

To protect themselves when being attacked, hagfish—jawless marine animals that resemble eels—will release large quantities of slimy, mucus-like threads. Because these threads are unusually strong and elastic, scientist Atsuko Negishi and her colleagues have been trying to recreate them in a lab as an eco-friendly alternative to petroleum-based fibers that are often used in fabrics. The researchers want to reproduce the threads in the lab because farming hagfish for their slime would be expensive and potentially harmful to the hagfish.

Which choice best states the text’s main idea?

- A. The slimy threads that hagfish release might help researchers create a new kind of fabric.
- B. Hagfish have inspired researchers to develop a new petroleum-based fabric.
- C. Hagfish are not well suited to being raised in captivity.
- D. The ability of hagfish to slime their attackers compensates for their being jawless.

The ice melted on a Norwegian mountain during a particularly warm summer in 2019, revealing a 1,700-year-old sandal to a mountaineer looking for artifacts. The sandal would normally have degraded quickly, but it was instead well preserved for centuries by the surrounding ice. According to archaeologist Espen Finstad and his team, the sandal, like those worn by imperial Romans, wouldn't have offered any protection from the cold in the mountains, so some kind of insulation, like fabric or animal skin, would have needed to be worn on the feet with the sandal.

What does the text indicate about the discovery of the sandal?

- A. Temperatures contributed to both protecting and revealing the sandal.
- B. The discovery revealed that the Roman Empire had more influence on Norway than archaeologists previously assumed.
- C. Archaeologists would have found the sandal eventually without help from the general public.
- D. The sandal would have degraded if it hadn't been removed from the ice.

The following text is adapted from Christina Rossetti's 1881 poem "Monna Innominata 2."

I wish I could remember that first day,  
First hour, first moment of your meeting me,  
If bright or dim the season, it might be  
Summer or Winter for [all] I can say;  
So unrecorded did it slip away,  
So blind was I to see and to foresee,  
So dull to mark the budding of my tree  
That would not blossom yet for many a May.

Which choice best states the main idea of the text?

- A. The speaker celebrates how the passage of time has strengthened a relationship that once seemed unimportant.
- B. Because the speaker did not anticipate how important a relationship would become, she cannot recall how the relationship began, which she regrets.
- C. As the anniversary of the beginning of an important relationship approaches, the speaker feels conflicted about how best to commemorate it.
- D. After years of neglecting a once valuable relationship, the speaker worries it may be too late for her to salvage the relationship.

The recovery of a 1,000-year-old Chinese shipwreck in the Java Sea near present-day Indonesia has yielded a treasure trove of artifacts, including thousands of small ceramic bowls. Using a portable X-ray fluorescence analyzer tool, Lisa Niziolek and her team were able to detect the chemical composition of these bowls without damaging them. By comparing the chemical signatures of the bowls with those of the materials still at old Chinese kiln sites, Niziolek and her team can pinpoint which Chinese kilns likely produced the ceramic bowls.

Which choice best states the main idea of the text?

- A. Because of a new technology, researchers can locate and recover more shipwrecks than they could in the past.
- B. Researchers have been able to identify the location of a number of Chinese kilns in operation 1,000 years ago.
- C. With the help of a special tool, researchers have determined the likely origin of bowls recovered from a shipwreck.
- D. Before the invention of portable X-ray fluorescence, researchers needed to take a small piece out of an artifact to analyze its components.

The following text is adapted from Guy de Maupassant's nineteenth-century short story "The Trip of Le Horla" (translated by Albert M. C. McMaster, A. E. Henderson, Mme. Quesada, et al.). The narrator is part of a group traveling in a hot-air balloon at night.

The earth no longer seems to exist, it is buried in milky vapors that resemble a sea. We are now alone in space with the moon, which looks like another balloon travelling opposite us; and our balloon, which shines in the air, appears like another, larger moon, a world wandering in the sky amid the stars, through infinity. We no longer speak, think nor live; we float along through space in delicious inertia. The air which is bearing us up has made of us all beings which resemble itself, silent, joyous, irresponsible beings, peculiarly alert, although motionless.

Which choice best states the main idea of the text?

- A. The narrator feels a growing sense of isolation even though his companions are nearby during the balloon ride.
- B. The narrator and his companions are completely absorbed in the change in perspective they gain while riding in the balloon.
- C. The narrator and his companions are troubled by the disorienting effects of the altitude while riding in the balloon.
- D. The narrator is pleasantly surprised by his companions' unrestrained enthusiasm about the sensation of riding in the balloon.

The following text is adapted from Robert Louis Stevenson's 1883 novel *Treasure Island*. Bill is a sailor staying at the Admiral Benbow, an inn run by the narrator's parents.

Every day when [Bill] came back from his stroll he would ask if any seafaring men had gone by along the road. At first we thought it was the want of company of his own kind that made him ask this question, but at last we began to see he was desirous to avoid them. When a seaman did [stay] at the Admiral Benbow (as now and then some did) he would look in at him through the curtained door before he entered the parlour; and he was always sure to be as silent as a mouse when any such was present.

According to the text, why does Bill regularly ask about "seafaring men"?

- A. He's hoping to find an old friend and fellow sailor.
- B. He's trying to secure a job as part of the crew on a new ship.
- C. He isn't sure that other guests at the inn will be welcoming of sailors.
- D. He doesn't want to encounter any other sailor unexpectedly.

In many of his sculptures, artist Richard Hunt uses broad forms rather than extreme accuracy to hint at specific people or ideas. In his first major work, *Arachne* (1956), Hunt constructed the mythical character Arachne, a weaver who was changed into a spider, by welding bits of steel together into something that, although vaguely human, is strange and machine-like. And his large bronze sculpture *The Light of Truth* (2021) commemorates activist and journalist Ida B. Wells using mainly flowing, curved pieces of metal that create stylized flame.

Which choice best states the text's main idea about Hunt?

- A. He often depicts the subjects of his sculptures using an unrealistic style.
- B. He uses different kinds of materials depending on what kind of sculpture he plans to create.
- C. He tends to base his art on important historical figures rather than on fictional characters.
- D. He has altered his approach to sculpture over time, and his works have become increasingly abstract.

Many intellectual histories of the Black Power movement of the 1960s and 1970s rely heavily on essays and other explicitly ideological works as primary sources, a tendency that can overrepresent the perspectives of a small number of thinkers, most of whom were male. Historian Ashley D. Farmer has shown that expanding the array of primary sources to encompass more types of print material—including political cartoons, advertisements, and artwork—leads to a much better understanding of the movement and the crucial and diverse roles that Black women played in shaping it.

Which choice best describes the main idea of the text?

- A. Farmer's methods and research have enriched the historical understanding of the Black Power movement and Black women's contributions to it.
- B. Before Farmer's research, historians had largely ignored the intellectual dimensions of the Black Power movement.
- C. Other historians of the Black Power movement have criticized Farmer's use of unconventional primary sources.
- D. The figures in the Black Power movement whom historians tend to cite would have agreed with Farmer's conclusions about women's roles in the movement.



NASA's Aspera mission, led by Carlos Vargas, will investigate the circumgalactic medium (CGM), the huge swaths of low-density gas that fill and surround galaxies. Specifically, the team will focus on portions of the gas that exist in a "warm-hot" phase: these portions haven't previously been observable but are thought to fuel new star formation and hold most of the mass that makes up a galaxy. Using a telescope capable of revealing these parts of the CGM, the Aspera mission should help answer long-standing questions about how galaxies emerge, change, and even interact.

Which choice best states the main idea of the text?

- A. As the leader of NASA's Aspera mission, Vargas will be the first person to investigate the makeup of the CGM.
- B. Although galaxies that are surrounded by the CGM have been studied, researchers have been unable to directly observe low-density gas in the CGM in the "warm-hot" phase.
- C. Researchers don't yet have a complete understanding of the process of galaxy evolution but have raised the possibility that galaxies interact with each other at times.
- D. The Aspera mission is expected to produce the first direct observations of CGM gas in the "warm-hot" phase, which likely has an important role in the evolution of galaxies.

The painter María Izquierdo played an important role in the development of twentieth-century Mexican art, but her work has never been well-known in the United States except among art historians. One reason for Izquierdo's relative obscurity is the enormous popularity of some of her peers. In particular, the painters Frida Kahlo and Diego Rivera have so captivated the interest of US audiences that Izquierdo and other Mexican artists from the period often get overlooked, despite the high quality of their work.

Which choice best states the main idea of the text?

- A. Izquierdo's work is not as well-known in the United States as it should be because Kahlo and Rivera draw so much of the public's attention.
- B. During Izquierdo's lifetime, her paintings were displayed in galleries in the United States much more frequently than paintings by Kahlo and Rivera were.
- C. Izquierdo painted some of the same subjects that Kahlo and Rivera painted but used different techniques than they used.
- D. Few of Izquierdo's works are in galleries today because she produced only a small number of paintings.

To dye wool, Navajo (Diné) weaver Lillie Taylor uses plants and vegetables from Arizona, where she lives. For example, she achieved the deep reds and browns featured in her 2003 rug *In the Path of the Four Seasons* by using Arizona dock roots, drying and grinding them before mixing the powder with water to create a dye bath. To intensify the appearance of certain colors, Taylor also sometimes mixes in clay obtained from nearby soil.

Which choice best states the main idea of the text?

- A. Reds and browns are not commonly featured in most of Taylor's rugs.
- B. Taylor draws on local resources in the approach she uses to dye wool.
- C. Taylor finds it difficult to locate Arizona dock root in the desert.
- D. *In the Path of the Four Seasons* is widely acclaimed for its many colors and innovative weaving techniques.

Philadelphia's Black Pearl Chamber Orchestra, founded by Jeri Lynne Johnson, performs classical music, from well-known compositions by Beethoven to contemporary works by Jessie Montgomery. For the orchestra's iConduct! program, Johnson invites community members to learn some basic elements of conducting and then experience conducting the Black Pearl orchestra themselves.

Which choice best states the main idea of the text?

- A. The Black Pearl orchestra performs music from all over the world but mostly performs music composed by Philadelphians.
- B. Johnson founded the Black Pearl orchestra to perform classical music by contemporary artist Jessie Montgomery.
- C. The Black Pearl orchestra gives community members the chance to both listen to and participate in classical music performance.
- D. Johnson has community members conduct an orchestra to demonstrate how difficult the task is.

The following text is adapted from Edgar Allan Poe's 1849 story "Landor's Cottage."

During a pedestrian trip last summer, through one or two of the river counties of New York, I found myself, as the day declined, somewhat embarrassed about the road I was pursuing. The land undulated very remarkably; and my path, for the last hour, had wound about and about so confusedly, in its effort to keep in the valleys, that I no longer knew in what direction lay the sweet village of B—, where I had determined to stop for the night.

Which choice best states the main idea of the text?

- A. The narrator remembers a trip he took and admits to getting lost.
- B. The narrator recalls fond memories of a journey that he took through some beautiful river counties.
- C. The narrator describes what he saw during a long trip through a frequently visited location.
- D. The narrator explains the difficulties he encountered on a trip and how he overcame them.

Paleontologists searching for signs of ancient life have found many fossilized specimens of prehistoric human ancestors, including several from the Pleistocene era discovered in a geological formation in the Minatogawa quarry in Japan. However, to study the emergence of the earliest multicellular organisms to appear on Earth, researchers must turn elsewhere, such as to the Ediacaran geological formation at Mistaken Point in Canada. A UNESCO World Heritage Site, the 146-hectare reserve contains more than 10,000 fossils that together document a critical moment in evolutionary history.

What does the text indicate about the geological formation at Mistaken Point?

- A. It holds a greater number of fossils but from a smaller variety of species than the formation in the Minatogawa quarry does.
- B. It has provided evidence that the earliest human species may have emerged before the Pleistocene era.
- C. It is widely considered by paleontologists to be the most valuable source of information about prehistoric life forms.
- D. It contains specimens from an older time period than those found in the formation in the Minatogawa quarry.

Biologists have predicted that birds' feather structures vary with habitat temperature, but this hadn't been tested in mountain environments. Ornithologist Sahas Barve studied feathers from 249 songbird species inhabiting different elevations—and thus experiencing different temperatures—in the Himalaya Mountains. He found that feathers of high-elevation species not only have a greater proportion of warming downy sections to flat and smooth sections than do feathers of low-elevation species, but high-elevation species' feathers also tend to be longer, providing a thicker layer of insulation.

Which choice best states the main idea of the text?

- A. Barve's investigation shows that some species of Himalayan songbirds have evolved feathers that better regulate body temperature than do the feathers of other species, contradicting previous predictions.
- B. Barve found an association between habitat temperature and feather structure among Himalayan songbirds, lending new support to a general prediction.
- C. Barve discovered that songbirds have adapted to their environment by growing feathers without flat and smooth sections, complicating an earlier hypothesis.
- D. The results of Barve's study suggest that the ability of birds to withstand cold temperatures is determined more strongly by feather length than feather structure, challenging an established belief.

A common assumption among art historians is that the invention of photography in the mid-nineteenth century displaced the painted portrait in the public consciousness. The diminishing popularity of the portrait miniature, which coincided with the rise of photography, seems to support this claim. However, photography's impact on the portrait miniature may be overstated. Although records from art exhibitions in the Netherlands from 1820 to 1892 show a decrease in the number of both full-sized and miniature portraits submitted, this trend was established before the invention of photography.

Based on the text, what can be concluded about the diminishing popularity of the portrait miniature in the nineteenth century?

- A. Factors other than the rise of photography may be more directly responsible for the portrait miniature's decline.
- B. Although portrait miniatures became less common than photographs, they were widely regarded as having more artistic merit.
- C. The popularity of the portrait miniature likely persisted for longer than art historians have assumed.
- D. As demand for portrait miniatures decreased, portrait artists likely shifted their creative focus to photography.