain that titles of articles are also helpful in predicting what the main idea of an article is. Explain to students that the way to see if their prediction about the main idea is right is to see what all or most of the sentences in the paragraph are talking about. Model the process using the following or a similar paragraph.

#### Insect Disguises

You can look right at a walking stick and not see it. The walking stick looks just like a twig on a tree branch. Another insect looks just like a leaf. It even rocks back and forth so that it looks like a leaf blowing in the wind. And there is an insect that looks just like a stone. Since birds don't eat sticks, leaves, or stones, birds leave the insects alone. The insects' disguises help keep the insects safe.

This paragraph is mainly about

- a. where insects live.
- b. why some insects make their homes in trees.
- c. how insects use disguises to hide from birds.
- d. the kinds of insects that birds eat.

Discuss students' responses. Stress that the answer is what all or most of the sentences are talking about.

**Guided and independent practice:** After discussing titles and how they help the reader think about what the main idea for an article might be, have students read the title "Snake Killer" in the Student Pages for this lesson and predict what they think the article might be about and what they think the author might tell them about

snake killers. For English learners, discuss the expression italicized in the following sentence: "Flying up above the mongoose, the hornbill *can spot the mongoose's enemies.*"

After students make their predictions, have them read the article to see how their predictions play out. Encourage students to change their predictions as they read if their predictions are not working out. Have students circle the correct answer after the article and then check their answers. Discuss the answers with the students. Also talk over how the title helped them to figure out what the paragraph was mainly about. To assess students' progress, note whether students can select the correct title and justify their choices.

**Extension:** Discuss titles of books and articles, and note whether the titles suggest the main idea of the book or article. This works best with nonfiction titles. As students compose titles for pieces they have written, guide them so that they create titles that contain or suggest the main idea. Have students use the titles from articles in children's periodicals to make predictions. Online articles are available at http://teacher.scholastic.com/scholasticnews/index.asp and http://www.timeforkids.com/TFK/, as well as other sources.



#### **Lesson 3: Snake Killer**

Topic sentences can help you discover what the main idea of an article is. A title can also help you discover the main idea. A good title tells what an article is going to be about.

Read the title of the following article. What do you think it will be about? To find out what a paragraph is mainly about, use the title and topic sentence as clues. Also ask yourself, "What are all or most of the sentences telling me?" Circle the letter of the correct answer.

#### Snake Killer

The mongoose is a champion fighter. It hunts and kills snakes, even poisonous ones. The mongoose is very fast. When a snake tries to strike the mongoose, the mongoose leaps out of its way and jumps on the back of the snake's neck. Then it bites into the snake's neck and kills it.

- 1. This paragraph is mostly about
  - a. a snake's enemies.
  - b. how mongooses kill snakes.
  - c. where mongooses are found.
  - d. how fast mongooses are.



Lesson 3 Snake Killer



Mongooses and hornbills help each other. A bird known as the hornbill follows the mongoose as it hunts for food. When the mongoose finds a nest of ants or other food, the hornbill invites itself to dinner. Why does the mongoose let the hornbill come along and even eat some of the food? Flying up above the mongoose, the hornbill can spot the mongoose's enemies. Even an animal brave enough to kill snakes has enemies. When it spots an enemy, the hornbill gives a warning cry.

- 2. This paragraph is mostly about
  - a. what hornbills eat.
  - b. why a mongoose has enemies.
  - c. how the mongoose finds food.
  - d. how the hornbill and mongoose help each other.

# The Hornbill Alarm Clock

**Objectives:** Students use (1) titles to help predict main ideas and (2) information from the title and article to identify the main idea.

**Introduction:** Encourage students to use the titles of articles to predict what the main idea of an article might be. After students make their predictions, have them read the article to see how their predictions play out. Encourage students to change their predictions as they read if their predictions are not working out.

**Guided and independent practice:** Have students circle the correct answers in the Student Pages and then check their answers. Discuss answers with students. Also talk over how the title helped them to figure out what the paragraph was mainly about. Encourage students to make a connection by telling who or what their alarm clock is.

### Lesson 5

# **Chasing Crowned Eagles Away**

**Objectives:** Students use titles to help predict main ideas and information from the title and article to identify the main idea.

**Introduction:** Encourage students to use the titles of the articles to predict what the main ideas of the articles might be. After students make their predictions, have them read the article to see how their predictions play out. Encourage students to change their predictions as they read if their predictions are not working out.

**Guided and independent practice:** Have students circle the answers they think are correct and then check their answers. Discuss the answers with the students. Also talk over how the title helped them to figure out what the paragraph was mainly about.

41

# **Student Pages**

#### **Lesson 4: The Hornbill Alarm Clock**

Read the paragraphs, and answer the questions that follow them.

#### The Hornbill Alarm Clock

Like most other birds, the hornbill wakes up early. It flies over to where the mongoose is sleeping. It calls the mongoose. First, it calls softly. But then it calls louder. It keeps on calling until the mongoose wakes up. The hornbill is an alarm clock with wings.

- 1. This paragraph is mostly about
  - a. why birds wake up early.
  - b. what alarm clocks do.
  - c. why the mongoose sleeps later than the hornbill.
  - d. how the hornbill is like an alarm clock.

### Monkeys Helping Hornbills

Without really meaning to, monkeys help keep hornbills safe from danger. Hornbills are large birds. Many of them live in large rain forests. Hornbills are also very loud. But even though they are large and loud, hornbills have enemies. One of their most feared enemies is the crowned eagle. When it spreads its wings, the crowned eagle is six feet across. It has very sharp claws. The crowned eagle is big enough and tough enough to eat monkeys and hornbills. When they spot a crowned eagle, monkeys give out a cry that sounds



like the bark of a dog. This warns the other monkeys. They quickly go into hiding. Monkeys also call out a warning when leopards are around. Hornbills take action when they hear the warning call that crowned eagles are near, but they don't do anything when they hear the warning call that leopards are in the area. Leopards eat monkeys, but they don't eat hornbills.

#### 2. This paragraph is mostly about

- a. how monkeys warn hornbills of danger.
- b. why hornbills are afraid of crowned eagles.
- c. why hornbills aren't afraid of leopards.
- d. what hornbills are like.





# **Lesson 5: Chasing Crowned Eagles Away**

Read the paragraphs, and answer the questions that follow them.

### Chasing Crowned Eagles Away

Hornbills don't run for cover when they hear that a crowned eagle is near. Instead they call each other. Then they head for the spot where the crowned eagle is. When a crowned eagle sees a flock of hornbills approach, it is surprised and puzzled. And it is probably frightened too. It doesn't know what the hornbills are going to do. And it doesn't wait around to find out. The crowned eagle flies away.

- 1. This paragraph is mostly about
  - a. why hornbills don't run for cover.
  - b. why hornbills are afraid of crowned eagles.
  - c. why hornbills call each other.
  - d. how hornbills get rid of crowned eagles.



# **Hiding Babies**

Hornbills have a special way of keeping their young safe. Hornbills build their nests in holes in trees or rocks. After she lays her eggs, the female hornbill closes up the opening to her nest and stays inside. Only a thin opening to the nest is left. The male hornbill stays outside the nest. The male hornbill passes food through the tiny slit in the nest for the female hornbill and the baby birds.

- 2. This paragraph is mostly about
  - a. how hornbills keep their young safe.
  - b. how hornbills find food.
  - c. where hornbills live.
  - d. how much hornbill babies eat.





# The Tree Hyrax

**Objectives:** Students use titles or information, or both, in an article to construct the main idea of an article.

**Introduction:** Most paragraphs do not have a topic sentence, so it is necessary to construct a main idea. This is done by reading the paragraph and determining what all or most of the sentences in the paragraph are about. Explain this to students and go over the following steps with them.

To build an implied main idea:

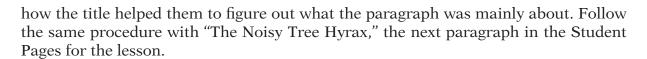
- 1. Use the title or heading, if there is one, to guess what the main idea might be.
- 2. Read the sentences in the paragraph.
- 3. Ask yourself, "What are all or most of these sentences telling me?" The answer to that question is the main idea.

Show students how you would determine the implied main idea of the following paragraph. Then invite the class to help construct a topic sentence for the paragraph.

#### Kangaroos

The red kangaroo can grow to be 7 feet tall and weighs up to 200 pounds or more. The gray kangaroo is also a large kangaroo. It isn't quite as tall as the red kangaroo, but it weighs more. A kangaroo known as the swamp wallaby is smaller than the red and the gray kangaroos. The swamp wallaby is about 3 feet high and weighs about 50 pounds. The rat kangaroo is the smallest kangaroo. Rat kangaroos are barely 9 inches high. The rat kangaroo is about the size of a rabbit.

Guided and independent practice: After discussing and posting steps for building a main idea, have students read the title of the article in the Student Pages, "The Tree Hyrax," and use that to guess what the main idea might be. After students make their guesses, have them read the article to see how their guesses work out and to change the guesses if necessary. Have students circle the correct answer after the paragraph and then check their answers. Discuss the answers with the students. Also talk over



Extension: Discuss titles of books and articles, and note whether the titles suggest the main idea of the book or article. This works best with nonfiction titles. As students compose titles for pieces they have written, guide them so that they create titles that contain or suggest the main idea. Have students use the titles from articles in children's periodicals to make predictions.



# **Student Pages**

### **Lesson 6: The Tree Hyrax**

Sometimes a paragraph or article doesn't have a topic sentence. You have to figure out what the main idea is. To get the main idea when there is no topic sentence, follow these steps:

- 1. Use the title or heading, if there is one, to guess what the main idea might be.
- 2. Read the sentences in the paragraph.
- 3. Ask yourself, "What are all or most of these sentences telling me?" The answer to that question is the main idea.

Read the following paragraphs. Then circle the letter of the correct answer.

### The Tree Hyrax

The tree hyrax is small and furry. Its fur is dark brown or black, with some gray or yellow mixed in. It looks like a rabbit, except that it has small, rounded ears. And it has only a stump for a tail. The tree hyrax has four toes on its front feet but only three on its hind feet.

- 1. This paragraph tells mostly
  - a. where a tree hyrax lives.
  - b. what a tree hyrax looks like.
  - c. how big a tree hyrax is.
  - d. how the tree hyrax got its name.







The tree hyrax begins making noises when the sun sets. First it squeaks and whistles. Then it squeals. It ends up by screaming. One scientist said that it sounds like an angry child.

- 2. This paragraph tells mostly
  - a. why the tree hyrax makes noise.
  - b. what kinds of noises the tree hyrax makes.
  - c. where the tree hyrax lives.
  - d. when the tree hyrax makes noise.







# **Strange Catfish**

**Objectives:** Students use a title and supporting details to identify a main idea and construct a web to display the main idea and supporting details.

**Introduction:** Have students read the title of the first paragraph in the Student Pages, "Strange Catfish," and use that to guess what the main idea might be. Encourage them to change their guesses as necessary. Also explain to students that they will be using a web to show the main idea and details. Chances are that students have used webs in the past. Explain that the main idea goes in the center and the supporting details go in the circles attached to the middle circle. Have students fill in the web for the article and then check their webs with the sample web. Discuss their responses and what they learned about catfish.

**Guided and independent practice:** Have students read the second paragraph in the Student Pages: "Fish That Use Disguises." Discuss students' responses. Have them justify their selection of the main idea by explaining how the details support the main idea. They might also talk about the different kinds of disguises that fish use.

**Extension:** Provide opportunities for students to complete webs. Ultimately have students create webs of their own. Graphic organizers are of most value when students create their own.

# Lesson 8

### **Insect Sounds**

**Objectives:** Students use (1) a title and supporting details to identify a main idea and (2) a web to display the main idea and supporting details.

**Introduction:** Have students read the title of the article in the Student Page, "Insect Sounds," and use that to guess what the main idea might be. Encourage them to change their guesses as necessary as they read.

**Guided and independent practice:** Discuss students' responses. Have them justify their selection of the main idea by explaining how the details support the main idea. Encourage students to add the names and sounds of other insects to the web.

**Assessment:** Note whether students are able to select the main idea and justify their choice. If not, model the process and provide more practice.



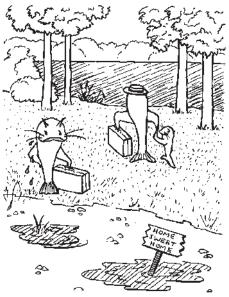
# **Student Pages**

# **Lesson 7: Strange Catfish**

Read the articles, and answer the questions that follow:

### Strange Catfish

One kind of catfish is called the glass catfish. Its body is like a thin piece of glass. You can look through its skin and see its insides. Another kind of catfish is called the upside-down catfish. This strange fish often swims on its back. But the strangest catfish of all is the walking catfish. The walking catfish can "walk" on land by using its tail and fins to push itself along the ground.



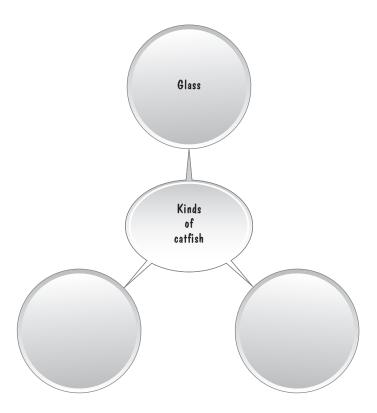
Credit: Norma Kable.

- 1. Which of the following sentences best states the main idea of this paragraph?
  - a. One kind of catfish swims upside down.
  - b. There are some mighty strange creatures in the catfish family.
  - c. The walking catfish is the strangest catfish of all.
  - d. One catfish has a body that is like a thin piece of glass.

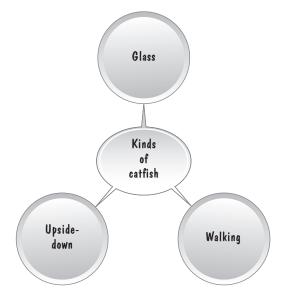




2. One way of showing main ideas and details is to use a web. The main idea or main word goes in the center. The supporting details are placed around the center circle. Part of the web here has already been filled in. Fill in the web's empty circles.



Compare your answers with those in the sample web below. The words that you use might be different, but the ideas should be similar.



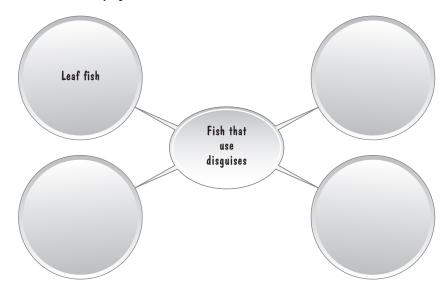
Copyright © 2010 by John Wiley & Sons, Inc.



### Fish That Use Disguises

Some fish use their shapes and colors to hide themselves. They disguise themselves. The leaf fish is very flat and is brown with white spots. It looks just like a leaf floating on the water. But if a small fish swims nearby, it soon shows that it is not a dead leaf but a live predator. It quickly opens its very large mouth and eats the smaller fish. The flatfish can make its body very flat. As it lies on the bottom of the sea, it can make its body match the sea bottom. The stonefish also hides on the bottom of the sea. It looks like a rock. When a fish swims by, the stonefish quickly gobbles it up. To protect itself from sharks and other dangerous creatures, the stonefish has thirteen poisonous spines. Pipefish have long, thin bodies. With their tubelike bodies, they can easily hide in seaweed. They can also change color so they can match the color of the seaweed where they are hiding.

- 3. Which sentence best states the main idea of this paragraph?
  - a. The pipefish has the best disguise.
  - b. The stonefish is the most dangerous fish.
  - c. Some fish use disguises.
  - d. Fish often eat other fish.
- 4. Fill in the web's empty circles.







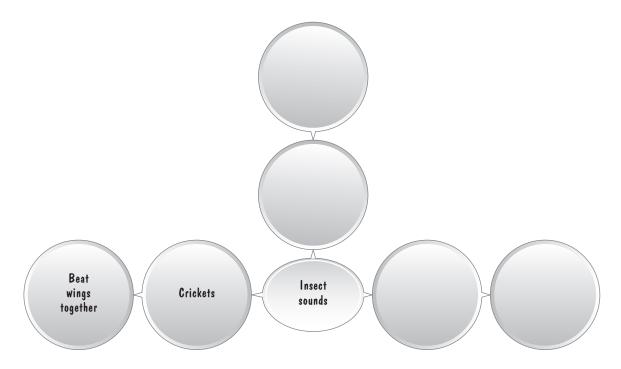
### **Lesson 8: Insect Sounds**

Read the article, and answer the questions that follow it.

#### Insect Sounds

Insects can't speak, but they can be heard. Crickets make noises by beating their wings together. Some grasshoppers rub their back legs against their wings. They look like violin players. Termites beat on their wooden homes. They sound like tiny drummers.

- 1. Which sentence best states the main idea of this paragraph?
  - a. Insects make sounds in many different ways.
  - b. Most insects use their wings to make noise.
  - c. Termites have a strange way of making noise.
  - d. Some animals use their wings to make noise.
- 2. Fill in the web's empty circles:



4 Lesson 8 Insect Sounds

54



### **Watch the Ears**

**Objectives:** Students use a web and frame to help construct a main idea and supply supporting details.

**Introduction:** Review the steps for inferring a main idea, and help the class determine and construct the main idea of the following paragraph. Explain that the wording of the topic sentence can vary but should contain the main idea of the paragraph, which is what all the sentences in the paragraph are about.

When the honey guide makes noise, the honey badger lifts its ears. The honey guide is a bird that lives mainly in Africa. It eats beeswax, but it can't open the beehive to get the wax. The honey badger is a small, furry animal that likes honey, but it has trouble finding it. Finding honey is easy for the honey guide. Once it has found the honey, the honey guide starts chattering. When the honey badger hears the chattering, it comes running. It soon digs its way into the beehive. The honey badger eats the honey, and the honey guide eats the beeswax.

Introduce answer organizers and frames, which are designed to help students construct responses. Answer organizers tell students what kinds of responses are needed. In this lesson, students are asked to supply a main idea and three supporting details. Frames help students frame their responses. They supply key words and phrases and provide blanks for students to fill in a portion of the responses. These aids provide structure and the kind of language needed for constructed responses. Ultimately, answer organizers and frames are faded so that students are responding on their own. To introduce answer organizers and frames, have students read the title of the article in the Student Pages, "Watch the Ears," and use that to guess what the main idea might be. Encourage them to change their guesses as necessary as they read. Also point out the answer organizer and frame, and explain that these will help them write their answers.

**Guided and independent practice:** Discuss students' responses. Have them justify their construction of the main idea, and compare their completed frames with the sample provided. Explain that their wording might differ from the samples, but the ideas should be approximately the same.



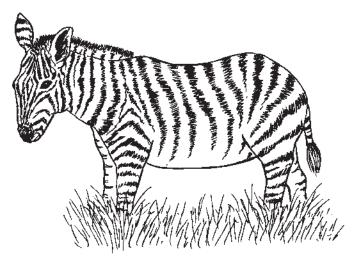
# **Student Pages**

# **Lesson 9: Watch the Ears**

Read the article, and answer the questions that follow.

#### Watch the Ears

A zebra's ears are worth watching. If a zebra's ears are standing straight up, it's a sign that the zebra is feeling calm. If the zebra's ears are pointed forward, then danger may be near. Ears pointed forward mean that a zebra is afraid. If a zebra's ears are pointed backward, you better hope that there is a fence between you and the striped creature. Ears flattened backward are a sign of anger. The zebra may be getting ready to attack.



Credit: Norma Kable.

The main idea of this article is that a zebra's ears show

The main idea is supported by information from the article. The article explains that if the zebra's ears are straight up, the zebra is feeling

If the zebra's ears are pointed forward,

If the zebra's ears are pointed backward,

# The Whale Shark

**Objectives:** Students use an answer organizer and frame to help construct a main idea and supply supporting details.

**Introduction:** Have students read the title of the article in the Student Pages, "The Whale Shark," and use that to guess what the main idea might be. Encourage them to change their guesses as necessary as they read. Also have them complete the answer organizer and frame.

**Guided and independent practice:** Discuss students' responses. Explain that there are different ways of wording responses, but the ideas should be approximately the same.

# Lesson 11

# **Keeping Safe**

**Objective:** Students use an answer organizer to help identify a main idea and supply supporting details.

**Introduction:** Have students read the title in the article in the Student Pages, "Keeping Safe," and use that to guess what the main idea might be. Encourage them to change their guesses as necessary as they read. Also have them complete the answer organizer and frame.

**Guided and independent practice:** Discuss students' responses. Explain that there are different ways of wording responses, but the ideas should be approximately the same.



**Student Pages** 

# **Lesson 10: The Whale Shark**

Read the article, and answer the questions that follow it.

#### The Whale Shark

The whale shark was named for its size. It is a shark, but it is as big as a whale. A whale shark is about 30 feet (9 meters) long. Some whale sharks have grown to be 60 feet long (18 meters). That is as long as four large cars parked in a row. A whale shark can weigh as much as 72,000 pounds (32,658 kilograms). That is about how much 20 large cars would weigh. The only sea creatures bigger than the whale shark are the large whales.



2. Fill in the frame answer. Use the boxes above to help you.

The main idea of this article is that the whale shark

The main idea is supported by information from the article. The article explains that the whale shark is

and



### **Lesson 11: Keeping Safe**

Read the article, and answer the questions that follow it.

### Keeping Safe

Some fish have unusual ways of keeping themselves safe. When puffer fish are in danger, they fill themselves with water or air. They puff themselves up to twice their normal size. This makes the puffer fish look frightening. It makes them harder to eat, too. Porcupine fish also double their size by gulping water or air when attacked. But a porcupine fish is covered with needles. These needles lie flat until the porcupine fish swells up. Then they stick out. Any enemy who tries to bite a porcupine fish gets a mouthful of cuts.

1. Write your answers in the boxes.

What is the main idea? (What are all the sentences talking about?) Write the main idea below.	What details support the main idea? (Which details are giving examples of the main idea? See if you can find two. Be sure to explain how each way of keeping safe works.) Write the details below.





	. Fill in the frame answer. Use the boxes above to help you.
	he main idea of this article is that some fish
article	The main idea is supported by information from the article. The explains that the puffer fish can
	his helps the puffer fish because
	he porcupine fish can
	his helps the porcupine fish because
ar	This helps the puffer fish because  The porcupine fish can

Copyright  $\circledcirc$  2010 by John Wiley & Sons, Inc.

### Lesson 12

### **Alligators**

**Objectives:** Students identify and use the main idea to create a title.

**Introduction:** Review the concept of a good title. Remind students that a good title tells what an article or story will be about and also tries to get the reader interested. Explain that the title of the article in the Student Pages, "Alligators," is too general to be a good title. Explain to students that they will be reading the article to get the main idea and also to think of and write a better title.

**Guided and independent practice:** Have students compare their completed responses with the sample response. Explain that there are different ways of wording responses, but the ideas should be approximately the same. Then have students create a better title for "Rhinos and Tickbirds," the next article in the Student Pages. Discuss students' responses. Explain that titles can differ but should give or at least hint at the main idea of the article.

#### Lesson 13

#### **Parrotfish**

**Objectives:** Students identify and use the main idea to create a title.

**Introduction:** Have students read the title of the article in the Student Pages. Discuss the fact that "Parrotfish" is too general to be a good title. Explain to students that they will be reading the article to get the main idea and also to think of and write a better title.

**Guided and independent practice:** Discuss students' responses. Explain that titles can differ but should give or at least hint at the main idea of the article. Talk over how the parrotfish keeps itself safe while it sleeps.

**Assessment:** Note whether students are able to create a title that reflects the article's main idea. If they have difficulty, model the process and provide more practice.

#### **Lesson 12: Alligators**

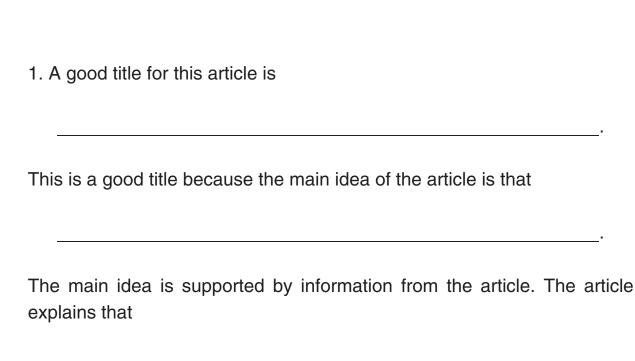
Read both of the articles, and answer the questions that follow them.

#### **Alligators**

With its strong jaws and slashing tail, the alligator is a killer. But it can be a helpful animal too. Alligators dig large holes about five or six feet deep. When winter comes, the holes are warm homes. The holes also hold water. So when water is hard to find, the holes become the alligators' wells. Other animals can drink from the wells, too. Water from the alligators' wells also keeps many kinds of plants alive. Everyone knows that alligators can be killers. But during very dry times, alligators can be lifesavers.

This article is called "Alligators." What could be another title for it? Use information from the article to support your answer. To answer this question, first decide what the main idea is. Then think up a title that tells what the main idea is. Write your title. Explain that this is a good title because it tells what the main idea is. Then tell what the main idea of the article is. Give details from the article that support the main idea. Use the frame to help you.





The article also tells that

Now compare your answer with this sample answer:

A good title for this article is "Helpful Alligators." This is a good title because the main idea of the article is that alligators can be helpful. The main idea is supported by information from the article. The article explains that alligators dig holes and that these holes fill up with water and become wells that other animals can drink from. The article also tells that the water can help keep plants alive.

Your answer does not have to be exactly like the sample, but your title should give the main idea, and you should explain why your title tells what the main idea is.

#### Rhinos and Tickbirds

Animals can be a big help to one another. The tickbird spends much of its time on the back of a rhino. It eats bugs off the rhino's back. In return for a free ride and a free meal, the tickbird acts as a lookout. The rhino has poor eyesight, so the tickbird watches for danger. Should a dangerous animal appear, the tickbird gives out a warning cry.

2. This story is called "Rhinos and Tickbirds." What could be another title for it? Use information from the article to support your answer.

A good title for this article is	
This is a good title because the main idea of the article is that	_•
The main idea is supported by information from the article. The a	- rticle



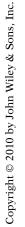
#### **Lesson 13: Parrotfish**

Read the article, and answer the questions that follow it.

#### Parrotfish

Parrotfish have a clever way of keeping themselves safe while they sleep. Before it goes to sleep, a parrotfish makes itself a sleeping bubble. The liquid for the bubble comes out of small openings around the parrot's head. It's a little like the way sweat comes out of small openings in our skin, only the liquid that oozes out is thicker than sweat. The bubble hides the parrotfish's scent so its enemies have a difficult time locating it. The slimy bubble also has a very bad taste. The bad taste keeps other sea creatures from trying to eat the parrotfish as it sleeps. The sleep bubble also acts like a burglar alarm. Should a sea creature bite or push against the bubble, the parrotfish will awaken and escape.





A go -	ood title for this article is		
- Γhis -	is a good title because the main idea of the article is that		·
	main idea is supported by information from the article.	The	 article

This story is called "Parrotfish." What could be another title for this story?

Use information from the article to support your answer.

### Lesson 14

#### **Meerkats**

**Objective:** Students use headings to help identify main ideas.

**Introduction:** Explain to students how headings can be used to help them get the main ideas of a longer article—one that has several sections. Tell students that whereas a title gives the main idea of the whole article, headings give the main ideas of the sections in the article. Show students headings in textbooks and magazines. Explain that often headings can be turned into questions and that they can then read to answer the questions and that this will help them understand what they are reading. Then do a think-aloud as you explain how you use headings. Point out the title and headings in the article in the Student Pages, "Meerkats," and encourage students to use the title and headings as they read the selection. Help them turn the headings into questions.

**Guided and independent practice:** Discuss students' responses. Ask them if and how using subheads helped them to understand better what they were reading.

**Extension:** Review the use of headings as students read textbooks, informational books, and other materials that have headings. Also have students supply headings when they write expository pieces.

# Lesson 15

#### **Two-Headed Snakes**

**Objectives:** Students identify supporting details that provide explanations, and use headings to identify main ideas.

**Introduction:** Encourage students to use the title and heading to find main ideas and supporting details as they read "Two-Headed Snakes" in the Student Pages.

**Guided and independent practice:** Discuss students' responses. Explain how using headings, besides announcing main ideas, can help readers locate information. For instance, using the heading, "Why Two-Headed Snakes Live Longer in Zoos," could help readers find the answer to the question: "Why are two-headed snakes better off in a zoo than they are in the wild?"

#### **Lesson 14: Meerkats**

This article has headings in addition to a title. The title tells you the main idea of a whole article. The headings tell you what the main idea of a section of the article is. The first heading tells you the main idea of the first part, the second heading tells you the main idea of the second part, and so on. As you read the article, use the headings. You can turn the headings into questions. For the first heading in the article, you can ask yourself, "How do meerkats keep safe?" For the second heading, you can ask yourself, "What do meerkats eat for dinner?"

Read the article, and answer the questions that follow.

#### Meerkats

1 Meerkats are built for life in the desert. The black rings around their eyes are like sunglasses. They help keep the bright desert sun from getting in the meerkats' eyes. Meerkats have very small ears. They can close up their ears so that sand doesn't blow in them during a sandstorm.

#### Keeping Safe

2 If you see a meerkat, chances are it is standing up on its hind legs and looking all around. Meerkats have lots of enemies. When they are outside their homes, at least one meerkat acts as a guard or sentry. If it sees an enemy, it calls out a warning. Meerkats let out a barking cry if they spot an eagle or other birds of prey flying overhead. Meerkats give a hooting sound if they spot a fox or other animal that is attacking from the ground.







Meerkats don't always run from their enemies. If they spot a hawk, snake, small fox, or other small predator, they march at it. They growl and bark at the predator as loud as they can. As they get closer, they jump up and down. Most predators take the hint and run, fly, or crawl away.

#### Eating Dinner

- 3 Meerkats eat beetles, spiders, worms, birds, eggs, small snakes, lizards, and roots of plants. They also eat small rats and mice. Meerkats even eat scorpions (SKOR-pea-unz). Scorpions are poisonous spider-like creatures. But meerkats aren't harmed by scorpion poison. Meerkats first bite off the scorpion's stingers and then eat the rest of the scorpion.
- 1. Section 1 is mainly about
  - a. where meerkats live.
  - b. how meerkats are built for desert life.
  - c. what life in the desert is like.
  - d. how big meerkats are.
- 2. What question does section 3 answer?
  - a. Why do meerkats eat scorpions?
  - b. What do scorpions look like?
  - c. Where do meerkats find their food?
  - d. What do meerkats eat?
- 3. What is the "Keeping Safe" section of the article mainly about?



### **Lesson 15: Two-Headed Snakes**

Read the article, and answer the questions that follow it.

#### Two-Headed Snakes

They say that two heads are better than one. But that isn't true if the two heads belong to one snake. For one thing, each head has a mind of its own. Sometimes one snake head wants to go one way, and the other wants to go the other way. They end up going nowhere. Another problem is that they fight over food. While they're deciding whether to go after a mouse or other animal, the animal will escape. An even bigger problem is that one head might see the other head as being food and attack it and even try to swallow it.

Why Two-Headed Snakes Live Longer in Zoos

- 2 Two-headed snakes don't have a chance in the wild. While they're fighting or figuring out which way to go, another animal will grab them and eat them. In captivity, two-headed snakes can live for a long time. One pair named Thelma and Louise lived in a zoo for seventeen years.
- 3 Scientists are now studying two-headed snakes. They want to see if the snakes can learn to work together to catch food.





Credit: AP Photo/James A. Finley.

1. Why is having two heads a problem for snakes? Use information from the article to support your answer. Write two details that the author included to show that having two heads is a problem for snakes.

Main Idea	Support
For a snake, having two heads is a problem:	Detail 1:
	Detail 2:



2. Why are two-headed snakes better off in a zoo than they are in the wild? Write your answer on the lines. If you don't remember why, go back
to paragraph 2 and find the sentence that explains.

Copyright © 2010 by John Wiley & Sons, Inc.



### The Mouse That Howls

**Objectives:** Students will identify main ideas and provide explanations.

**Introduction:** Encourage students to use the title and heading as they read "The Mouse That Howls" in the Student Pages.

**Guided and independent practice:** Discuss students' responses to the questions. Have students locate and read sentences from the article that provide support for questions 2 and 3.

**Assessment:** To assess students' progress, note whether they are using headings and how well they are using them. You might ask students to tell how they are using headings and how the headings help them.

#### **Lesson 16: The Mouse That Howls**

Read the article, and answer the questions that follow it.

#### The Mouse That Howls

1 Did you know that there is a mouse that howls? Grasshopper mice don't like other mice to come into their territory (TAIR-uh-tor-ee). If other mice do come into the place where the grasshopper mice live, the grasshopper mice bark and howl.

#### What Grasshopper Mice Eat

2 Most mice eat seeds or bread or cheese. But grasshopper mice eat grasshoppers, beetles, and even other mice and scorpions and small snakes. Grasshopper mice aren't harmed by the poison of scorpions and snakes.

#### Fierce Fighters

3 Grasshopper mice are small. They weigh only about half an ounce (14 grams). But they are fierce fighters. They have long claws, sharp teeth, and strong jaws. They are also very fast on their feet and can catch their prey in a flash. Grasshopper mice are said to be like tiny wolves.





- 1. The first paragraph tells mostly
  - a. why the grasshopper mouse howls.
  - b. how the grasshopper mouse howls.
  - c. what other animals do when the grasshopper mouse howls.
  - d. how loud the grasshopper mouse howls.
- 2. Why are grasshopper mice able to eat poisonous snakes and poisonous scorpions? Write your answer on the lines.

3. Why is the grasshopper mouse said to be like a tiny wolf? Write your answer on the lines.

### Lesson 17

#### The Fish That Fishes

**Objectives:** Students visualize, supply supporting details, and provide explanations.

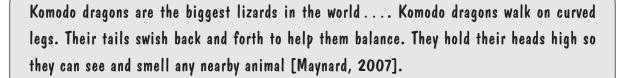
**Introduction:** Based on a review of thousands of studies over a period of three decades, Marzano and associates (2000) found nine instructional techniques that were highly effective in improving student achievement. One of these is "representing knowledge" by creating graphic organizers, creating pictures or models, dramatizing or portraying, and imaging. Knowledge can be stored verbally or nonverbally. Storing knowledge nonverbally in addition to verbally greatly increases both understanding and retention.

Have you ever had the experience of seeing a movie that was based on a book that you read and being disappointed because the characters or scenes didn't look the same as those you had created in your mind as you read the book? Imaging is a powerful strategy for enriching the experience of reading. To introduce visualizing, describe the strategy. You might ask students whether they have ever read a story or book and then watched a movie or TV version of the story or book. Discuss how the movie or TV version might have differed from the book version and how sometimes people prefer the version that they created in their minds to the one they saw on the screen or TV.

Explain the value of visualizing. Use a think-aloud with a high-imagery passage to show students how you use this strategy. Read aloud some high-imagery passages and have students draw the images that they create. Because each of us has a different background of experience and unique processing abilities and propensities, images are personal. In a class of twenty students, you can expect twenty different versions of a visualized main character or scene.

Explain to students that their images will be personal to them because each of us is a special person with different experiences and backgrounds. However, the image should adequately and accurately reflect the text that students are reading or hearing. Students must concentrate so that their images are rich in detail but accurate in portraying the information provided in the piece. To provide some carefully guided practice, have students create images for the following high-imagery descriptions.

When Laura walked behind Ma on the path to the barn, the little bits of light from the lantern leaped all around on the snow. The night was not yet quite dark. The woods were dark, but there was a gray light on the snowy path and in the sky there were a few stars [Wilder, 1935].



Encourage students to use the title of the article in the Student Pages, "The Fish That Fishes," to guess what the main ideas will be. Encourage them to make pictures in their mind to visualize what the fish that fishes looks like and what it does. Encourage inclusion of detail. Because some students have more artistic ability than others, place the focus on the content rather than the quality of the drawings. Demonstrate how stick figures might be used. As an alternative, have students write a description rather than create a drawing.

**Guided and independent practice:** Discuss students' responses. Ask for volunteers to show their drawings. Explain that drawings will differ because each of us has a different background of experience and different ways of looking at the world, but also explain that the drawings should show what was in the article. Display a picture of an anglerfish from a book or the Internet, and have students compare their drawings with what the fish actually looks like.

**Assessment:** To assess students' progress, note their drawings and written and oral descriptions of their images. Note too whether they are creating images on their own. From time to time, ask them what they are doing to make meaning as they read. Ask them to tell what strategies they are using and how these strategies are helping them comprehend better.

**Extension:** Have students extend imaging to fiction reading and reading in the content areas. Encourage them to create images as you read selections aloud to them. Ask questions such as the following to prompt students to elaborate on their images: "What are you picturing? What does the main character look like? How tall is he? What is he wearing? What is he doing? What expression does he have on his face? Is he frowning or smiling?" You might show students illustrated versions of the same story and discuss how different authors created different illustrations. Continue to model visualizing and encourage students to visualize as they read.

#### **Lesson 17: The Fish That Fishes**

Making pictures in your mind can help you to become a better reader. As you read the article about the fish that fishes, try to make pictures in your mind that show what the fish looks like and what it does.

#### The Fish That Fishes

Anglerfish (ANG-glur-fish) get their food in a surprising way. They fish for it. Anglerfish have a spine that grows out of their back fin. The spine can be very long or very short, but it bends over the mouth of the anglerfish like a fishing rod. On the end of this living fishing rod is a part that looks like a bug or a worm. The end part also lights up with a blue-green light. Most anglerfish live deep in the ocean. It is very dark deep in the ocean, so if the bait didn't light up, other fish wouldn't be able to see it.

The anglerfish has a round body and a very large mouth that is full of sharp teeth. When other fish stop to look at the lighted bait or try to eat it, the anglerfish snaps them up. Anglerfish have large jaws, so they can eat fish that are as big as they are, or even bigger. The anglerfish's teeth point inward so its prey cannot escape. Anglerfish are usually dark. That way, other fish can't see them. All they see is the bait.

1. In the column on the left, draw a picture that you made in your mind as you read about the anglerfish. In the column on the right, tell what your picture shows.



4. Why is the anglerfish able to catch fish that is bigger than it is?

### Lesson 18

### The Goliath Birdeater Spider

**Objectives:** Students visualize, supply supporting details, and provide explanations.

**Introduction:** Encourage students to use the title to guess what the main ideas in the article in the Student Pages, "The Goliath Birdeater Spider," will be. Encourage them to make pictures in their mind to visualize what the Goliath birdeater spider looks like and what it does.

**Guided and independent practice:** Discuss students' responses. Have volunteers show their drawings. Explain that drawings will differ because each of us has a different background of experience and different ways of looking at the world, but explain, too, that all of the drawings should show what was in the article. Display a picture of a Goliath birdeater spider from a book or the Internet, and have students compare their drawings with what the spider actually looks like.

### Lesson 19

# Giant Squid

**Objectives:** Students visualize, supply supporting details, and provide explanations.

**Introduction:** Encourage students to use the title of the article in the Student Pages, "The Giant Squid," to guess what the main ideas will be. Encourage them to make pictures in their mind to visualize what the giant squid looks like and how it moves through the water.

**Guided and independent practice:** Discuss students' responses. Ask for volunteers to show their drawings. Explain that the drawings will differ because each of us has a different background of experience and different ways of looking at the world, but explain that all of the drawings should show what was in the article. Display a picture of a giant squid from a book or the Internet, and have students compare their drawings with what the giant squid actually looks like.

**Assessment:** Note students' ability to visualize. If they have difficulty, model the process, and provide more practice.



### **Lesson 18: The Goliath Birdeater Spider**

Read the article, and answer the questions that follow it.

#### The Goliath Birdeater Spider

The Goliath (guh-LIE-eth) birdeater spider's name isn't quite right. Goliath means "large" and it is the biggest spider in the world, but it doesn't eat birds. However, it does eat mice. It also eats crickets and other bugs.

How the Goliath Birdeater Kills Its Prey

The Goliath birdeater can hurt its prey in two ways. Its hairs have sharp points on the end. It can stick its prey with those. It can also bite. It has sharp fangs. The fangs carry venom that poisons their prey. The venom can kill mice and a cricket but isn't strong enough to kill a person. But the bite can be painful.

A Frightening Sight

Goliath birdeaters can be a frightening sight. They are hairy and very large. From leg tip to leg tip, they are 12 inches (30 centimeters) across.



2. How does the Goliath birdeater kill its prey?

3. The article is called "The Goliath Birdeater Spider." What might be another title for this article?

Explain your answer with information from the article. Write your answer on the lines.



#### **Lesson 19: The Giant Squid**

Read the article, and answer the questions that follow it.

#### The Giant Squid

Giant squids, it seems, sometimes fight with whales. Toothed whales prey on giant squids. But giant squids fight back. No one has ever seen a giant squid fight a whale. But they have found marks on whales that were made by the tentacles (TEN-tuh-kuhlz) of a giant squid.

What a Giant Squid Looks Like

A giant squid has a long body. At the upper tip of its body are its fins. It uses these to guide itself through the water. Next comes the mantle. The mantle is the main part of the squid's body. Squid have a hard shell, but the shell is inside the mantle. Connected to the mantle is the funnel. A giant squid jets through the water by forcing water through the funnel. Sitting on top of the mantle is the head. The head holds a very large brain. Growing out of the head are eight arms known as "tentacles" (TEN-tuh-kehlz). Two of the tentacles are longer than the other six. From the tip of the fins to the tip of the longest tentacles, a giant squid can measure 60 feet (18 meters) or more.

Giant Eyes

No other creature has eyes as big as the giant squid has. Its eyes are as big as basketballs. It is very dark deep beneath the sea. The giant squid uses its giant eyes to find food.



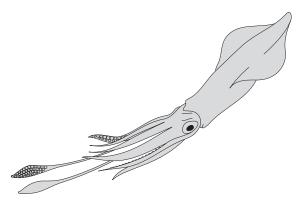


#### How a Giant Squid Catches Its Prey

Giant squids eat fish, smaller squid, and other sea creatures. When it spots prey, the giant squid grabs it with its long tentacles. Their tentacles have suckers that hold onto the victim. Inside the suckers are hooks that are known as teeth. The teeth are as sharp as knives. With its two long tentacles and six shorter ones, the squid pulls the prey into its mouth. It cuts up the victim with its sharp beak. Its beak is so strong that it can snap a steel underwater cable in two. (An underwater cable is thicker than your fist.)

#### How a Giant Squid Escapes from Its Enemies

Giant squids are tough fighters. With their tentacles and sharp beaks, they can put up a fierce fight. But they would rather flee than fight. The giant squid has a special trick to escape from a whale or other enemy. When attacked, it shoots out a blob of black ink. The ink forms the shape of a squid. While the enemy animal is looking at the blob of ink, the squid turns a whitish color so it is hard to see. Then it squirts water out of its funnel and jets away.

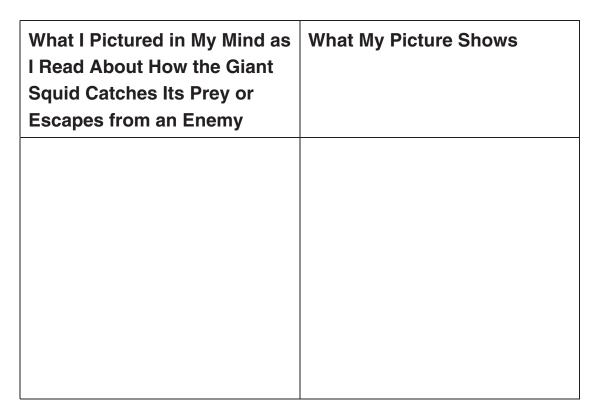


Credit: Clipart.com

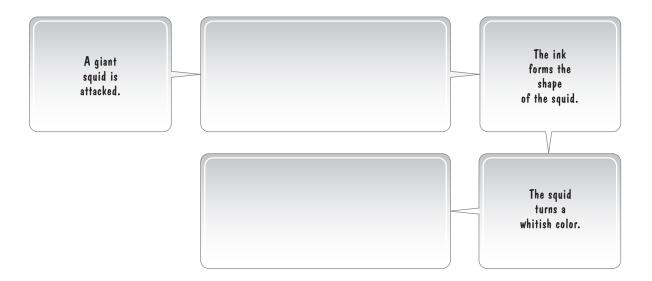
1. In the column on the left, draw a picture that you made in your mind as you read about how the giant squid catches its prey or escapes from an enemy. In the column on the right, tell what your picture shows.







2. In the empty boxes, write the missing steps that tell how a giant squid escapes from its enemies:



3. Why does the giant squid have such large eyes? Write your answer on the lines.

#### **End-of-Theme Reflection**

Discuss with students what they have learned about getting main ideas and supporting details and how they are using these skills. Ask what they have learned about animals and what they would still like to know. Have available copies of related books or other materials that extend the theme and encourage students to read them. Although the brief articles that students have read so far are building background knowledge and reading skill, students need to apply these skills to full-length selections. So that students might apply the skills and strategies that they have learned, select books that are well structured and have headings. Demonstrate to students how you use titles and headings to help you determine main ideas and grasp supporting details. Have them answer questions such as these:

- What were the main things that you learned from that book?
- What are the three to five most important ideas in the book?
- What strategies did you use to help you understand what you were reading?

The readability levels of the books listed below have been provided by Accelerated Reading (AR), except where noted otherwise. One book also has a three-digit Lexile designation. All are on a grade 3 to 5 reading level. However, readability formulas do not measure concept load, background needed to read a book, or interest level. You might want to examine the books you provide to students and use your professional judgment as to whether the books are appropriate for them.

Berger, Melvin, and Berger, Gilda. (2009). Dangerous Animals. 4.2

Hanna, Jack. (2009). *The Wackiest, Wildest, Weirdest Animals in the World*. **4.9** (estimated by Follett Library Resources)

Kalman, Bobbie. (2005). Endangered Komodo Dragons. 5.6

Landau, Elaine. (2008). Alligators and Crocodiles: Hunters of the Night. 4.1

Redmond, S. (2003). Tentacles: Tales of the Giant Squid. 3.5

Thomson, Sarah L. (2006). Amazing Snakes. 3.2

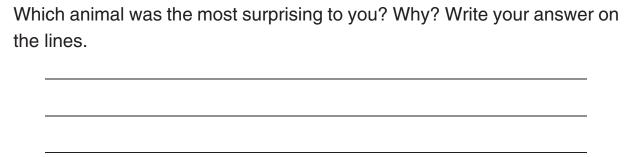
West, Tracey. (2009). *Amazing Animals of the Rainforest*. **5.2** (estimated by Follett Library Resources)

Williams, Brenda. (2008). Amazing Birds. 4.3, 750

Zoobooks magazines (zoobooks.com)







Here is where you can go to find out more about some of the animals in this section:

- Berger, Melvin, and Berger, Gilda. (2009). *Dangerous Animals*. New York: Scholastic. Gives facts about lions, tigers, grizzly bears, hippopotamuses, hyenas, rattlesnakes, and other dangerous animals. Asks true-false questions.
- Hanna, Jack. (2009). *The Wackiest, Wildest, Weirdest Animals in the World*. Nashville, TN: Thomas Nelson. Describes the platypus, pufferfish, lion, anaconda, and other strange animals.
- Kalman, Bobbie. (2005). *Endangered Komodo Dragons*. New York: Crabtree. Tells how Komodo dragons live and why they are endangered and gives fascinating facts about them.
- Landau, Elaine. (2008). *Alligators and Crocodiles: Hunters of the Night*. Berkeley Heights, NJ: Enslow Elementary. Has colorful photos and lots of interesting facts about these creatures.
- Redmond, S. (2003). *Tentacles: Tales of the Giant Squid.* New York: Random House. Describes the giant squid and tells how it lives.
- Thomson, Sarah L. (2006). *Amazing Snakes*. New York: HarperCollins. Explains where snakes live and how they catch food and keep safe from enemies.
- West, Tracey. (2009). *Amazing Animals of the Rainforest*. New York: Scholastic. Describes freshwater dolphins, gorillas, leopards, monkeys, and other animals.
- Williams, Brenda. (2008). *Amazing Birds*. Milwaukee: Gareth Stevens. Has lots of interesting information about a number of birds.
- Zoobooks. This magazine describes a different animal each month. zoobooks.com.







# Theme B Robots

Theme B, which explores the world of robots, provides additional practice with previously introduced main ideas and supporting details skills and strategies. In Lesson 22, students are introduced to the use of context clues to derive the meanings of words that may be new to them. Vocabulary knowledge is a key determiner of comprehension. One way to improve comprehension is to build students' vocabularies. To build vocabulary, Theme B introduces two potentially difficult words in each selection. In addition, students are provided with practice in using context. Instruction in context clues improves students' chances of deriving the meaning of a word from the context. This means that while reading for fun or to complete assignments, students will have a better chance of deriving the meanings of unfamiliar words and adding them to their vocabularies.



### Lesson 20

### **Review of Topic Sentences**

**Objectives:** Students identify topic sentences and supporting details.

**Introduction:** Review the concept of topic sentences. Using the following paragraph or a similar one, model once again how you determine whether the first sentence seems to be stating a main idea and how, if it seems to be, you note as you read the paragraph whether the details are supporting the hypothesized main idea. If some sentences are not supporting the main idea, you seek another main idea sentence. Explain that the main idea might be presented in a middle or even an ending sentence and that not all paragraphs have topic sentences.

Factory robots can do a lot of jobs. Factory robots can paint products. Factory robots can weld pieces of metal together. They can put products into boxes and seal the boxes shut.

After reviewing topic sentences, have students complete the exercise in the Student Pages for this lesson.

**Guided and independent practice:** Discuss students' responses. Note that the topic sentences appeared in different places in the paragraphs.







### **Review of Topic Sentences**

The stories in this section are about robots. As you get more practice understanding main ideas and supporting details, you will be learning what robots are like and the various jobs that they do.

### **Lesson 20: Review of Topic Sentences**

The topic sentence gives the main idea of a paragraph. Not all paragraphs have a topic sentence, but the one in the following article does. Often the topic sentence is the first one, but it can be anywhere in the paragraph. As you read this article, notice the details that support the main idea.

#### Robots

Robots make good workers. They never get tired. They can work 24 hours a day, 7 days a week, 52 weeks a year. And they never get bored. They can do the same job over and over again. They can put car parts together and paint cars faster and better than people can. And they won't get sick from paint fumes (fyuoomz) or burn themselves with a welding torch.





nt oı	That is the topic sentence for this paragraph? Remember that the to ence tells the main idea of the paragraph. It is what the paragraph is ut. The other sentences in the paragraph support the topic sentences in the paragraph support the topic sentences.
	e the topic sentence on the lines. Underline sentences in the paragrave that support the main idea.
-	
-	
-	Read the next paragraph, and answer the questions after it.
n	ost robots that can move around have wheels. But some robots move on treads like thos a tank. With treads, they can go through mud and up hills easily. Some robots loo d move like insects. They have three pairs of legs. With their six legs, these robots ca
eli e	mb into and out of holes and ditches. One kind of robot has just one leg. It uses tha If to hop by springing up into the air. Robots, it seems, have a number of ways of movin Jound.

2. Write the topic sentence on the lines. Underline sentences that support the main idea. *Hint:* The topic sentence is not always the first sentence in the paragraph,



### Lesson 21

### Sawfish

**Objectives:** Students identify main ideas and supply supporting details.

**Introduction:** Explain to students that some titles just hint at the main idea. Tell them that they are going to read an article that is titled "Sawfish." Ask them what they think the article might be about. Remind them that all the articles in this unit are about robots. Encourage them to think about both parts of the word *sawfish*. After students make their predictions, have them read the article to see how their predictions play out. Encourage students to change their predictions as they read if their predictions are not working out.

**Guided and independent practice:** After students have circled their answers to the questions after the article, discuss their responses and especially reasons for their choices. Stress the need to support responses. Discuss the nature of the underground forest and the way that Sawfish cuts down the trees. Discuss any words that posed problems.

**Extension:** Have students visit the Sawfish Web site at http://www.tritonlogging.com/engineering.html to find out more about Sawfish.





#### **Lesson 21: Sawfish**

Some titles tell you exactly what an article is going to be about. But other titles just hint at the article's main idea. The title of this article is "Sawfish." What do you think it will be about? Keep in mind that all the articles in this theme are about robots. What kind of a robot might be called "Sawfish"? Read the article, and answer the questions that follow it.

#### Sawfish

1 A robot by the name of Sawfish saws down trees that are underwater. In some places, dams have been built and nearby forests have been flooded. There are about 100 million trees that are underwater. The trees are dead, but they are not rotten. For human lumberjacks, cutting the trees down is dangerous and difficult. Lumberjacks are people who cut down trees. Some of the trees are hundreds of feet underwater. But for Sawfish, cutting the trees down is no problem, no matter how big they are or how deep the water is.

2 Sawfish is a small submarine with a very large saw. It also has TV cameras. An operator on land uses these cameras to guide Sawfish. When it gets to a tree, Sawfish puts its arms around the bottom of the tree's trunk. Then it pulls out a heavy plastic bag and wraps it around the tree trunk. It quickly fills the bag with air from a tank that it carries. Then it saws across the bottom of the tree. It saws below the air-filled bag. After the tree has been cut through, Sawfish lets it go. The air-filled bag wrapped around the tree's trunk carries the tree to the surface.

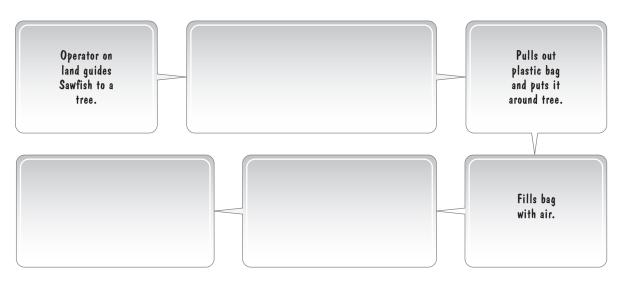






Credit: Triton Logging.

- 1. Paragraph 1 is mainly about
  - a. what lumberjacks do.
  - b. where trees grow.
  - c. how Sawfish got its name.
  - d. what Sawfish does.
- 2. Paragraph 2 is mainly about
  - a. what Sawfish looks like.
  - b. how Sawfish cuts down trees.
  - c. what trees are used for.
  - d. where Sawfish works.
- 3. In the boxes, write the missing steps that tell how Sawfish cuts down a tree and sends it to the surface:



Lesson 21 Sawfish

# Lesson 22

### Rovers

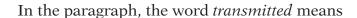
**Objectives:** Students identify main ideas and supporting details and use context clues.

**Introduction:** This lesson introduces students to the use of context clues. In the article in the Student Pages and most of the ones that appear after it in this book, two words that students may not know are underlined. Students are to use context to derive a possible meaning for each of the two words. In the vocabulary questions in the exercise, students select from four definitions the one that best defines each underlined word.

To introduce the use of context clues, explain that each article will now have two words that are underlined. Tell students that if these words are new to them, they should use the context to help them make a good guess as to the meaning of each underlined word. When reading the selection, they can make a quick guess so they don't interrupt the flow of their reading. However, when they are answering questions about the words, they should look at the four possible definitions. Then they should go back to the article and take a close look at the way the words are used in the article. Next, they go back to the vocabulary question and select from the four definitions the one that best tells what each word means.

Explain to students that when using context, often it is helpful to think about what the article has said so far and also to read beyond the sentence in which the underlined word appears. Do a think-aloud as you model the process of using context. To make the think-aloud authentic, you might select a passage that has some words that are unfamiliar to you. Then guide students as the class cooperatively uses context with the following sample paragraph:

Someday robot suits might help people who are too weak to get around. The robot suits will help people walk, sit in chairs, and even go up stairs. Signals from the person's nerves and muscles are sent to a computer. The computer will figure out what the signals that have been transmitted mean. The computer will send signals to tiny motors in the suit. The miniature motors will help lift and move the person's arms and legs. With help from the robot suits, people who are now too weak to move around on their own will be able to lead more independent lives.



- a. fixed.
- b. sent.
- c. found.
- d. passed.

In the paragraph, the word *miniature* means

- a. costing a lot of money.
- b. very quiet.
- c. very easy to make.
- d. very small.

After the class has used context to derive the meanings of the underlined words, introduce the article in the Student Pages for this lesson entitled "Rovers." Discuss what a rover is. Ask students to predict why robots might be called "rovers." Have students look at the illustration in the lesson. Have them tell what they notice about Rover and where they think it might be. Remind students that reading the title and headings and looking at illustrations can help them to read with more understanding. Have students predict what the article might tell them about the Rovers. Also remind students that they will be using context to get the meanings of the underlined words in the article.

**Guided and independent practice:** After students have completed the exercises, discuss their responses. Discuss in particular their responses to the vocabulary items. To provide added practice with the new vocabulary words, include them in the discussion of the article. Have students tell why the Rovers are said to be well equipped and also how they are able to analyze soil samples.

**Assessment:** Note whether students are going back to the selection to find the target vocabulary words and to see how the words are used in the article. If they have difficulty, model the process and provide more practice.

**Extension:** Have students visit the Rovers' Web site at http://marsrovers.nasa.gov/home/index.html to get the latest information on the robots.



# **Student Pages**

### **Lesson 22: Rovers**

Read the article, and answer the questions that follow it.

#### Rovers

Some robots are telerobotic. Tele means "distant" or "far away." Telerobotic robots are directed by people, but the people are someplace else. The most famous telerobotic robots are the Rovers.

### Rovers Depend on People on Earth

Rovers have been sent to Mars. Right now there are two Rovers on Mars. Their names are Spirit and Opportunity. In 2011, a third Rover will be sent to Mars. Drivers on Earth start a Rover's engine. Then they guide it as it travels on flat land or goes over dunes and up hills. The operators guide it very carefully. If Spirit or Opportunity gets stuck in the sand, the operators can try moving the wheels in different ways. But if that doesn't work, the Rovers might be stuck there for all time. There are no tow trucks on Mars.

#### Rovers Have What They Need for Their Work

The Rovers are well equipped for exploring Mars. Both Rovers are packed with cameras and sensors. Sensors can pick up sounds and movement. With their cameras, they can take long shots of Mars and they can take close-ups. They have magnifying cameras that make a grain of sand look like a giant boulder. The Rovers have robot arms so they can pick up soil or rocks. Then they can use instruments on board to analyze the samples of the soil so that scientists on Earth can learn what the samples are made of. The Rovers even have a tool that they can use to dig inside rocks. That way the scientists on Earth can see what is inside





the rocks and also have the Rovers pick up bits on the inside of the rock and analyze them.

#### Rovers Are Slow Movers

4 The Rovers move slowly and carefully. A Rover might travel only a hundred yards in an hour. And most days it travels only a few hundred yards. *Spirit* took more than two months to climb up a tall hill and another two months to climb back down again.



Credit: NASA.

- 1. A good title usually tells what the main idea of an article or story is. The title of this article is "Rovers." What could be another good title for this article? Circle the letter of the title that you think is best. Then explain your answer with information from the article. Use the frame to help you answer the question.
  - a. "Telerobotic Robots"
  - b. "Robot Helpers"
  - c. "The Red Planet"
  - d. "Robots on Mars"



2. "	"
is a good title because it tells the readers what this article is going to about. The article tells why the robots	o be
The article tells how the robots	_
and how the robots	-
The article also tells	

These details show that the title tells the main idea of the article.

- 3. Paragraph 2 is mainly about
  - a. how many Rovers are on Mars.
  - b. how people on Earth operate the Rovers.
  - c. why the Rovers are on Mars.
  - d. why the Rovers can go up and down hills.
- 4. Paragraph 3 is mainly about how Rovers
  - a. move on Mars.

- c. are guided.
- b. help explore Mars.
- d. go up hills.

Copyright © 2010 by John Wiley & Sons, Inc.



- 5. According to paragraph 2, why do the drivers on Earth guide the Rovers very carefully?
  - a. Rovers are hard to guide.
  - b. If the Rovers get stuck, there is not much they can do to help them.
  - c. It took a long time to build the Rovers.
  - d. Rovers can do many of the things that a person could do.

Sometimes there are new words used in the articles that you read. One way to learn new words is to use clues in the article to guess a new word's meaning. The following questions are asking you to choose the meanings of two words from the article. First look at the words below that are in *italics*, which means the letters are slanted. Next, read the possible meanings that are listed in answer choices **a** to **d**. Then go back to the paragraph and see how the words are used. In the article, the words are underlined. Then for each word, circle the letter of the best meaning.

- 6. In paragraph 3, the word equipped means
  - a. is easy to run.
  - b. works well.
  - c. has parts that have been fixed.
  - d. has things that are needed.
- 7. In paragraph 3, the word analyze means
  - a. keep away from.
  - b. lift up.
  - c. break into small parts.
  - d. find out what something is made of.



**Objectives:** Identifying main ideas and supporting details and using context clues.

**Introduction:** Write the title of the selection on the board. Note that T-52 doesn't give much of a clue as to what the article might be about. Have students look at the illustration to see what T-52 looks like. Ask students to predict what the article might tell about T-52.

**Guided and independent practice:** After students have completed the exercises, discuss their responses. Talk over why T-52 is able to rescue people in places where humans might not be able to go. Also discuss why T-52 is described as a mammoth bulldozer. Ask how a mammoth bulldozer would be different from a regular bulldozer. Also discuss what some possible titles might be. Remind students that the titles that they create should tell what the main idea is and that they need to explain why the title they have made up gives the main idea.

**Assessment:** Note students' performance on this and previous exercises. Have they mastered key skills? If not, provide additional instruction and practice.

# Lesson 24

## The Pet Contest

**Objectives:** Students identify main ideas and themes, and use context clues.

**Introduction:** Ask how many students have pets. Have them tell what kind of pets they have. Ask if they have ever been in a pet contest. Have them read the story to find out about a boy by the name of Jason and his unusual pet.

**Guided and independent practice:** Discuss what Jason's pet was and why he had a robot dog for a pet. Discuss why the robot dog was not expensive. Discuss what the theme of the story is. Discuss why "Make the best of what you've got" is the theme of the story. Note that although the boy preferred having a real dog, he had fun with the robot dog. To foster making connections, give examples of times when you made the best of what you had and invite students to tell about a time when they made the best of what they had. Discuss responses to the other questions.





# **Student Pages**

## **Lesson 23: T-52**

Read the article, and answer the questions that follow it.

### T-52

- 1 One telerobotic robot was built mainly to <u>rescue</u> people from danger. The T-52 Rescue Robot will go into burning buildings, pick up people or objects, and return.
- 2 T-52 is a giant of a robot. It stands 10 feet tall and weighs 10,000 pounds. It looks like a mammoth bulldozer with arms. With its powerful arms, T-52 can lift 1,000 pounds.
- 3 T-52 has seven cameras built into it. Standing outside the burning building, T-52's operator can watch on one of seven screens known as monitors and see what's going on inside the building. Using wireless controls, the operator directs T-52's movements.



Credit: TMSUK.





The article is called "T-52." What could be another title for it? This time make up a title on your own. Explain your answer with information from the article. Remember the title should tell what the main idea of the article is.

Use the frame to help you answe	r the question.
1. Another title for this article is	
"	.,,,
This is a good title because the a	rticle tells that
The article also tells how	·
These details show that the title to	ells the main idea of the article.
2. According to paragraph 3, an on inside a building by	operator uses T-52 to see what's going
a. watching TV screens.	c. using mirrors.
b. sitting inside the T-52.	d. standing just behind the T-52.
3. Paragraph 2 is mainly about	
a. how T-52 is operated.	c. what T-52 looks like.
b. who controls T-52.	d. why T-52 is needed.
4. In paragraph 1, the word rescu	re means
a. save from danger.	c. explain what is happening.

5. In paragraph 2, the word *mammoth* means

a. very unusual.

b. help with a problem.

c. very frightening.

b. very large.

d. very friendly.

d. take care of.

106 Lesson 23 T-52





### **Lesson 24: The Pet Contest**

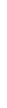
So far, you have been reading nonfiction articles about robots, but there have been lots of stories written about robots. Here is a story about a boy and his robot pet. Read the story, and answer the questions that follow.

#### The Pet Contest

- 1 I had forgotten about wanting a dog until the principal came on the loudspeaker and said there was going to be a pet contest. The winners of the contest were getting a book of their choice
- at the bookstore around the corner. Two things I like: that's books of my own and dogs. Mom and Dad would like to get me a dog, but they can't. We live in an apartment that has a no-pets rule. You can't have a dog or a cat or even a bird. If the owner finds out you have a pet, out you go.
- 2 I wouldn't want to get kicked out. I like the apartment. It's right across the street from the park. That's where I spend most of my free time. And the rent is cheap. Mom and Dad work hard. But they don't make all that much money.
- 3 When I got home from school, Mom asked me how everything was. "Fine," I said. But the look on my face didn't match my words. Mom kept at me until I told her about the pet contest. I could see that she wished that she could let me get a pet. That night, she and Dad had a long talk.
- 4 The next night Dad came home carrying a big box. He had a wide smile on his face. "Got a surprise for you, Jason," he said, as he handed me the box. "Open it."
- 5 The box was kind of heavy. I like to guess what's inside boxes before I open them. But this one had me puzzled. I quickly opened the box. There, staring me in the face, was a dog. But the dog didn't bark or even move. I looked over at Dad.



- 6 "You've got to charge him up," Dad said. You see, Dad had gotten me a robot dog. I was surprised because the dog looked <u>expensive</u>. I knew money was tight. I didn't want Dad spending it on a fake dog. But Dad said he bought it from a guy at work. The dog was broken. So the guy sold it cheap. Dad is great at fixing things. He ordered some spare parts and got the dog working again.
- 7 I would <u>prefer</u> having a real dog, but it was kind of fun playing with the robot dog. I named it Robbie, and I taught it some tricks. I taught it to sit up and roll over. I also taught it to go get a ball when I throw it. That's a hard trick. I can't throw the ball too far. Robbie won't be able to see it. Its camera eyes can see for only about 20 yards.
- When the day of the contest rolled around, I shined up Robbie and made sure he was charged up. Kids brought in all kinds of pets. There were pet dogs of all sizes and lots of pet cats. There were also pet fish and pet birds and pet hamsters. Prizes were being awarded for the best-behaved pet, the smartest pet, the biggest pet, and the most unusual pet. When the judges looked at Robbie, they got a puzzled look on their faces. They began talking among themselves. Some of the judges said that the contest was only for live pets. But then one of the judges said that the rules didn't say that the pets had to be live animals. The judges asked, "What can your pet do?" Robbie did all his dog tricks. He sat up. He rolled over. He ran after the ball that I threw and brought it back to me. And then I had him do some tricks that only robot dogs can do. He played a song with his built-in CD player. And he took my picture with his built-in camera. The judges were surprised.
- 9 Robbie didn't win first prize. The judges decided that should go to a real live pet. But Robbie got a prize for most unusual pet. To tell you the truth, I would still rather have a real live dog. But in the meantime, I'm going to hang on to Robbie.







- 1. What is the theme of the story that you just read? The main idea of a story is its theme. The theme is an idea that the author is trying to get across. Often it's a lesson about life. The theme of a story might be, "Share with others," "The best things in life are free," or "To have friends, you have to be a friend." Think about the story. What was the author saying in the story?
  - a. Make the best of what you've got.
- c. Contests are fun.
- b. Dogs make good pets.
- d. We can learn things from our pets.

Did you pick "Make the best of what you've got"? That is the theme of the story. Jason wanted a dog to enter in the school's pet contest, but he understood that he couldn't have a real dog. The apartment where his family lived didn't allow pets. Jason trained his robot dog and entered it in the school's pet contest.

- 2. Paragraph 7 is mainly about
  - a. what Jason thought of Robbie. c. how Jason took care of Robbie.
- - b. the tricks that Jason taught the dog.
- d. why people like robot dogs.
- 3. In paragraph 6, the word expensive means
  - a. hard to get.

- c. having many parts.
- b. costing a lot of money.
- d. hard to learn how to use.
- 4. In paragraph 7, the word *prefer* means
  - a. stay close to.

c. do not care much about.

b. stay next to.

d. would rather have.



# **End-of-Theme Reflection**

Discuss the end-of-theme reflection that appears on the Student Pages that follow. Have available copies of the books suggested here or others that extend the theme and encourage students to read them. Although the brief articles that students have read so far are building background knowledge and reading skill, students need to apply these skills to full-length selections. So that students might apply the skills and strategies that they have learned, select books that are well structured and have headings. Demonstrate to students how you use titles and headings to help you determine main ideas and grasp supporting details. Have them answer questions such as:

- What were the main things that you learned from that book?
- What are the three to five most important ideas in the book?
- What strategies did you use to help you understand what you were reading?

The readability levels of the books listed below have been provided by Accelerated Reading (AR). All are on a grade 3 to 6 level. However, readability formulas do not measure concept load, background needed to read a book, or interest level. You might want to examine the books and use your professional judgment as to whether the books are appropriate for your students.

Davis, Barbara J. (2010). The Kids' Guide to Robots. 5.3

Hyland, Tony. (2008). How Robots Work. 5.7

Hyland, Tony. (2008). Space Robots. 6.0

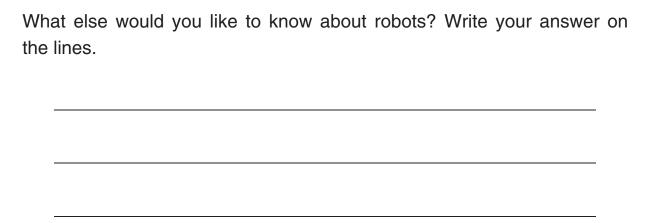
Kortenkamp, Steve. (2009). Space Robots. 3.5





What die	l you learn about	robots? V	Vrite your an	swer on the li	ines.
  Which o	f the robots that y	ou read a	bout do you	think is most	useful? W





Here are some books where you can find out more about robots:

Davis, Barbara J. (2010). *The Kids' Guide to Robots*. North Mankato, MN: Capstone Press. About a number of different kinds of robots and the jobs they do.

Hyland, Tony. (2008). *How Robots Work*. Mankato, MN: Smart Apple Media. Explains how robots move, use their senses, and do different kinds of jobs.

Hyland, Tony. (2008). *Space Robots*. Mankato, MN: Smart Apple Media. About the Rovers on Mars and other space robots.

Kortenkamp, Steve. (2009). *Space Robots*. North Mankato, MN: Capstone Press. About some of the discoveries that robots might make in space.