When Science and Art Collide

1 As a young boy, Garfield Minott had two separate, but captivating, interests. His first was a fascination with prehistoric dinosaurs. His second, an aptitude for art. As an adult, Minott found a way to merge these two distinct interests, leading to an unusual career as a paleo-artist. In fact, he has been so successful in this career that paleontologists around the world commend him on his precision and attention to detail. Claiming that his life-like dinosaur replicas are among the most anatomically correct reconstructions they have ever seen, scientists who study prehistoric animals, museum curators, and even motion-picture directors seek Minott’s expertise.

2 There are a number of noted scientists with whom Minott has worked. For example, Dr. Kent A. Stevens from the University of Oregon sought Minott’s advice for his recent publication on vision in dinosaurs. Dr. Paul Sereno, another noted paleontologist, specifically requested Minott be the first to sculpt the newly discovered African dinosaur,

![Garfield Minott (left) consulting with Dr. Paul Sereno for a Discovery Channel documentary.](image)

---

1 scientists who study life of past geological times using fossil remains
2 person in charge of or who cares for a museum or other place of exhibit
Carcharodontosaurus. Dr. Frank Mendel, a scientist at the University of Buffalo, studies the saber-toothed cat. Upon hearing of Minott’s reputation as the “fastest and most accurate” paleo-artist, he hired Minott to assist him in the study and reconstruction of the dentition (arrangement of teeth) in the saber-toothed cat.

As museum curators seek to accurately recreate the world of the dinosaur, they, too, turn to experts like Garfield Minott. His works are so authentic that museums worldwide commission him to assist in their recreations of the prehistoric past. Minott’s replicas can be seen at the Museum of Natural History in Japan, the Natural Science Museum in Morocco, and the Smithsonian Institute in the United States, to name just a few.

Perhaps the most interesting aspect of Minott’s work is his involvement with the film industry where he specializes in special effects. His work can be seen in quite a number of movies and special features. Among the most well-known was the sculpting of miniature models that he created for the 2002 movie, The Santa Claus 2. He has also done a great deal of work for the National Geographic Channel, the Discovery Channel, and the British Broadcasting Channel. According to Minott, the life-like mechanical saber-toothed tiger he created for a National Geographic special was one of the more challenging replicas he has created to date. He also takes great pride in the Tyrannosaurus rex head that he molded for a recent British documentary on the giant carnivore.

By attending science conferences and lectures, Garfield Minott continues to expand his knowledge of the prehistoric creatures that have mesmerized him since he was a child. He also strives to perfect his artistic talents by experimenting with innovative computer graphics and molding techniques. Because Minott continues to study and to learn, he will likely remain one of the top paleo-artists in the field.

Sabertoothed cats are some of the best known and most popular of all Ice Age animals.

Source: http://www.dinosaurdiscovery.ca/aboutUs.html
DIRECTIONS: Carefully read the preceding passage before answering the questions.

1. Read the following excerpt from the passage:

As a young boy, Garfield Minott had two separate, but captivating, interests… As an adult, Minott found a way to merge these two distinct interests, leading to an unusual career as a paleo-artist.

Based on the context, what is the best definition of the word merge?

○ A develop
○ B combine
○ C increase
○ D define

2. Carefully read paragraph 4. Which of the following best summarizes the main idea of the paragraph?

○ A Among Minott’s list of achievements is the work he has done for movies and documentaries.
○ B The tiny life-like models he created for a movie were Minott’s most popular and most challenging project.
○ C Minott’s work requires him to work with scientists, actors, producers, and museum curators.
○ D He prefers working with directors on special effects for movies and documentaries.

3. What can the reader logically infer about Garfield Minott?

○ A He prefers to working on special effects for movies.
○ B He is a respected scientist as well as a great artist.
○ C He is the only paleo-artist in the United States.
○ D He enjoys his work and finds it challenging.
4. Carefully read the following supporting detail.

As a paleo-artist, Minott must not only possess expert knowledge about dinosaurs, but must also be patient and conscientious in order to create accurate models.

In which paragraph does the above sentence belong?

- A  Paragraph 4
- B  Paragraph 3
- C  Paragraph 2
- D  Paragraph 1

5. Carefully read the excerpt from paragraph 5.

...Garfield Minott continues to expand his knowledge of the prehistoric creatures that have mesmerized him since he was a child.

Which phrase from the passage provides a context clue to the meaning of the word mesmerized?

- A  “...paleontologists around the world commend him on his precision...”
- B  “...Garfield Minott had two separate, but captivating, interests.”
- C  “...his involvement with the film industry where he specializes in special effects.”
- D  “to perfect his artistic talents by experimenting with innovative computer graphics...”

6. Scientists, museum curators, and film directors hire Minott for all of the following reasons except-

- A  his ability to use computer graphics.
- B  the degree of accuracy in his models.
- C  the fact that he can create models quickly.
- D  his knowledge of the anatomy of dinosaurs.
7. What is the author’s primary purpose for writing “When Science and Art Collide”?

- **A** to provide information about the time when dinosaurs roamed the earth
- **B** to persuade people to choose careers based on their childhood interests
- **C** to provide biographical information about a successful paleo-artist
- **D** to persuade people to study paleontology and learn about prehistoric creatures

8. Which of the following statements from the passage does **not** contain opinion?

- **A** ...the life-like mechanical saber-toothed tiger he created for a *National Geographic* special was one of the more challenging replicas he has created to date.
- **B** Perhaps the most interesting aspect of Minott’s work is his involvement with the film industry where he specializes in special effects.
- **C** ...scientists who study prehistoric animals, museum curators, and even motion-picture directors seek Minott’s expertise.
- **D** As an adult, Minott found a way to merge these two interests, leading to an unusual career as a paleo-artist.

9. Which of the following predictions about Minott can be made based on the information in the text?

- **A** He will likely return to college and pursue a career as a paleontologist.
- **B** He will likely create even better quality replicas in the future than he did in the past.
- **C** He will likely lose interest in the field of paleo-artistry.
- **D** He will likely become one of the most popular special effects artists in the field of movies.
10. A museum curator is **most** likely one who-
   ○ A  selects items and exhibits for display.
   ○ B  sweeps and cleans the museum.
   ○ C  takes visitors on tours of museums.
   ○ D  studies the history of each exhibit.

11. Complete the graphic organizer.

Which of the following **best** completes the graphic organizer?

   ○ A  a college education in science or paleontology
   ○ B  contacts with people in the film industry
   ○ C  artistic ability to create and to sculpt
   ○ D  expert skills in computer technology

12. Based on your completion of the graphic organizer, write a summary of the skills needed to become a successful paleo-artist. Use a separate sheet of paper. (You will be assessed on details, grammar, mechanics, and spelling.)
Reading Grades 7 and 8  
Strands 1 and 3  
Reading Process and Informational Text  
“When Science and Art Collide”

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>PO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>S1C4PO2</td>
</tr>
<tr>
<td>2</td>
<td>A</td>
<td>S3C1PO1, S3C1PO2</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
<td>S3C1PO10, S1C6PO7, S1C6PO3</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>S3C1PO1</td>
</tr>
<tr>
<td>5</td>
<td>B</td>
<td>S1C4PO2</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
<td>S1C6PO7, S1C6PO3</td>
</tr>
<tr>
<td>7</td>
<td>C</td>
<td>S3C1PO4</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td>S3C1PO3</td>
</tr>
<tr>
<td>9</td>
<td>B</td>
<td>S3C1PO10, S1C6PO7</td>
</tr>
<tr>
<td>10</td>
<td>A</td>
<td>S3C1PO5</td>
</tr>
<tr>
<td>11</td>
<td>C</td>
<td>S1C6PO4, S1C6PO7, S1C6PO6</td>
</tr>
<tr>
<td>12</td>
<td>Students should develop a short paragraph which summarizes the graphic organizer from question 11. Grammar, mechanics, spelling should be assessed.</td>
<td>S1C6PO4, S1C6PO7, WS1C4PO1, WS3C2PO2</td>
</tr>
</tbody>
</table>

Flesch-Kincaid readability: 9.7  
General readability: 10.3  
Lexile: 1550L