

Grade Seven Sample Test Item—Reading

Achievement Level: Standard Exceeded

Stone Doctors

Have you ever wondered how an ancient stone statue or monument can survive thousands of years buried in the earth or under the ocean? The answer may surprise you—the long time spent underground or underwater can actually help preserve it. The environment surrounding a buried artifact or monument that has had no exposure to oxygen, sunlight, wind, and rain for many years becomes balanced and experiences little change. It is as if the artifact's life clock has stopped and it is in a long, peaceful sleep.

But remove a “peacefully sleeping” artifact or monument from that environment and expose it to the sun, rain, heat, frost, and/or wind, then its life clock starts ticking again.

The goal of the archaeologist, when excavating, is to harm each find as little as possible. So archaeologists work hard, not only to discover artifacts, but also to preserve what they uncover. To keep a monument's life clock going after so many hidden centuries, archaeologists work with conservators. Like an artifact doctor, conservators examine, record, treat, and design special storage units for excavated artifacts.

Mud As Glue

When you excavate a site, you find many artifacts made of stone, metal, wood, bone, and ceramics. While only a few artifacts are found in perfect condition, all are found dirty. Most are also broken, stained, and scratched. One exceptionally well-preserved find is the statue of Queen Tiye found at Mut Temple in 2006. Carved of very hard stone, it was little affected by its burial environment.

Archaeologists excavating the Isheru area during the 2008 season found many decorated stone fragments covered with thick mud. Even though the lake was emptied of its water, the lakebed is still very muddy. So, while it was tempting to clean off the mud and peek at the decoration on the surface, the archaeologists brought them to a conservator first for a thorough cleaning with gentle tools. Without this careful examination, artifacts may lose important original materials such as beautiful paint. Once these are removed, gone is the story behind the original use of the artifact. Sometimes, all that holds a piece of pottery together is a layer of mud. If you try to “clean” off the mud, the artifact will quickly fall apart into dozens of pieces.

Grade Seven Sample Test Item—Reading
Achievement Level: Standard Exceeded (continued)**Salt Contaminates**

Sometimes, recovered artifacts are contaminated with chemicals that cause damage. For example, at the Isheru site, the artifacts were not only wet and muddy, but they also were contaminated with salts. The salts found in underground water can penetrate deep inside an artifact. When the artifact is excavated, it dries, and the salts change their form from liquid to crystal. You have probably seen this process yourself.

Imagine dropping a tablespoon of salt in a glass of water and then letting the water evaporate. After the water is gone, you will see the salt you added at the bottom of the glass. In this process, the salt has changed from a crystal to a liquid, and then back again to a crystal. Because salts swell when they dry, salts in crystal form are actually much larger than those in liquid form. If this crystallization happens too quickly, it can cause cracking inside the artifact and may eventually break it completely to pieces. To counter-act this effect, conservators often remove salts by soaking artifacts in clean water.

While excavating the lakebed, archaeologists found a stone torso of Ramesses II. The surface was completely covered with years of accumulated hard mineral crust. Unlike the salts described above, these minerals were so hard that they could not be removed by soaking in clean water. Rather, a conservator removed the crust, inch by inch, by carefully chipping it off with tiny tools. Once the work was done, we could finally see the beautiful, red granite body.

Back to ‘Sleep’!

You might be surprised to learn that at the end of each season in Mut Temple, after all finds have been recorded, we bury them again! So, you can say that after we woke them from a long sleep, we let them go back to sleep.

From “Stone Doctors” by Kariya Hiroko, from *Dig* magazine. Copyright 2009 by Carus Publishing. Reprinted by permission of Carus Publishing.

Grade Seven Sample Test Item—Reading

Achievement Level: Standard Exceeded (continued)

The following question has two parts. First, answer part A. Then, answer part B.

Part A

Which statement **best** summarizes the central ideas of the text?

- A. Archaeologists dig into the earth to find artifacts as proof of ancient civilizations, and conservators clean and replace the artifacts that are uncovered.
- B. Archaeologists work to find and carefully remove artifacts of ancient peoples, and conservators work to clean and preserve the artifacts that are excavated.
- C. Archaeologists dig in the earth to uncover artifacts of ancient peoples, and conservators work to reverse and repair any damage done to the artifacts that are found.
- D. Archaeologists work to find and preserve artifacts to understand ancient civilizations, and conservators work to help them understand the artifacts that are unearthed.

Part B

Which sentence from the text **best** supports your answer in part A?

- A. “To keep a monument’s life clock going after so many hidden centuries, archaeologists work with conservators.”
- B. “While only a few artifacts are found in perfect condition, all are found dirty.”
- C. “Carved of very hard stone, it was little affected by its burial environment.”
- D. “So, while it was tempting to clean off the mud and peek at the decoration on the surface, the archaeologists brought them to a conservator first for a thorough cleaning with gentle tools.”

Area

Reading

Demonstrating understanding of literary and nonfiction texts

Standard(s)

Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary.

Answer

Part A: Answer B
Part B: Answer D