

NONFICTION

7th & 8th GRADE

RI.7.2/RI.8.2

CENTRAL IDEA



960L

Central Idea & Summary Name: _____ Date: _____

Electrifying the Roads: Unleashing the Power of the EV

You've likely seen and *not* heard electric vehicles (EVs) driving on the streets of your community. Electric vehicles are one of modern day's most important inventions. Not only are electric vehicles sleek and faster than ever before, but today's EVs have the ability to change the world.

One of the most remarkable features of EVs is their superior energy efficiency compared to traditional internal combustion engine vehicles. While conventional cars waste a significant portion of the energy generated through fuel combustion as heat and friction, EVs channel nearly all their stored energy directly into propulsion. Traditional gas-powered cars convert between 17-21% of energy into vehicle movement. In contrast, EVs convert 59-62% of energy to power the car. With electric motors being two to three times more efficient than combustion engines, EVs convert a higher percentage of energy from the battery to power the wheels. This results in greater efficiency and reduced energy wastage. Regenerative braking systems in EVs capture and convert kinetic energy into electricity, further maximizing energy efficiency. These advancements not only enhance the range and overall performance of electric vehicles but also contribute to minimizing greenhouse gas emissions and reducing our dependence on fossil fuels.



Close-up of an electric car charging station.

Central Idea & Summary Name: _____ Date: _____
Answer the following questions. Use color indicated.

1. Which statement best expresses the central idea of the article?

- a. Electric vehicles offer many advantages.
- b. Electric vehicles are fun cars.
- c. Gas-powered vehicles are faster.
- d. Electric vehicles are difficult to maintain.

2. What was the author's main purpose in writing this article?

- a. To inform readers about the benefits of electric vehicles.
- b. To persuade readers to buy electric vehicles.
- c. To entertain readers with facts about electric vehicles.
- d. Gas-powered vehicles are faster.

Central Idea & Summary Name: _____ Date: _____

4. This question has two parts. First, answer Part A. Then, answer Part B.
Part A: What is the central idea developed in paragraph 4?

- a. Electric vehicles are the future.
- b. People must do their research before buying an electric vehicle.
- c. Electric vehicles are high-performance vehicles, resulting in an exhilarating driving experience.
- d. Electric vehicles require minimal maintenance, making them an affordable option long-term.

Part B: Which of the following quotes supports the central idea in Part A?

- a. "EVs produce zero tailpipe emissions." (paragraph 3)
- b. "They don't have complex transmission systems to maintain. EV owners to enjoy reduced maintenance costs and hassle." (paragraph 4)
- c. "The electric motors in EVs provide maximum force from the moment you press the accelerator." (paragraph 5)
- d. "Electric vehicles (EV) offers a variety of compelling reasons that make it an attractive choice." (paragraph 6)

5. What is the central idea of this article? Write a paragraph explaining the key points that support this idea.

By embracing electric vehicles, we can pave the way for a more sustainable transportation system. The text explicitly states that EVs produce zero tailpipe emissions, which minimizes their environmental impact. Additionally, EVs contribute to a cleaner and healthier environment by producing zero tailpipe emissions, reducing air pollution and improving air quality for future generations.



WHAT'S INSIDE?

CENTRAL IDEA

7th & 8th grade

Table of Contents

*This product includes 12 Lexile® leveled stories in the 7th and 8th Grade Common Core Text Complexity Band (the range for 7th and 8th grade is 925-1185).

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2. Central Idea & Summary Practice Work
3. Spectacular Sights of the City Skylines (1010L)
4. Whacky Weather (1020L)
5. Unicorns of the Sea: The Narwhals Plight for Survival (1040L)
6. Far Out: The James Webb Space Telescope (1040L)
7. Fishing in Frozen Perils (1060L)
8. A Scandalous Presidency: Corruption in the Cabinet (1070L)
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13. Test
 - Electrifying the Roads: Unleashing the Power of the EV (950L)
 - A Nation Repays Its Debts: The National Soldiers' Home and Cemetery in Dayton, Ohio(1160L)



PRINTABLE PDFs covering the 7th and 8th grade text complexity band with Certified Lexile Levels.

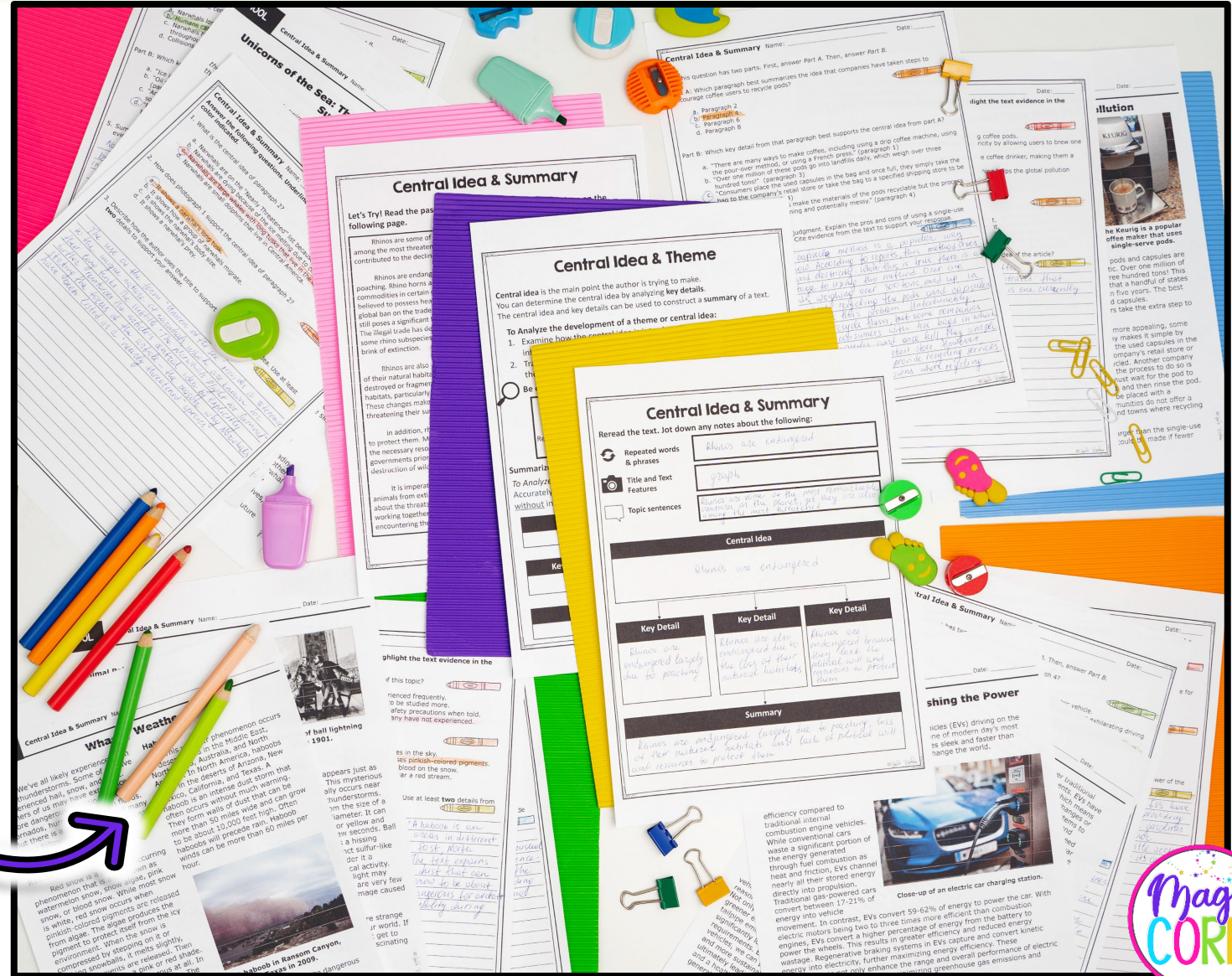
- Anchor chart and question sets
- Color coding to encourage students to use text evidence
- AND two assessments on nonfiction reading passages

Printable Slides Included



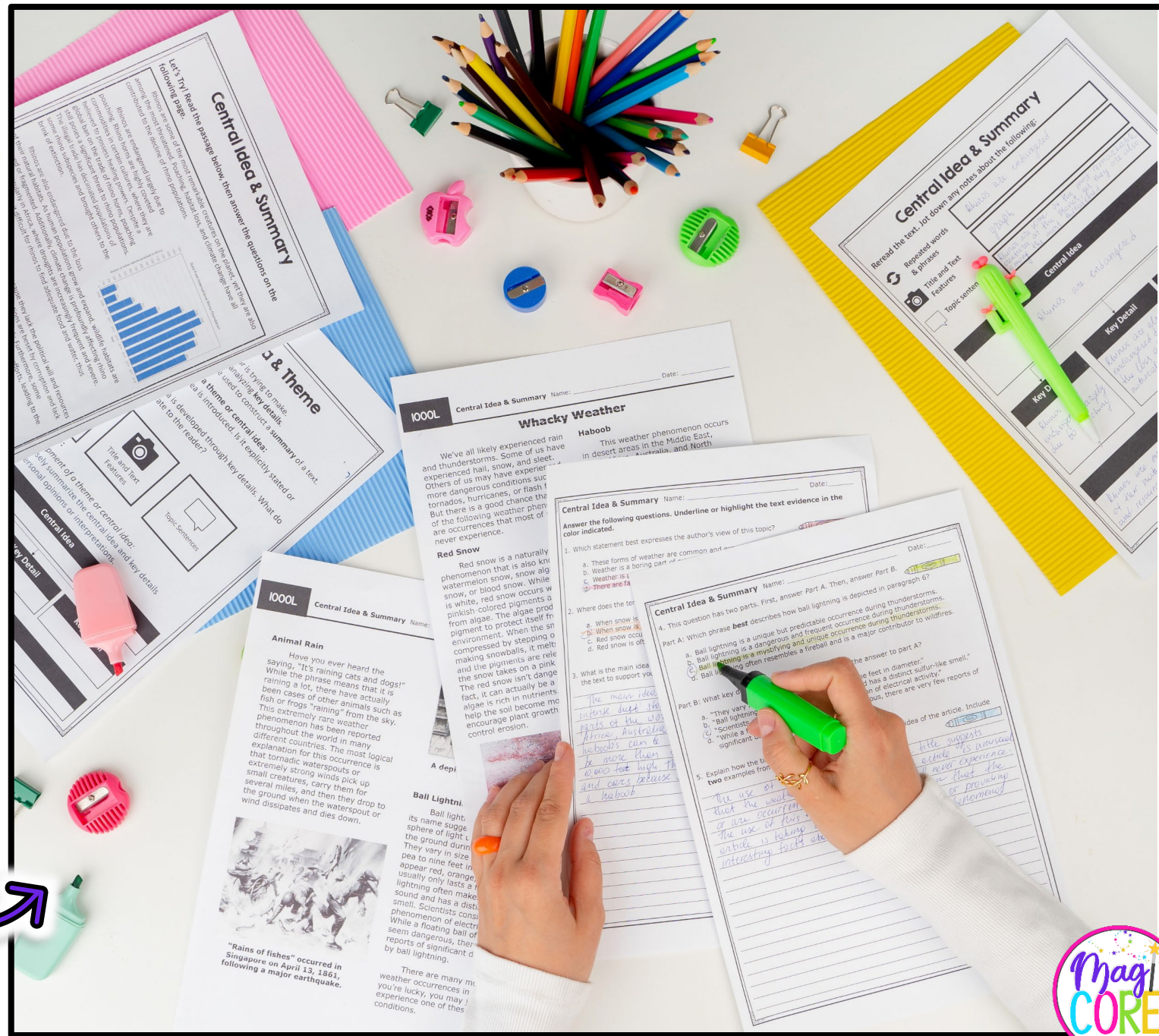
12 NONFICTION PASSAGES

- Learn in color! Visual cues reinforce text evidence.
- Teachers can quickly check student work.
- Variety of structures to spark comprehension AND curiosity.
- Dive into interesting and engaging informational texts.



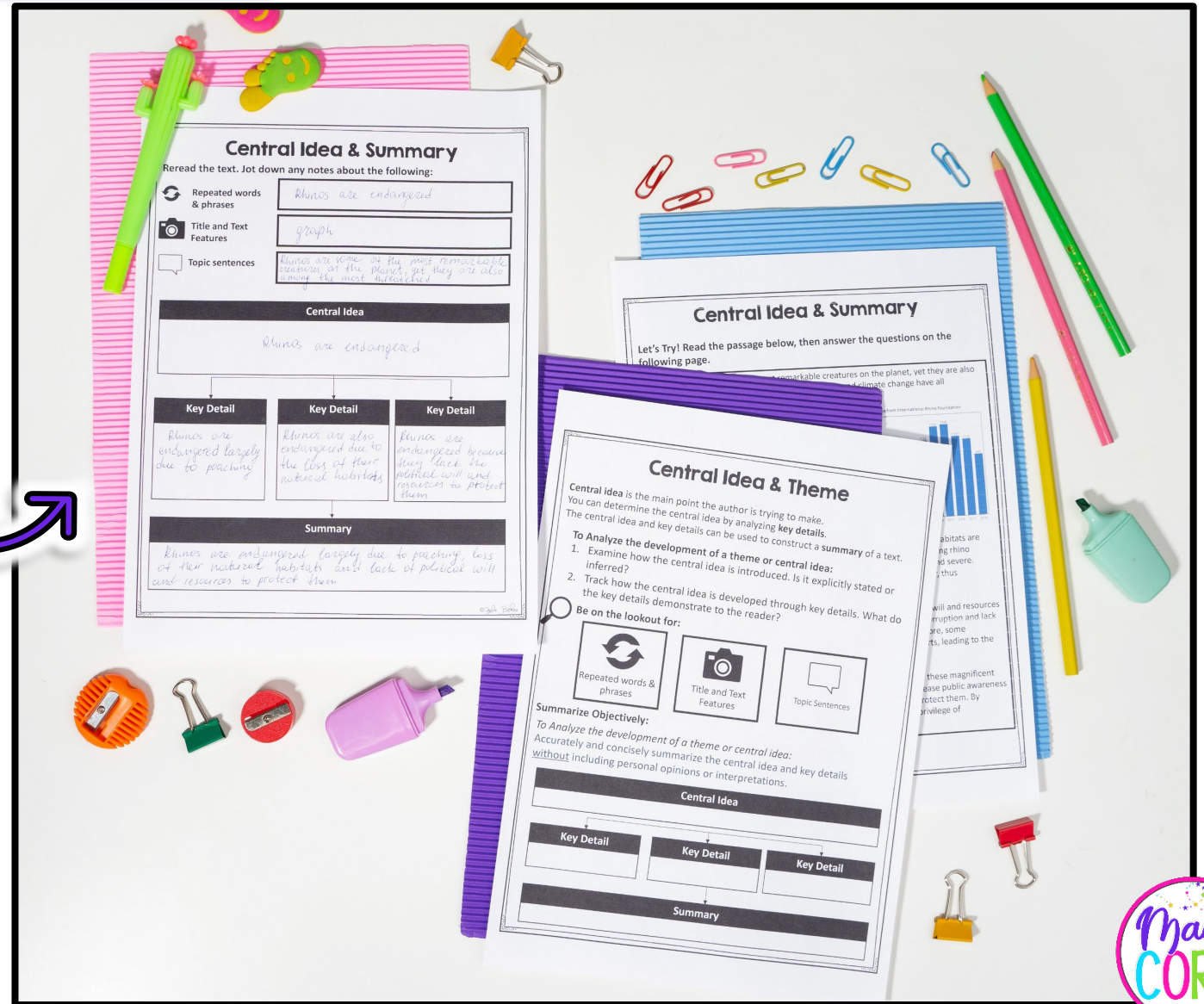
QUESTIONS

- Skill-focused, scaffolded questions
- Multiple choice and short answer
- Preps students for state testing
- Rigorous and research-based approach to questioning



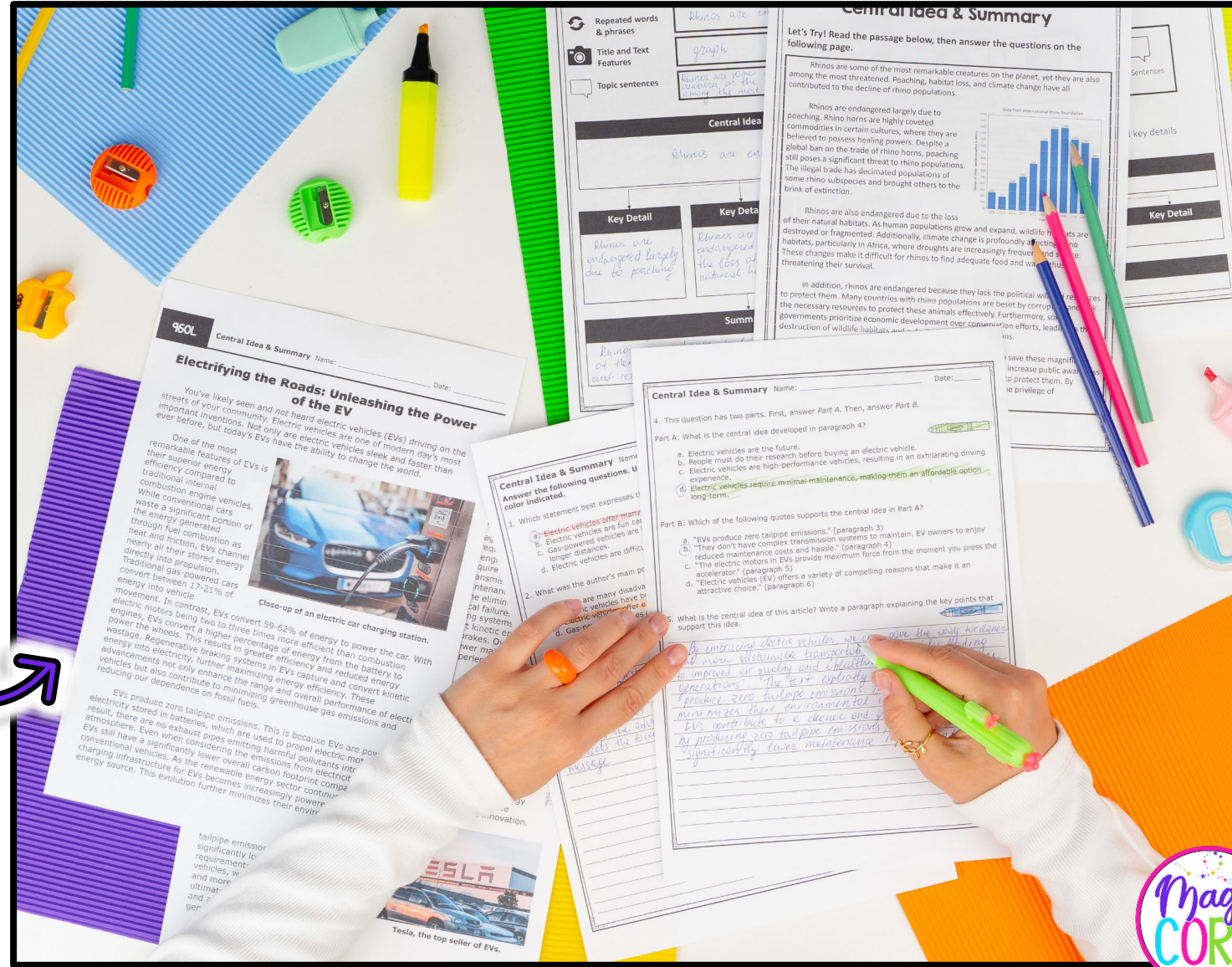
ANCHOR CHART

- Anchor chart breaking down central idea
- Practice passage and warmup activity sheet
- Use to introduce the skill
- Students reference throughout the unit
- Use in student journal as a reference



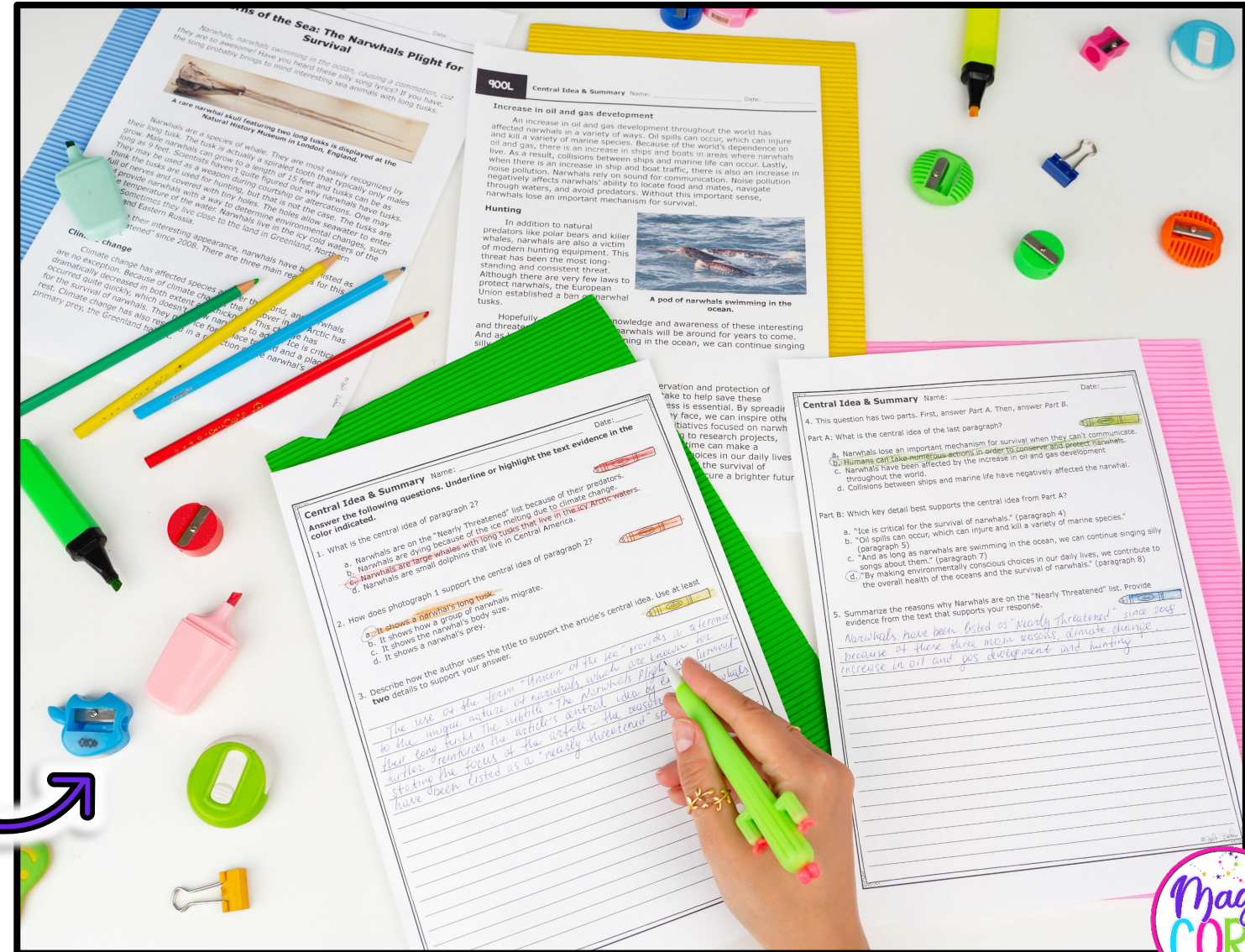
ASSESSMENTS

- Same format as practice
- Two tests with different Lexile levels
- Color-coding
- Follows best practices for standardized assessments

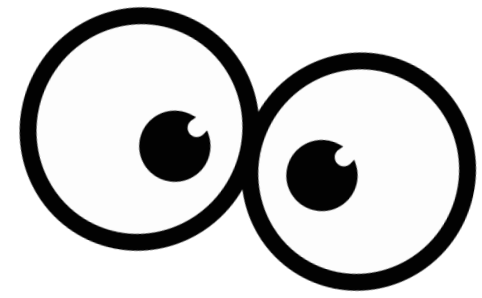


WHY IT WORKS

- Certified Lexile measures
- High - interest texts to motivate readers
- Cross - curricular topics
- Scaffold approach will help your students meet grade level expectations.
- Classroom tested! Trusted by over 1,000 teachers... and counting!... To help students grow their reading skills



TAKE A PEEK



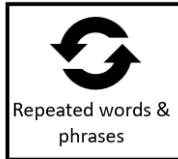
Central Idea & Theme

Central idea is the main point the author is trying to make. You can determine the central idea by analyzing **key details**. The central idea and key details can be used to construct a **summary** of a text.

To Analyze the development of a theme or central idea:

1. Examine how the central idea is introduced. Is it explicitly stated or inferred?
2. Track how the central idea is developed through key details. What do the key details demonstrate to the reader?

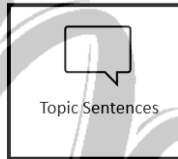
Be on the lookout for:



Repeated words & phrases



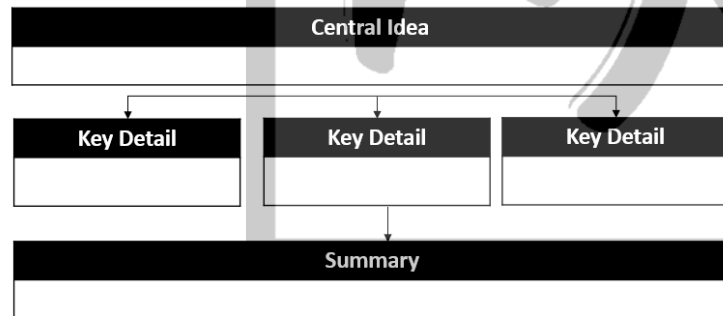
Title and Text Features



Topic Sentences

Summarize Objectively:

To Analyze the development of a theme or central idea: Accurately and concisely summarize the central idea and key details without including personal opinions or interpretations.

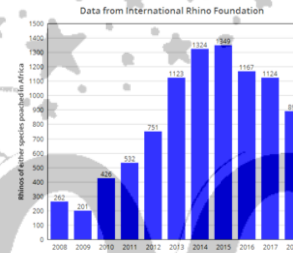


Central Idea & Summary

Let's Try! Read the passage below, then answer the questions on the following page.

Rhinos are some of the most remarkable creatures on the planet, yet they are also among the most threatened. Poaching, habitat loss, and climate change have all contributed to the decline of rhino populations.

Rhinos are endangered largely due to poaching. Rhino horns are highly coveted commodities in certain cultures, where they are believed to possess healing powers. Despite a global ban on the trade of rhino horns, poaching still poses a significant threat to rhino populations. The illegal trade has decimated populations of some rhino subspecies and brought others to the brink of extinction.



Rhinos are also endangered due to the loss of their natural habitats. As human populations grow and expand, wildlife habitats are destroyed or fragmented. Additionally, climate change is profoundly affecting rhino habitats, particularly in Africa, where droughts are increasingly frequent and severe. These changes make it difficult for rhinos to find adequate food and water, thus threatening their survival.

In addition, rhinos are endangered because they lack the political will and resources to protect them. Many countries with rhino populations are beset by corruption and lack the necessary resources to protect these animals effectively. Furthermore, some governments prioritize economic development over conservation efforts, leading to the destruction of wildlife habitats and a decline in rhino populations.

It is imperative that we take swift and concerted action to save these magnificent animals from extinction. We must support conservation efforts, increase public awareness about the threats facing rhinos, and advocate for stronger laws to protect them. By working together, we can ensure that future generations have the privilege of encountering these remarkable animals in their natural habitats.

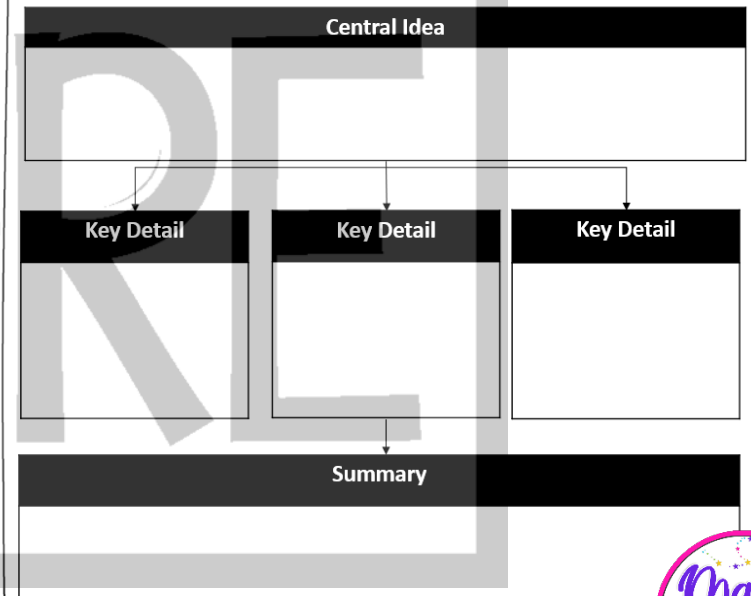
Central Idea & Summary

Reread the text. Jot down any notes about the following:

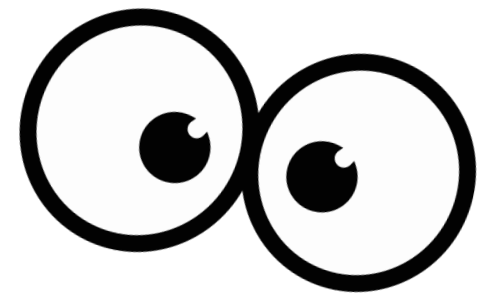
Repeated words & phrases

Title and Text Features

Topic sentences



AND ANOTHER PEEK



10101

Central Idea & Summary Name: _____ Date: _____

Spectacular Sights of the City Skylines

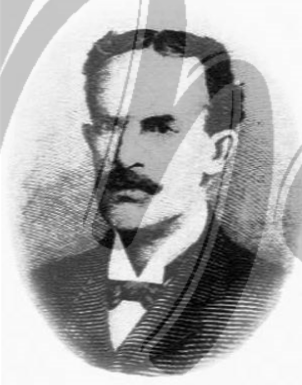
Walk down the streets of any large city, and you're sure to pass multiple skyscrapers soaring tall into the air. New York City, Chicago, Hong Kong, and London are just a handful of the large metropolises throughout the world whose skies are dotted with these modern marvels.

These modern marvels were made possible by innovations in the architectural and engineering industries. Most importantly, the invention of a process to inexpensively produce steel allowed skyscrapers to be constructed. Steel was much stronger than the bricks and wood that had been used to construct buildings. Henry Bessemer, an English inventor, developed the technique that could mass produce steel. Initially, skyscrapers were relatively short. The first, the Home Insurance Building in Chicago, was completed in 1885. But engineers and architects had their sights set much higher.

Eventually, George A. Fuller, an American architect, came up with a new way to allow buildings to bear more weight. The outside walls of buildings carried the entire load of the weight. Fuller determined that a building would bear more weight and be built higher if a steel "skeleton" could be built inside the building. He developed a method for making steel cages that would be used for constructing future, taller skyscrapers.

The higher skyscrapers get, the harder and more time-consuming it is to get to the higher floors. Thus, the invention of the electric elevator in 1883 made it much easier to travel between floors. Now, engineers and architects had all of the tools they needed to set their limits sky-high.

While all skyscrapers are a marvel to look at, with their diversity of style and materials, there are few throughout the world that stand out.



George A. Fuller,
American Architect

Central Idea & Summary Name: _____ Date: _____

Answer the following questions. Underline or highlight the text evidence in the color indicated.

1. What is the central idea of paragraph 1?

- a. The invention of steel made skyscrapers possible.
- b. The Empire State Building is the tallest skyscraper in the country.
- c. Skyscrapers are tall buildings.
- d. There are many skyscrapers in large cities throughout the world.

2. Which word best describes George Fuller?

- a. courageous
- b. innovative
- c. conservative
- d. secretive

3. Why was George Fuller significant to the development of the skyscraper? Include details from the text to support your answer.

Central Idea & Summary Name: _____ Date: _____

4. This question has two parts. First, answer Part A. Then, answer Part B.

Part A: Read the sentence below from paragraph 4.

Now, engineers and architects had all of the tools they needed to set their limits sky-high.

What idea does this key detail support?

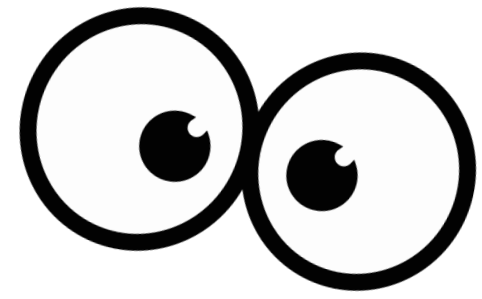
- a. Skyscrapers are tall buildings that are mostly seen in large cities.
- b. Skyscrapers could now be built even taller due to the invention of steel.
- c. Skyscrapers could now be built even taller due to the invention of the elevator.
- d. Skyscrapers could no longer be built because they were dangerous to society.

Part B: How does the central idea of paragraph 4 support the central idea of the entire passage?

- a. This paragraph explains who invented the skyscraper.
- b. This paragraph gives an example of a tall skyscraper.
- c. This paragraph tells the reader that skyscrapers are found in big cities.
- d. This paragraph explains how it was possible for skyscrapers to become taller.

5. Describe how paragraphs 5, 6, and 7, contribute to the development of the central idea of the article. Include **three** details from the text to support your answer.

CHECK THIS OUT TOO!



1190L

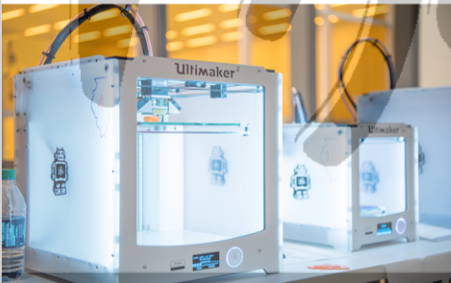
Central Idea & Summary Name: _____ Date: _____

3D Printing: The Shape of Tomorrow

3D printers are a way of creating three-dimensional (3D) solid objects. This method of printing uses fused deposition modeling, which means that objects are printed from the bottom up, a single layer at a time. There are three main steps to creating an object using a 3D printer. First, the object is developed on a computer using special software. Next, the object is created and sent to the 3D printer. The printer divides the 3D object into two-dimensional, cross-sectional layers. When the layers are stacked, the object is created. The object is then printed using a material, typically plastic. The printing process can take from less than an hour to many days, depending on the size of the object and how complicated or intricate the object is. When the object has been printed, the last step is finishing. Sometimes minor adjustments must be made to improve the appearance of the object, such as removing extra material that the printer required to support the model during the printing phase.

3D printers are changing the world of manufacturing and, as a result, impacting the world in a positive way. Businesses and entrepreneurs use 3D printers to rapidly develop prototypes of new products. In the past, traditional manufacturing processes could take months or years to produce a prototype. Now, 3D printers are used to create a prototype quickly and cheaply so that businesses can easily see their product, make any necessary changes, and get their product into the market.

3D printers allow greater design freedom. Product designers are not confined to the limitations of the traditional manufacturing process. Now they can develop products that have more intricate designs and complex shapes. Because of this, 3D printers allow designers to create products that are more functional.



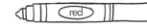
Several 3D printers on display at HackIllinois.

©Julie Becker

Central Idea & Summary Name: _____ Date: _____

Answer the following questions. Underline or highlight the text evidence in the color indicated.

1. What is a 3D printer?



- a. A device that creates three-dimensional objects using fused deposition modeling.
- b. A device that makes paper using special machines for breaking down the trees.
- c. A computer that uses special algorithms that calculate distances traveled.
- d. A copier that scans, uploads, and faxes important documents to others.

2. How does a 3D printer help businesses?



- a. It sends faxes to other businesses to get information there quickly.
- b. It develops prototypes quickly to get products to market faster.
- c. It creates slideshow presentations and markets the products online.
- d. It helps the business manage its finances in a more efficient manner.

3. Read the sentence from paragraph 3.

Product designers are not confined to the limitations of the traditional manufacturing process.

What central idea does this key detail support?



Central Idea & Summary Name: _____ Date: _____

4. This question has two parts. First, answer *Part A*. Then, answer *Part B*.

Part A: What is the central idea of paragraph 5?



- a. Medical facilities can use 3D printers to produce life-saving apparatuses.
- b. 3D printers allow greater design freedom for businesses.
- c. 3D printers are good for businesses because they recycle.
- d. Using a 3D printer is more efficient and environmentally friendly.

Part B: Which of the following quotes supports the main idea of paragraph 5?

- a. "When the layers are stacked, the object is created." (paragraph 1)
- b. "These printers can be used to create prosthetic limbs that work perfectly with each person's unique physiology." (paragraph 4)
- c. "When using 3D printing, individual items can be produced, often using recycled materials." (paragraph 5)
- d. "In traditional methods of manufacturing, large batches often have to be created, even when only a small number is needed." (paragraph 5)

5. How does the photograph on page 2 support the central idea of the text? Use evidence from the text to support your response.



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The THEME AND CENTRAL IDEA Unit
Contains:

- 12 Printable Lexile Leveled Reading Comprehension Passages
- Anchor Charts
- Rigorous comprehension questions for each passage
- Assessment Passages and Question
- Prepares students to determine a theme or central idea of a text

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