The Asteroid that Ended the Dinosaurs?

For over 100 years, scientists have studied fossils left behind from nearly 1000 species of dinosaurs that roamed the Earth. These unique creatures, whose skeletons resemble present–day lizards, fascinated children and adults alike. New discoveries about these animals surface daily, as technological advancements uncover more about their appearances, lifestyles, and environments. Scientists must rely on fossils they find in the Earth's crust to study them, so dinosaurs truly are as old as the hills. Scientists have learned a lot about dinosaurs by studying fossils, including how they died out. Why did the dinosaurs disappear from the face of the Earth? Some say it was because volcanoes caused climate change. Other paleontologists believe that an asteroid collided with the Earth with as much energy as 100 trillion tons of dynamite and caused all the dinosaurs to perish quickly.

Dinosaurs, who roamed the Earth during the Mesozoic Era from about 230 to 65 million years ago, are captivating because of their unique characteristics as well as their absence from the Earth today. Because of their reptile–like claws and skin, many scientists first assumed that dinosaurs were cold blooded. Further research, though, has proven that they were most likely warm blooded because of their ability to move quickly and to dominate the food chain. While most dinosaurs were herbivores, eating plants on both the ground and in the trees, a small group of them were carnivores that ate other dinosaurs, fish, and other small mammals. Most plant–eaters walked on four feet while most meat–eaters ran on two feet. Finally, the common view is that all dinosaurs were giant. Many of them were, but some were as small as dogs or pigs. There are still many unanswered questions about how dinosaurs looked, how they communicated, how they related to one another, and why they died. Scientists have only fossils and the Earth's crust to look to for answers.

From the time British scientist Richard Owen first named them "Dinosauria" or "terrible lizards" in 1841, many scientists have dedicated their lives to finding out why and how dinosaurs died out. One school of thought is that many volcanoes erupting in India gradually caused a climate change that made food scarce for dinosaurs and eventually killed them off. The more popular theory, however, is that an asteroid that measured 10 kilometers across struck the Earth going at least 30 kilometers per second and caused such cataclysmic changes to the Earth that the dinosaurs had no chance of survival. The theory holds that, once the asteroid struck near the Yucatan Peninsula in Mexico, it caused a dense cloud of rock and dust to block the sunlight from the Earth. When the Sun was blocked, the plants had no chance to absorb the light and died. Once the plants died, the plant–eating dinosaurs had no food source. Once these herbivores died, the carnivores had no food source. In addition to loss of food source, the darkness caused by the cloud may also have lowered the temperature on the Earth to an unlivable degree. Further, once the dust cleared, the greenhouse gases from the crash may have raised temperatures to an unlivable degree. Also, the impact may have caused wildfires and tsunamis around the world. Scientists believe that this impact killed off more than 70% of the species on the Earth. Several species of small mammals and birds survived. The dinosaurs would not have stood a chance against such a catastrophe.

Scientists who support the asteroid theory have several pieces of evidence on which to base their opinions. First, there is a 180 kilometer–wide impact crater, known as the Chicxulub Crater, in the Yucatan Peninsula. This crater is believed to be caused by the impact the asteroid made when it hit the Earth. Second, there is no evidence of a gradual extinction reflected in the fossil records. There are many dinosaur fossils of different species, and then there are simply none, which points to a single, fast, catastrophic extinction. Third, iridium has been found in the layer of the Earth's crust that coincided with the time of the dinosaurs. Iridium, which is found in asteroids, is not naturally found in the Earth's crust. All of this evidence has caused many scientists to agree with physicist Luis Alvarez and his geologist son, Walter, who first proposed the asteroid theory in the 1980s.

With so much evidence pointing to the asteroid theory, scientists for the most part have accepted it as at least part of the reason that dinosaurs died out. The argument rages on, however, as to the extent of the volcanoes' damage versus the asteroid's damage, whether it was a comet or an asteroid that hit the Earth, and which species today may be the distant relatives of dinosaurs. Regardless of these continuing debates, one truth remains evident: by studying the extinction of dinosaurs, scientists can learn a lot about how the Earth's
ecosystems are affected by large-scale climate changes and catastrophic events. We can learn a lot from the dinosaurs.

I TEACHER READS:
Read the question to yourself and select the best answer.

After reading "The Asteroid that Ended the Dinosaurs?", look carefully at the way in which the author has organized the text. The author has chosen to put a paragraph of background information about dinosaurs before the paragraph of detailed explanation about the asteroid theory.

Which of the following best explains why the author would choose to order the paragraphs in this way?

A. The background paragraph gives information about asteroids so that the reader can better understand what they are.
B. The reader can better understand the author's point of view about the asteroid if there is a background paragraph first.
C. The background paragraph is more complicated than the paragraph about the asteroid, so it is best to get it out of the way.
D. The first paragraph of the text explains the ongoing debate among scientists, and the background paragraph continues on that theme.

Master ID: 334851 Revision: 1
Correct: D
Standards:
CCSS.LA.9-10.RI.9-10.3
2. What does it mean to assess a source for its authority?

A. You look at the author's personal opinions on the topic, in order to determine if the source is biased.
B. You look at how recently the source was published, in order to figure out how up to date the information on it is.
C. You check whether or not the information in your source is consistent with the information in other sources.
D. You look at the credentials of the author of the source, in order to figure out if they are truly an expert on the topic.

Master ID: 351313 Revision: 1
Correct: D
Standards:
CCSS.LA.9-10.W.9-10.8
Andrew Carnegie

Andrew Carnegie's family immigrated to the United States from Scotland in 1848. At 12 he worked in a cotton factory during the day and went to school at night. Two years later he became a messenger boy in the Pittsburgh Telegraph Office and earned $2.50 per week!

His skills were noticed by the superintendent Thomas A. Scott. Scott made Carnegie his private secretary and personal telegrapher in 1853. His rise in the company was rapid and in 1859 he took over Scott's position.

Carnegie saved his money and invested in the Woodruff Sleeping Car Company. They made the first successful sleeping car on American railroads. He made other good investments and by the age of 30 Carnegie earned $50,000 annually.

Anticipating the demand for steel and iron, Carnegie left the Pennsylvania Railroad and began managing the Keystone Bridge Company in 1865. Carnegie built the first steel plant in the United States in the 1870s. He used the Bessemer steelmaking process to make steel quickly and on a large scale. By 1900, three million tons of steel were produced by Carnegie's mills every year. Carnegie's fortune grew to two hundred fifty million.

After fulfilling his dream of increasing steel production in the U.S., Carnegie sold his company to J.P. Morgan's newly formed United States Steel Corporation in 1901. Carnegie retired and spent much of his time and money helping others. During his retirement, Carnegie started many libraries throughout the United States.

Carnegie believed that a man who accumulates a lot of money should use his wealth for "the improvement of mankind." He wrote a famous article, "Wealth," which appeared in the June 1889 issue of the North American Review and stated, "The man who dies thus rich dies disgraced." Andrew Carnegie was honored throughout his lifetime for his achievements.
TEACHER READS:

Read the question to yourself and select the best answer.

Which option correctly identifies the sequence of events in "Andrew Carnegie"?

A. Carnegie worked as a messenger in the Pittsburgh Telegraph Office, started libraries throughout the United States, and managed Keystone Bridge Company.

B. Carnegie invested in the Woodruff Sleeping Car Company, managed Keystone Bridge Company, and built the first steel plant in the United States.

C. Carnegie took over Thomas A Scott's position as superintendent of the Pittsburgh Telegraph Office, managed Keystone Bridge Company, and invested in Woodruff Sleeping Car Company.

D. Carnegie became a messenger in the Pittsburgh Telegraph Office, invested in the Woodruff Sleeping Car Company, and took over Thomas A Scott's position as superintendent of the Pittsburgh Telegraph Office.

Master ID: 175771 Revision: 1
Correct: B
Standards: CCSS.LA.9-10.RI.9-10.3
4. **TEACHER READS:**

   Read the question to yourself and select the best answer.

   Read this sentence.

   Everyone knows that good nutrition keeps the body strong, but it can also boost your brain power, too.

   **Which of the following does not provide additional support for the main idea above?**

   A. studies showing that orange and green leafy vegetables actually increase brain cells
   B. an expert hypothesis stating that eating healthy leads to increased energy and work performance
   C. a chart which shows that students that ate nutritious foods before their test scored higher compared to those who ate poorly
   D. a list of leafy vegetables sold at the grocery store

   Master ID: 42623 Revision: 1
   Correct: D
   Standards:
   - CCSS.LA.9-10.W.9-10.2
   - CCSS.LA.9-10.W.9-10.2.b
   - CCSS.LA.9-10.W.9-10.9.b

5. **Which of the following statements about inflection in public speaking is true?**

   A. It is best to speak at a rapid pace for the entire speech, to fit in as many points as possible.
   B. It is best to speak much slower than normal conversation.
   C. It is best to slow down and change your tone when you get to a very important point
   D. It is best to put an emphasis on every word you say, since everything is important

   Master ID: 282131 Revision: 1
   Correct: C
   Standards:
   - CCSS.LA.9-10.W.9-10.8

6. **Which of the following is a good practice for intonation in a speech?**

   A. It is best to not vary your pitch, tone, or pace during the speech.
   B. Varying pitch and speech are important tools that you should use to add emphasis to important phrases.
   C. Speaking at a fast pace for the entire speech will help to keep the audience engaged.
   D. It is best to speak at a much slower pace than normal conversation.

   Master ID: 282125 Revision: 1
   Correct: B
   Standards:
   - CCSS.LA.9-10.SL.9-10.4

7. **All of the following are correct in-line MLA citations EXCEPT...**

   A. “...the task to define what to teach is basically an exercise of making choices about what to include and what to exclude” (Zhao 146).
   B. “…the task to define what to teach is basically an exercise of making choices about what to include and what to exclude” (Zhao 146).
   C. Zhao states that “…the task to define what to teach is basically an exercise of making choices about what to include and what to exclude” (146).
   D. “…the task to define what to teach is basically an exercise of making choices about what to include and what to exclude,” according to Zhao (146).

   Master ID: 281578 Revision: 1
   Correct: A
   Standards:
   - CCSS.LA.9-10.W.9-10.8
Which of the following examples is a correct in-line MLA citation?

A. The question, according to Wagner, is “How can established educational institutions encourage the trial and error and intellectual risk-taking that are the hallmarks of innovators” (174)?

B. The question, according to Wagner, is “How can established educational institutions encourage the trial and error and intellectual risk-taking that are the hallmarks of innovators?” (174)?

C. The question, according to Wagner, is “How can established educational institutions encourage the trial and error and intellectual risk-taking that are the hallmarks of innovators” (174).

D. The question, according to Wagner, is “How can established educational institutions encourage the trial and error and intellectual risk-taking that are the hallmarks of innovators?” (174).

All of the following are examples of quotations as they might appear in a student’s essay. Which of the following examples uses correct MLA citation?

A. “The Duchess of Cambridge and Prince William have welcomed their first child, a son” (Perry 1).

B. “The Duchess of Cambridge and Prince William have welcomed their first child, a son.” (Perry 1).

C. “The Duchess of Cambridge and Prince William have welcomed their first child, a son” (Perry page 1).

D. “The Duchess of Cambridge and Prince William have welcomed their first child, a son” (Perry, page 1).
Your writing teacher would like you to make a brief speech to your classmates about how texting is changing the English language. Write a detailed paragraph about how texting is impacting the English language, especially for young people.

Your paragraph needs to be formal in vocabulary and tone, as it will be presented in class to your peers.

Make sure your paragraph:

- Is organized, including a thesis, appropriate transitions, and a concluding sentence
- Consists of a logical presentation of ideas
- Contains details about how texting is changing the English language
- Is formal, fitting the audience and purpose of this writing situation
- Does not use slang, contractions, or informal vocabulary

Texting is changing the English language for young people because it is making it more concise and casual. Throughout history, young people have been taught how to write in school. Often, they have been taught formal, structured ways of forming sentences and paragraphs to get their points across. Teachers have always stressed using correct grammar, paying close attention to punctuation, and elaborating on their points with specific examples. Texting has changed all of that. Because most phone companies charge by the text, brevity is crucial. To save both time and money, young people have abandoned using correct grammar in order to use as few words as possible. They no longer care about punctuation, but instead use colons and parentheses to make smiley faces. Finally, they no longer elaborate on anything, instead choosing abbreviations and shorter words that take less time to type. Overall, texting is changing the English language from a tedious, long-winded formal way of communicating into a streamlined, laid back way to talk to friends.