Prehistoric Printing

Paleontologists are using modern technology to gain a greater understanding of the distant past. With the aid of computed tomography (CT) scanning and 3-D printing, researchers are able to create accurate models of prehistoric fossils. These models have expanded...

At this point, the writer is considering adding the following sentence.

Fossils provide paleontologists with a convenient way of estimating the age of the rock in which the fossils are found.

Should the writer make this addition here?

A) Yes, because it supports the paragraph’s argument with an important detail.
B) Yes, because it provides a logical transition from the preceding sentence.
C) No, because it is not directly related to the main point of the paragraph.
D) No, because it undermines the main claim of the paragraph.
researchers’ knowledge of ancient species and swear to advance the field of paleontology in the years to come.

CT scanners use X-rays to map the surface of a fossil in minute detail, recording as many as one million data points to create a digital blueprint. A 3-D printer then builds a polymer model based on this blueprint, much as a regular computer printer reproduces digital documents on paper. Whereas the head of an ordinary computer printer moves back and forth while printing ink onto paper, the corresponding part of a 3-D printer moves in multiple dimensions while squirting out thin layers of melted polymer plastic. The plastic hardens quickly, it allows the printer to build the layers of the final model. Compared with older ways of modeling fossils, scanning and printing in this way is extremely versatile.

2. A) NO CHANGE  
   B) subscribe  
   C) vow  
   D) promise

3. The writer is considering deleting the underlined sentence. Should the sentence be kept or deleted?
   A) Kept, because it helps explain why X-rays are used in CT scanners.  
   B) Kept, because it provides details to illustrate how a 3-D printer works.  
   C) Deleted, because it contradicts the passage’s information about digital blueprints.  
   D) Deleted, because it creates confusion about how researchers gather data.

4. A) NO CHANGE  
   B) this  
   C) which  
   D) that
One significant benefit of 3-D printing technology is its ability to create scale reproductions of fossils. But now 3-D scale models can be rearranged with ease, which is a huge boon to scientists. A team led by Drexel University professor Kenneth Lacovara is making models of dinosaur bones one-tenth the bones’ original sizes in order to learn how they fit together when the animals were alive. In the past, such research was limited by the weight and bulk of the fossils as well as its preciousness and fragility. In many cases, scientists had to rearrange bones virtually, using artists’ renderings.

Because CT scanners can map objects that are impossible to excavate, CT scanning and 3-D printing can also be used to reproduce fossils that scientists cannot observe firsthand. By contrast, researchers

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5. In order to learn
A) NO CHANGE
B) in order for learning
C) so that one is learning
D) so to learn

6. its preciousness and fragility
A) NO CHANGE
B) it’s
C) their
D) there

7. To make this paragraph most logical, sentence 2 should be placed
A) where it is now.
B) before sentence 1.
C) after sentence 4.
D) after sentence 5.

8. Nonetheless,
A) NO CHANGE
B) Nonetheless,
C) Besides,
D) For example,
from the National Museum of Brazil has relied on this technique to study a fossilized skeleton that was discovered protruding from a rock at an old São Paulo railroad site. The fossil was too delicate to be removed from the rock. Because of the fossil’s delicate nature, the team dug up a block of stone around the fossil and brought it to their lab. With the aid of a CT scanner and a 3-D printer, they were able to produce a resin model of the fossil. Examining the model, the researchers determined that one had found a new species, a 75-million-year-old crocodile. While not every discovery will be as dramatic as this one, paleontologists anticipate further expanding their knowledge of ancient life-forms as CT scanning and 3-D printing continue to make fossils more accessible.

9
A) NO CHANGE
B) relied
C) will rely
D) is relying

10 Which choice most effectively combines the underlined sentences?
A) The fossil could not be removed from the rock on account of it being too delicate; moreover, the team dug up a block of stone around it and brought it to their lab.
B) The team thought the fossil was too delicate to remove from the rock, and their next decision was to dig up a block of stone around the fossil and bring it to their lab.
C) The fossil was too delicate to be removed from the rock, so the team dug up a block of stone around the fossil and brought it to their lab.
D) In removing the fossil from the rock, the team found it was too delicate; then they dug up a block of stone around the fossil and brought it to their lab.

11
A) NO CHANGE
B) he or she
C) they
D) it
Thomas Nast, the Crusading Cartoonist

“Stop them pictures!” Legend has it that the corrupt politician William “Boss” Tweed once used those words when ordering someone to offer a bribe to Thomas Nast, an artist who had become famous for cartoons that called for reforms to end corruption. As a result, Tweed’s attempt to silence the artist failed, and Nast’s cartoons, published in magazines like Harper’s Weekly, actually played a key role in bringing Boss Tweed and his cronies to justice.

There were powerful political organizations in the 1860s and the 1870s. The organizations were known as “political machines” and started taking control of city governments. These political machines were able to pack legislatures and courts with hand-picked supporters by purchasing votes, a form of election fraud involving the exchange of money or favors for votes. Once a political machine had control of enough important positions, its members were able to use public funds to enrich themselves and their friends. Boss Tweed’s Tammany Hall group, which controlled New York City in the 1860s—stole more than $30 million,
the equivalent of more than $365 million today.

Tweed had been elected to a single two-year term in Congress in 1852. Tammany Hall was so powerful and corrupt that, the New York Times, commented “There is absolutely nothing . . . in the city which is beyond the reach of the insatiable gang.”

Given the extent of Tweed’s power, it is remarkable that a single cartoonist could have played such a significant role in bringing about his downfall. Nast’s cartoons depicted Tweed as a great big bloated thief. One of the artist’s most famous images showed Tweed with a bag of money in place of his head. Another featured Tweed leaning against a ballot box with the caption “As long as I count the votes, what are you going to do about it?” These cartoons were so effective in part because many of the citizens who supported Tweed were illiterate and thus could not read the newspaper accounts of his criminal activities. Nast’s cartoons, though, widely exposed the public to the injustice of Tweed’s political machine.
Nast’s campaign to bring down Tweed and the Tammany Hall gang was ultimately successful. In the elections of 1871, the public voted against most of the Tammany Hall candidates, greatly weakening Tweed’s power. Eventually, Tweed and his gang were persecuted for a number of charges, including fraud and larceny, and many of them were sent to jail. In 1875 Tweed escaped from jail and fled to Spain and unwittingly brought about one final pinnacle for the power of political cartoons: A Spanish police officer recognized Tweed from one of Nast’s cartoons. Consequently, Tweed was sent back to jail, and Nast was hailed as the man who toppled the great Tammany Hall machine.

20 A) NO CHANGE  
B) persecuted on  
C) persecuted with  
D) prosecuted on

21 A) NO CHANGE  
B) bringing  
C) brings  
D) has brought

22 A) NO CHANGE  
B) triumph  
C) culmination  
D) apex
Rethinking Crowdfunding in the Arts

Crowdfunding is a popular way to raise money using the Internet. The process sounds simple: an artist, entrepreneur, or other innovator takes his or her ideas straight to the public via a crowdfunding website. The innovator creates a video about the project and offers, in exchange for donations, a series of “perks,” from acknowledgment on a social media site to a small piece of art. Many crowdfunding programs are all-or-nothing; in other words, the innovator must garner 100 percent funding for the project or the money is refunded to the donors. At its best, the system can give creators direct access to millions of potential backers.

The home page of one leading crowdfunding site features a project to manufacture pinhole cameras on a 3-D printer. The idea is obviously very attractive. An obscure method of photography may be made available to many at little expense. Within weeks, the project was 621 percent funded. In contrast, on the same page, a small Brooklyn performance venue is attempting to raise money for its current season. The venue features works of performance art showcased in a storefront window. Those who have seen the space consider it vital. However, that group may not be large enough; with just fourteen days to go in the fund-raising period, the campaign is only 46 percent funded.
Artists such as these Brooklyn performers find that crowdfunding exacerbates problems that already exist.

Work, that is easily understood and appreciated, is supported, while more complex work goes unnoticed.

Time that could be used creating art is spent devising clever perks to draw the attention of potential contributors. In addition, audiences may contain many “free riders,” they did not make contributions.

At this point, the writer is considering adding the following sentence.

Crowdfunding tends to attract contributors from a wide variety of professional fields.

Should the writer make this addition here?

A) Yes, because it gives more information about the people who donate to crowdfunding campaigns.

B) Yes, because it reinforces the writer’s point about the funding of artistic projects.

C) No, because it fails to take into account project funding received from public institutions.

D) No, because it blurs the focus of the paragraph by introducing a poorly integrated piece of information.
Ironically, the success of crowdfunding may weaken overall funding for the arts if people begin to feel that paying for the art loved by them is someone else’s responsibility.

[1] One innovative playwright has woven the deficiencies of the system into her crowdfunding model. [2] Though the price for her tickets was higher than that of tickets for comparable shows, it was still affordable to most theatergoers—and reflected the real cost of the performance. [3] She presented the total cost for producing her play on a crowdfunding site. [4] Then she divided the total cost by the number of people she expected to attend the performance. [5] The result of the calculation was the minimum donor price, and only donors who paid at least the minimum ticket price were allowed to attend the performance. [6] By subverting the presumption that money used for her project is an altruistic donation, the playwright showed that our work has monetary value to those who enjoy it.

30. A) NO CHANGE  
B) they love  
C) loved by him or her  
D) he or she loves

31. A) NO CHANGE  
B) their  
C) her  
D) its

32. To make this paragraph most logical, sentence 2 should be placed  
A) where it is now.  
B) after sentence 3.  
C) after sentence 4.  
D) after sentence 5.
Crowdfunded Projects on Kickstarter in 2012

Money raised (millions of dollars)
- games
- publishing
- food
- art
- theater
- fashion
- photography
- dance

Average pledge (dollars)
- food
- fashion
- dance
- theater
- photography
- art
- games
- publishing

Success rate (percent of fully funded projects)
- dance
- theater
- art
- food
- photography
- games
- publishing
- fashion

Adapted from “These Were the Most Successful Projects on Kickstarter Last Year.” ©2013 by The Economist Newspaper Limited.

**Question 33 asks about the graphic.**

Which choice offers an accurate interpretation of the data in the graphs?

A) The project category with the lowest amount of money raised was also the most successfully funded project category.

B) The project category with the highest average pledge amount was also the most successfully funded project category.

C) The project category with the lowest average pledge amount was also the project category that raised the most money.

D) The project category with the highest average pledge amount was also the project category with the most money raised.
Questions 34-44 are based on the following passage.

Investigative Journalism: An Evolving American Tradition

[1] The recent precipitous decline of print journalism as a viable profession has exacerbated long-held concerns about the state of investigative reporting in the United States. [2] Facing lower print circulation and diminished advertising revenue, many major newspapers have reduced or eliminated investigative resources. [3] Newspapers, the traditional nurturing ground for investigative journalism, have been hit especially hard by the widespread availability of free news online. [4] To survive, investigative journalism must continue to adapt to the digital age.

It is not difficult to understand why a cash-strapped, understaffed publication might feel pressure to cut teams of investigative reporter’s—their work is expensive and time-consuming. Taking on the public interest, investigative journalism involves original, often long-form reporting on such topics as illegal activities, street crime, corporate wrongdoing, and political corruption. An investigative story involves one or more experienced journalists dedicating their full energy and the resources of the publisher to a piece for a prolonged period of time. Expensive legal battles may ensue. The results of this work, though costly, have

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34
For the sake of the logic and cohesion of the paragraph, sentence 3 should be
A) placed where it is now.
B) placed before sentence 1.
C) placed after sentence 1.
D) DELETED from the paragraph.

35
A) NO CHANGE
B) reporters;
C) reporters,
D) reporter’s;

36
A) NO CHANGE
B) Undertaken in
C) Overtaking
D) Taking off from

37
A) NO CHANGE
B) business scandals,
C) abuse of government power,
D) DELETE the underlined portion.
helped keep those in power accountable. The exposure by *Washington Post* reporters Bob Woodward and Carl Bernstein of government misconduct in the Watergate scandal resulted in the resignation of President Richard Nixon in 1974. More recently, Seymour Hersh, reporting for the *New Yorker* in 2004, helped publicize the mistreatment of Iraqi prisoners by US personnel at Abu Ghraib during the Iraq War. In these and other cases, exposure from reporters has served as an important blockade to or scolding of malfeasance.

At this point, the writer is considering adding the following sentence.

In 1954, Edward R. Murrow and Fred Friendly produced episodes of the CBS television show *See It Now* that contributed to the end of US senator Joseph McCarthy’s anticommunist “witch hunts.”

Should the writer make this addition here?

A) Yes, because it helps clarify that the passage’s main focus is on investigations of political corruption.

B) Yes, because it offers an important counterpoint to the other cases previously described in the paragraph.

C) No, because it gives an example that is both chronologically and substantively out of place in the paragraph.

D) No, because it provides an example that is inconsistent with the passage’s definition of investigative journalism.

Should the writer make this addition here?

A) NO CHANGE

B) interference to or condemnation of

C) drag on or reproof of

D) deterrent or rebuke to
While worrisome, the decline of traditional print media could not entail the end of investigative journalism. Although many newsrooms have reduced their staff, some still employ investigative reporters. Nonprofit enterprises such as the Organized Crime and Corruption Reporting Project have begun to fill the void created by staff losses at newspapers and magazines. Enterprising freelance reporters, newly funded by nonprofits, make extensive use of social media.

40 Which choice most effectively suggests that the “end of investigative journalism” is a real possibility but one that can be prevented?
A) NO CHANGE
B) need
C) will
D) must

41 Which choice most effectively sets up the examples in the following sentences?
A) NO CHANGE
B) Investigative journalism also declined between the 1930s and 1950s, only to be revived in the 1960s.
C) According to the Pew Research Center, more people get their national and international news from the Internet than from newspapers.
D) Indeed, recent years have witnessed innovative adjustments to changing times.

42 A) NO CHANGE
B) enterprises: such as
C) enterprises such as:
D) enterprises, such as
including blogs and Twitter, to foster a public conversation about key issues. The Help Me Investigate project, for example, solicited readers to submit tips and information related to ongoing stories to its website. Far from marking the end of investigative journalism, cooperation among journalists and ordinary citizens has been facilitated by the advent of the digital age through an increase in the number of potential investigators.

STOP

If you finish before time is called, you may check your work on this section only. Do not turn to any other section.