Vocabulary in Context

1. **resemble**
   Some house cats resemble, or look like, cougars, but cougars are much bigger.

2. **detecting**
   Excellent eyesight and a good sense of smell help lions in finding, or detecting, their prey.

3. **keen**
   All cats have sharp, keen night vision. It is a great aid to them when hunting.

4. **vary**
   The color of tiger stripes can vary from black and orange to black and white.

TARGET VOCABULARY

- **resemble**
- **detecting**
- **keen**
- **vary**
- **unobserved**
- **mature**
- **particular**
- **available**
- **ferocious**
- **contentment**
Lesson 10

▶ Study each Context Card.
▶ Use a dictionary to determine the part of speech of each Vocabulary word.

5 unobserved
Hiding under the rug, this kitten is unobserved, or unseen, by its owner.

6 mature
As cougars mature from cubs to adults, their eyes change from blue to greenish-yellow.

7 particular
A house cat may prefer a particular, or certain, brand of food. It will eat only that kind.

8 available
Big cats can live only where plenty of food is available, or obtainable.

9 ferocious
The savage, ferocious roar of a tiger signals that the animal is angry.

10 contentment
Like wild cats, house cats purr with contentment when they are satisfied.
Read and Comprehend

☑️ TARGET SKILL

Main Ideas and Details  As you read “Cougars,” look for the main ideas, or most important points, that the author makes about cougars and their habitats. Each main idea is supported by details, such as facts, examples, and descriptions. You can use these main ideas and important details to summarize part or all of a text. To keep track of the main ideas in each part of the selection, use a graphic organizer like this one.

☑️ TARGET STRATEGY

Monitor/Clarify  As you read “Cougars,” remember to monitor, or notice, how well you understand the text. If there is something you do not understand, pause to clarify it, or make it clear.

RI.5.2 determine two or more main ideas and explain how they are supported by details/summarize; RI.5.3 explain the relationships between individuals/events/ideas/concepts in a text
PREVIEW THE TOPIC

Animal Behaviors

Have you ever seen a dog trample the ground in circles before it settles down to sleep? Have you noticed how squirrels drop nuts from trees to crack the shells? Behaviors like these teach us about animals’ intelligence and adaptability. Observing the behaviors of wild animals helps us find ways to protect both the animals and their habitats.

In “Cougars,” the author shares many details about the behavior of these wild cats. Although cougars are not easy to study, scientists have tried to learn as much as they can about them. In certain regions, cougars are an important part of the ecosystem and play a crucial role in the chain of life.
MEET THE AUTHOR

PATRICIA CORRIGAN

Patricia Corrigan began writing for her local newspaper while she was still in high school. Since then, she has been a writer for the St. Louis Post-Dispatch and has published numerous magazine articles, nonfiction books for adults, and nature books for children. She loves to travel and has taken trips to Argentina and Egypt.

Lesson 10

ANCHOR TEXT

TARGET SKILL

Main Ideas and Details
Identify a topic’s main ideas and the details that support them.

GENRE

Informational text gives facts and details about a topic. As you read, look for:
- information that is clearly organized
- domain-specific vocabulary that aids understanding
- photographs and captions that enhance the text

Go Digital

RI.5.2 determine two or more main ideas and explain how they are supported by details/summarize; RI.5.4 determine the meaning of general academic and domain-specific words and phrases; RI.5.10 read and comprehend informational texts
What can a scientist learn by observing the behaviors of a particular animal?
Cougars are seldom seen and rarely heard. In fact, they often live their entire lives unobserved by humans!

But we do know that these members of the cat family live in eleven western U.S. states. They are found from the southernmost tip of Alaska down to where the California border meets Mexico and east all the way to the edge of Texas. Their cousins, Florida panthers, live in Florida. In Canada, cougars are found in British Columbia and parts of Alberta. Cougars also live throughout Mexico, Central America, and South America.

In different areas of the world, cougars have different names. They may be called mountain lions, wildcats, pumas, painters, fire cats, swamp lions, or catamounts. In Mexico, Spanish for cougar is el león (leh OHN), which means “the lion.” And sometimes they are known by nicknames like “ghost of the wilderness” and “ghost walker.”

Fortunately, cougars are able to live in many different habitats. Over time, they have adapted, or evolved, for living in places such as snow-capped mountains, jungles thick with vegetation, cool pine forests, grassy plains, and murky swamps. For instance, cougars that live in northern mountains tend to be larger and have a thicker coat of fur than cougars that live elsewhere. They learned to climb trees. And they also can swim if necessary, but usually prefer to stay dry—like their relative, the house cat!
The average cougar measures from 3.3 to 5.3 feet long and stands about 2 feet high at the shoulder. Adult male cougars weigh up to 225 pounds, and adult females usually are slightly smaller. A cougar’s tail may measure up to 32 inches, almost two-thirds the length of the animal’s body.

**ANALYZE THE TEXT**

**Main Ideas and Details** What is the topic of this selection? How do you know? Choose a paragraph on one of these two pages. State its main idea and explain how it is supported by details.

Cougars don't hunt from trees, but a high branch makes a good lookout spot.
Cougars have good balance and can easily leap over fallen trees and onto rocks without slowing down.

The cougar is one species (SPEE sees), or kind, of wild cat. Cougars are medium-sized, along with bobcats and lynxes. Tigers, lions, and leopards all are larger and heavier.

Cougars are muscular and sleek, with little fat on their bodies. Fat usually serves as excellent insulation and keeps an animal’s body warm. But because cougars have little of this kind of insulation, they have another natural defense against the cold: their fur coats keep them warm.

The layer of hair closest to the skin, called the underfur, is woolly and short. The top layer is made up of longer hairs, called guard hairs. These hairs are hollow and trap the air to keep cold temperatures from reaching the animal’s skin.

Unlike humans, cougars have no sweat glands, so the cougars that live in warm climates cool themselves the same way dogs do, by panting to release heat from their bodies.
Cougars’ coats are usually tawny, or orange-brown. They also may be gray, sandy brown, reddish-brown, and tan. All adult cougars have black markings on the sides of the muzzle, or snout, where the whiskers are. Some people say this area looks as if the cougar has a “mustache.” If cougars were less secretive, scientists might be able to tell individual animals apart by the dark patterns on the muzzles, but few of the animals are ever seen.

The chin is white, as is the area right under the pinkish-brown nose. The tips of their tails also are black. The underside of most cougars is light, sometimes nearly white. At first glance, adult cougars resemble female lions.

Their coloring helps them blend in with their surroundings. It is good camouflage (KAM uh flahj) and helps them hide from their prey (PRAY), or the animals they hunt for food.

Cougars have good eyesight. In fact, vision is their best-developed sense. Researchers believe that they can see moving prey from long distances. The cougar's yellow eyes have large, round pupils that take in all available light. That helps the animal see at night almost as well as during the day.
A keen sense of hearing is important for cougars. They even can move their small, rounded ears to take in sounds coming from different directions. Cougars also have a strong sense of smell, which can really be useful when following prey. Still, their sense of smell is not as well developed as their senses of sight or hearing.

Like all of their cat relatives, cougars have whiskers. These sensitive hairs are also called vibrissae (vy BRIHS ee). They grow on either side of the animal’s nose and mouth, above the eyes, and sometimes on the chin.

These whiskers vary in length, but most of the whiskers found on the muzzle are long enough to stretch past the side of the face and back to the edge of the ear. The cougar uses whiskers to gather information through touch. With its whiskers, a cougar can determine the height of the grass, the width of the space under a rock, and whether a bush would be easy or difficult to push through.

Cougars make a variety of sounds, or vocalizations. Their meow, which is a sign of contentment, is much louder than that of a pet cat. They also purr when they are contented. Cougars hiss first and then growl when they feel threatened. Unlike lions, cougars cannot roar.

Like all cats, cougars groom themselves. Grooming helps keep their coats clean. They use their rough tongues to remove any loose hair and to untangle any matted hair. Female cougars groom their babies constantly, and young siblings have been seen grooming one another.

Mothers pick up their kittens by the scruff of the neck to move them one at a time to a new den site.
Cougars have very strong jaws. And they have three kinds of teeth, 24 in all. The carnassial (kar NASS ee uhl) teeth are located on both the top and bottom jaws. They are long and sharp, used for slicing or shearing. The canine (KAY nyn) teeth are thick and sharp, used for puncturing. The incisors (ihn SYZ ohrz) are small and straight, used for cutting and some chewing. But cougars don’t chew their food very well. They mostly gulp down large chunks.

Most adult cougars are solitary, which means they live alone. They protect their territory from intruders, including other cougars. Each cougar needs a lot of space, an average of as much as 200 square miles for adult males and less than half that for adult females. They may walk as far as 30 miles in a day, searching for food or patrolling their territory.
Newborn kittens have soft, fluffy-looking fur that is speckled with brown spots. This coloring helps camouflage them.

The spots disappear when the kittens are about eight months old. Kittens also have curly tails, which straighten out as they get older.

The kittens are born with blue eyes, which stay closed for about the first two weeks. Their eye color soon changes to yellow.

Kittens are totally dependent on their mother for food. They nurse for up to three months. Immediately after birth, and often in the next few weeks, the female licks the kittens to clean their fur. This helps them stay safe from enemies that might find the den site by detecting the scent of the newborn kittens.

If a female cougar thinks that her kittens are in danger in a particular spot, she often finds a new hiding place and moves them. A mother cougar will do whatever is necessary to keep the kittens away from dangerous predators, or enemies, such as wolves.
When the mother leaves to hunt for food, the kittens stay hidden and quiet at the den site. When the kittens are about two months old, their teeth have grown and they nurse less. Their mother begins to bring them food every two or three days. The mother makes no special effort to catch small prey for her small offspring. At first, the young kittens just want to play with the food, no matter what she brings. One of the first lessons the mother teaches her kittens is how to eat this new food.

By example, she shows them how to bite, how to tear meat off the bone, and how to chew. She also teaches the kittens that their rough tongues are good for cleaning the meat off bones. After about six months the kittens are good at eating this food, and they begin to explore away from the den site.

This young cougar still has some of its baby spots. It is practicing stalking its prey.
The kittens stay with their mother for about eighteen months. During this time, she teaches them many things about surviving in their habitat. As the kittens mature, the mother cougar takes them hunting. They learn how to find and carefully follow prey. This is called stalking.

They also learn when to pounce, or jump out suddenly, to capture the prey. They are taught how to hide their kill and protect it from other animals. With a lot of practice, they learn to hunt for themselves.

Then, the young cougars go out on their own to find a territory and a mate. If they find a good habitat with plenty of prey animals and water in the area, cougars may live about eight to ten years.
Cougar eyesight may be five times better than human eyesight.
Main Ideas and Details

Informational texts, such as “Cougars,” contain several main ideas and supporting details. A **main idea** is a major point brought out in the text or in a section of the text. Sometimes, a main idea is stated directly. If it is not stated directly, the reader must look at the information in that part of the text to infer, or guess, the main idea.

**Supporting details** are key facts, examples, descriptions, and other text evidence used to develop each main idea. For example, the main idea of the third paragraph on page 298 is that cougars have different layers of hair. The supporting details name and explain the purpose of each layer. As you revisit “Cougars,” identify main ideas and details, and use them to summarize the text.
Authors of informational texts often use **domain-specific words.** These are words from the content area that they are writing about—such as social studies, art, or science. Using domain-specific vocabulary enables authors to explain ideas precisely. It also shows the author’s expertise or familiarity with the subject and lends credibility to his or her writing.

**Domain-Specific Vocabulary**

**Explain Scientific Ideas**

The purpose of most informational texts is to inform, or to share knowledge about a topic with readers. When that topic is related to science, the author carefully explains scientific ideas in ways that will help readers gain a solid understanding. For example, the author of “Cougars” uses clear, descriptive details to explain the ideas of cougar behavior and development.
WHAT DOES IT MEAN?

Look It Up The author of “Cougars” uses many domain-specific words. These words, such as prey, whiskers, muzzle, vocalizations, matted, carnassial, and canine, are directly related to the subject of cougars. Choose five domain-specific words from the text. Look them up in a print or digital dictionary. Write a new sentence for each word. Then share your sentences with a partner.
WRITE ABOUT READING

Response The last section of the text is about mother cougars and their kittens. Would you agree that one of the main ideas of this section could be stated as “mother cougars know best”? Write a paragraph explaining your opinion about the main ideas of this section of text. Show how the details in the text support the main ideas. Use specific quotations to develop your paragraph.

Writing Tip

State your opinion at the beginning of your paragraph. Be sure to include a conclusion that restates this opinion and makes it memorable for readers.

RI.5.2 determine two or more main ideas and explain how they are supported by details/summarize; RI.5.4 determine the meaning of general academic and domain-specific words and phrases; W.5.9b apply grade 5 Reading standards to informational texts; W.5.10 write routinely over extended time frames and shorter time frames; SL.5.1a come to discussions prepared/explicitly draw on preparation and other information about the topic; L.5.4c consult reference materials, both print and digital, to find pronunciation and determine or clarify meaning; L.5.6 acquire and use general academic and domain-specific words and phrases.
Have you ever wondered how a cat uses its keen eyesight and hearing for detecting mice? Have you ever wished you could be a cat, napping in perfect contentment? From ferocious tigers to timid tabbies, cats have always fascinated people. The reasons may vary from person to person and culture to culture.

There are few animals that have inspired poets as much as cats. As you read the following poems, notice how the poets have tried to capture the particular way cats move, their mysterious nature, and their entertaining antics.

**Tiger**

*by Valerie Worth*

The tiger
Has swallowed
A black sun,

In his cold
Cage he
Carries it still:

Black flames
Flicker through
His fur,

Black rays roar
From the centers
Of his eyes.
As male cats mature from kittens to tomcats, they take on different traits. The imagery in this poem describes all the different things a tomcat can resemble.

A Tomcat Is
by J. Patrick Lewis

Nightwatchman of corners
Caretaker of naps
Leg-wrestler of pillows
Depresser of laps

A master at whining
And dining on mouse
Designer of shadows
That hide in the house

The bird-watching bandit
On needle-point claws
The chief of detectives
On marshmallow paws

A crafty yarn-spinner
A stringer high-strung
A handlebar mustache
A sandpaper tongue

The dude in the alley
The duke of the couch
Affectionate fellow
Occasional groucher
Write Using Alliteration

Write a poem using alliteration. Use “Tiger” on page 310 as a model. Choose the subject of your poem and think of unusual details that are available to describe it. Create imagery that will reveal things that may go unobserved by most people. For each image, focus on a single repeating initial consonant sound. Alliteration can draw attention to unique imagery in a poem and make reading it exciting.

Disturbed, the cat
Lifts its belly
On to its back.

—Karai Šenryū
**Compare and Contrast Texts**

Both “Quest for the Tree Kangaroo” (Lesson 6) and “Cougars” contain information about wild animals. How is the presentation of concepts, information, and other details in “Quest for the Tree Kangaroo” different from or similar to the presentation of these elements in “Cougars”? Support your answer with specific references to both texts. What did you learn about animals in the wild that you didn’t know before?

**Analyze Writers’ Approaches**

The author of “Cougars” and the poets in “Purr-fection” write about the traits and behaviors of cats. Compare and contrast the representations of cats in “Cougars” and in one of the “Purr-fection” poems. Use evidence from both selections to support your points. Pay special attention to the writers’ uses of sensory details, figurative language, and sound.

**Respond to a Poem**

Rhyme is a technique used by many poets. Quietly read the poem “A Tomcat Is” to yourself a few times. What rhyming words do you hear, and where? How do the rhymes affect the way you read the poem? Do you think they enhance the poem’s imagery? How might you use this technique when writing your own poems? Discuss these questions with a partner.

**Go Digital**

RI.5.5 compare and contrast the overall structure in two or more texts; RI.5.9 integrate information from several texts on the same topic
Grammar

Direct Quotations Direct quotations give a speaker’s or an author’s exact words. They can be used when writing story dialogue and when quoting from a text to support ideas in an essay or a research report. Capitalize the first word, and use a comma and quotation marks to set off a direct quotation from the other words in a sentence. At the end of a direct quotation, put a comma or other punctuation inside the quotation marks.

Interjections To show a speaker’s strong emotion, or to make a character’s voice more lively, include an interjection such as Hey or Wow, and punctuate it with a comma or an exclamation point.

Direct Quotations and Interjections

Ravindra said, “I can recognize cougar tracks.” He was on a hike with his friends Paula and Bethany.

“Draw a sketch of a print,” said Paula. She handed Ravindra her sketch pad and a pencil.

“Hey, I see a cougar print!” shouted Bethany.

Try This! With a partner, talk about what you would capitalize and punctuate in these sentences. Then identify each interjection and explain its function in the sentence.

1. Sam asked are you sure it’s a cougar print
2. Belinda replied it looks just like the one in the book.
3. Wow we have to tell people about this exclaimed Andre.
4. I will take a photo of the print said Nell.
To let readers know which words are a speaker’s exact words, make sure quotation marks, commas, and end punctuation are placed correctly. When you are writing dialogue, start a new paragraph each time the speaker changes, making sure to indent the first line. Any interjections can be set off with a comma or can stand alone with an exclamation point.

<table>
<thead>
<tr>
<th>Incorrect</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>I saw a cougar, Tom said.</td>
<td>“I saw a cougar,” Tom said.</td>
</tr>
<tr>
<td>“Where was it? asked Lin.”</td>
<td>“Where was it?” asked Lin.</td>
</tr>
<tr>
<td>Pete said “you just saw a housecat”</td>
<td>Pete said, “You just saw a housecat.”</td>
</tr>
<tr>
<td>Tom yelled”, No It was a cougar”!</td>
<td>Tom yelled, “No! It was a cougar!”</td>
</tr>
</tbody>
</table>

**Connect Grammar to Writing**

As you edit your research report, make sure you have written direct quotations and interjections correctly. Check for both capitalization and punctuation errors. Correct any errors you find.
The Andrea Doria was surrounded by a fog bank. When radar showed another ship (the Stockholm) nearby, she continued her course. Eventually, the ships got close enough to see each other through the fog, and the captains realized they were too close to avoid a crash. The bow, or front end, of the Stockholm “slammed into the Andrea Doria’s side.”

Josie drafted her report on the sinking of the Andrea Doria. Later, she rephrased sentences that she had accidentally copied. She made other revisions to improve her writing, as well.

In a research report, good writers are careful not to copy sentences or phrases from their sources. As you revise your report, use synonyms—different words with similar meanings—to help you rephrase quotes from your sources.

The night was foggy, and each ship was using its radar to navigate. The Andrea Doria was surrounded by a fog bank. When radar showed another ship (the Stockholm) nearby, she continued her course. Eventually, the ships got close enough to see each other through the fog, and the captains realized they were too close to avoid a crash. The bow, or front end, of the Stockholm “slammed into the Andrea Doria’s side.”
A Successful Rescue
by Josie Teicher

It was the night of July 25th, 1956. A terrible accident was about to happen. An Italian ship, the Andrea Doria, and a Swedish ship, the Stockholm, were headed straight for each other.

The night was foggy, and each ship was navigating by radar. The Andrea Doria's radar showed the Stockholm nearby, but the crew decided not to turn the ship. Eventually, the ships got close enough to see each other through the fog, and the captains realized they were too close to avoid a crash. The bow, or front end, of the Stockholm "slammed into the Andrea Doria's side."

The Andrea Doria put out an SOS, which is a radio call for help. The Ile de France arrived just three hours after the crash. It was able to rescue hundreds of Andrea Doria passengers. Even the Stockholm was able to rescue people because it was damaged but not sinking.

Partly because the Andrea Doria took so long to sink, all but forty-six of the 1,706 people on board were saved. This sea rescue was one of the most successful in history.

In my final paper, I included facts, definitions, details, and a quotation. I also made sure to avoid plagiarism by rephrasing sentences I had copied from sources during my research.