#### ID: e38b3e4f

The radiation that \_\_\_\_\_ during the decay of radioactive atomic nuclei is known as gamma radiation.

- A. occurs
- B. have occurred
- C. occur
- D. are occurring

#### ID: 3580533b

In recent years, economists around the world have created new tools that quantify the overall well-being of a country's citizens. Economists in India, for example, use an Ease of Living Index. This tool \_\_\_\_\_ economic potential, sustainability, and citizens' quality of life.

- A. measures
- B. had measured
- C. would have measured
- D. will have been measuring

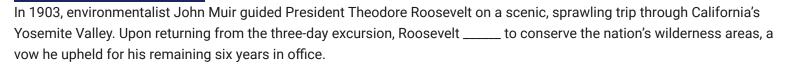
#### ID: b7363ba2

Mathematician and meteorologist Edward Lorenz used the metaphor of the "butterfly effect" to explain how seemingly minor events can have major impacts on future weather. According to Lorenz's metaphor, the wind from a butterfly flapping \_\_\_\_\_ in Brazil might eventually grow into a storm elsewhere across the globe.

Which choice	completes the	text so that it	conforms to the	conventions of	Standard English?

- A. its wings
- B. its wings'
- C. it's wing's
- D. it's wings'

#### ID: 7b419faf



- A. is vowing
- B. vowed
- C. will vow
- D. vows

# ID: dbd78791

Led by Syrian American astronomer Shadia Habbal, the Solar Wind Sherpas are an intrepid team of scientists who travel the
globe to study solar winds, the streams of particles emanating from the Sun that are only visible from certain locations
during a total solar eclipse. When such an eclipse is imminent, the Sherpas pack up their telescopes and ready.

- A. get
- B. had gotten
- C. got
- D. were getting

# ID: 77bf77cd

Farouk El-Baz, a geologist and space scientist,	part of the team that selected the lunar landing sites for the Apollo
program during the 1960s and 1970s.	

- A. are
- B. was
- C. have been
- D. were

# ID: 57998dd3

Obsidian is a kind of volcanic gla	ss formed when lava cools so quickly that the atoms inside it cannot arrange themselves in
a crystalline structure. You	more about obsidian's structure, which is classified as amorphous, in a later chapter.

- A. had learned
- B. had been learning
- C. will learn
- D. have learned

#### ID: db4e3819



- A. sweep
- B. are sweeping
- C. were sweeping
- D. sweeps

# ID: d47bb0a4

Objects ranging from the Kikkoman soy sauce bottle to the Yamaha VMAX motorcycle to the Komachi bullet train
designed by twentieth-century industrial designer Kenji Ekuan.

- A. was
- B. is
- C. has been
- D. were

# ID: 69f031ab

While exploring Nevada's Gypsu	m Cave in 1930, Seneca and Abenaki archaeologist Bertha Parker made her most famous
discovery: the skull of a now-ext	inct ground sloth (Nothrotheriops shastensis) alongside human-made tools. Parker's crucial
finding was the first huma	ans in North America as far back as 10,000 years ago.
Which choice completes the tex	t so that it conforms to the conventions of Standard English?
A 1	

- A. places
- B. placed
- C. place
- D. to place

# ID: 843f92af

The sun never sets during the Arctic summer in the Far North. In response, reindeer in this region must change their sleep
nabits. Instead of resting when it gets dark, they rest when they need their food.
Which choice completes the text so that it conforms to the conventions of Standard English?

- A. digest
- B. will digest
- C. to digest
- D. digesting

#### ID: f4fd123c

The African Games	es Co-production Market, one of over 180 annual international conferences supporting video game
development,	the growth of the African gaming industry by helping start-up studios in Africa find partners.

- A. promote
- B. are promoting
- C. promotes
- D. have promoted

#### ID: 856b495d

In the early twentieth century, Joseph Kekuku and other Hawaiian	_ in the mainland United States to the bright and
lilting sound of the <i>kīkā kila</i> , or Hawaiian steel guitar. The instrument so	oon became a fixture in American blues and country
music.	

- A. musicians introduced audiences
- B. musicians' introduced audiences'
- C. musician's introduced audience's
- D. musicians' introduced audiences

# ID: 97b62fab

Smaller than poppy seeds, t	ardigrades are tiny, but they are tough. These minuscule animals can survive for thirty years
without food or water, and _	can withstand extreme temperatures as low as minus 328 degrees and as high as 304
degrees Fahrenheit.	

- A. that
- B. it
- C. they
- D. he

#### ID: 35360da9

The US Geological Survey wants to map every human-made structure in the United States, and it is asking volunteers to help. Cassie Tammy Wang and Ashish D'Souza are just two of the many volunteer map editors who \_\_\_\_\_ to the project since it began in 2012.

- A. contribute
- B. will contribute
- C. have contributed
- D. will be contributing

#### ID: 0ff8477b

Food and the sensation of taste are central to Monique Truong's novels. In *The Book of Salt*, for example, the exiled character of Bình connects to his native Saigon through the food he prepares, while in *Bitter in the Mouth*, the character of Linda \_\_\_\_\_ a form of synesthesia whereby the words she hears evoke tastes.

- A. experienced
- B. had experienced
- C. experiences
- D. will be experiencing

#### ID: b260c65a

Earth is not a perfect sphere. Due to the gravi	tational pull, Earth bulges out on the sides closest to and farthest from
the Moon. This distorting pull is known as a tidal for	ce, and it is responsible for the changes in water levels that are called
high and low tides.	

- A. Moon's
- B. Moons
- C. Moons'
- D. Moon

# ID: 898f182c

Richard Spikes was a prolific African American inver	ntor known for his contributions to automotive engineering. Between
1907 and 1946, he patented many inventions,	an automobile turn signal, a safety brake, and—most famously—the first
automatic gearshift.	

- A. included
- B. includes
- C. including
- D. will include

#### ID: 7c48a6dd

In the late 1960s, inspired in part by the sight of laundry hanging on a clothesline, African American abstract painter Sam Gilliam began to create his iconic "Drape" paintings. He applied bold, saturated hues to large canvases and \_\_\_\_\_ them from ceilings or walls, causing the drooping fabric to cascade in dramatic loops and curves.

- A. to have suspended
- B. suspending
- C. to suspend
- D. suspended

# ID: fff4c7f4

American poet Emily Dickinson wrote many of her poems on scraps of paper, but she also took steps to collect these works.
From 1858 to around 1864, for example, she copied more than 800 of into forty homemade booklets (known as fascicles).
Which choice completes the text so that it conforms to the conventions of Standard English?

A. them

B. this

C. that

D. it

# ID: 175df826

n the 2011 documentary	The Barber of Birmingham, civil rights activist James Armstrong recounts how his barbershop in
Birmingham, Alabama,	as a political hub for members of the Black community during the 1950s.

- A. serving
- B. having served
- C. served
- D. to serve

# ID: e2759b92

D. was

Occupying a significant part of modern-day Nigeria, the Kingdom of Benin was one of the major powers in West Africa
petween the thirteenth and nineteenth centuries. It ruled by Oba Ewuare I from 1440 to 1473.
Which choice completes the text so that it conforms to the conventions of Standard English?
which choice completes the text so that it comorms to the conventions of Standard English:
A. is
B. will be
C. has been

# ID: 31362d2d

If simple sugars such as ribose and glycolaldehyde	_ Earth from elsewhere and survived impact—a possibility
astrophysicist Nicolle Zellner outlined in a 2020 study—th	e sugars could have reacted with other molecules that were already
present on the planet to form the nucleotides that are the	structural components of RNA and DNA.

- A. reach
- B. had reached
- C. will reach
- D. are reaching

#### ID: 1d971f75

Photographer Ansel Adams's landscape portraits are iconic pieces of American art. However, many of the \_\_\_\_\_ of landscapes were intended not as art but as marketing; a concessions company at Yosemite National Park had hired Adams to take pictures of the park for restaurant menus and brochures.

- A. photographer's early photo's
- B. photographers early photo's
- C. photographer's early photos
- D. photographers early photos

# ID: f40ca576

Each year in the fall, when the weather starts to cool in the northern hemisphe	ere, millions of North American monarch
butterflies journey south. Searching for food and warmer habitats, they	thousands of miles—from as far north as
Canada all the way down to Mexico—on this annual migration.	

- A. flew
- B. were flying
- C. had flown
- D. fly

#### ID: 4c9a2aee

Wanda Diaz-Merced is an astrophysicist who lost her sight when she was young. Diaz-Merced's condition inspired her to develop software that can translate scientific data into sound. Sound-based tools \_\_\_\_\_ scientists to detect subtle patterns in data. Such patterns may not be evident in traditional graphs.

- A. has enabled
- B. enable
- C. is enabling
- D. enables

# ID: 42cc9236

f you try on one of artist Nick Cave's signature Soundsuits, you can expect to swish, rustle, or clang every time you move.
Cave makes his suits out of found objects, everything from ceramic birds to broken record players. He carefully considers
the sound an object makes before using in a suit.

- A. this
- B. that
- C. these
- D. it

#### ID: 81ac953e

In 1899, Swedish chemist Svante Arrhenius developed an equation to answer a long-standing question: why do chemical reactions speed up at higher temperatures? The Arrhenius equation, named for its creator, \_\_\_\_\_ an important concept in modern chemistry.

- A. have remained
- B. remain
- C. remains
- D. are remaining

# ID: ec08463d

Botanists recognize over fifty different species of sunflower. One species, the silverleaf sunflower,	_ both an early-
flowering ecotype that tends to grow in coastal areas and a late-flowering ecotype that grows inland.	

- A. having included
- B. including
- C. to include
- D. includes

# ID: 4a90a978

D. joins

In 1990, California native and researcher Ellen Ochoa left her position as chief of the Intelligent Systems Technology Branch at a NASA research center the space agency's astronaut training program.
Which choice completes the text so that it conforms to the conventions of Standard English?
A. to join
B. is joining
C. joined

# ID: 59e41600

Why are Rome's famous concrete structures, such as	s the Colosseum, still standing after 2,000-plus years, when modern
concrete may not even last for fifty? Scientists	that the secret to Roman concrete's durability was its unique blend of
ingredients, which included volcanic ash and seawate	er.

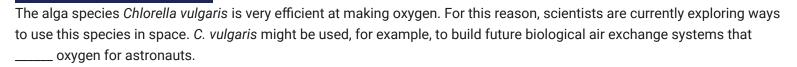
- A. explain
- B. having explained
- C. explaining
- D. to explain

#### ID: 588887b9

In 1881, French chemist Camille Faure redesigned the rechargeable lead-acid battery. Faure's	design greatly increased the
amount of electricity that the original battery, which the French physicist Gaston Planté	fifteen years earlier, could
hold.	

- A. is inventing
- B. will invent
- C. invents
- D. had invented

#### ID: 96e5da01



- A. are producing
- B. produced
- C. produce
- D. have produced

#### ID: 12bd5b75

With its towering, six-spired exterior of granitelike quartz monzonite, the Salt Lake Temple is one of the most instantly recognizable structures in the state of Utah. However, many people do not know that \_\_\_\_\_ built over the course of forty years, with construction beginning in 1853 and ending in 1893.

Which choice com	npletes the text so t	that it conforms to the	e conventions of	Standard English?

- A. it was
- B. one was
- C. they were
- D. both were

# ID: bd11fe93

Dr. Rocío Paola Caballero-Gill is a paleoceanographer. This means that Dr. Caballero-Gill doesn't just study oceans as they
are today. She uses chemistry and fossil evidence oceans as they were in the past.
Which choice completes the text so that it conforms to the conventions of Standard English?

- A. has studied
- B. to study
- C. studied
- D. studies

#### ID: d75d57a0

While many video game creators strive to make their graphics ever more	others look to the past, developing titles with
visuals inspired by the "8-bit" games of the 1980s and 1990s. (The term "8-bit" r	refers to a console whose processor could
only handle eight bits of data at once.)	

- A. lifelike but
- B. lifelike
- C. lifelike,
- D. lifelike, but

# ID: f2eaaf5d

At eight paragraphs long, the preamble to the constitution of country in Western Asia—is much longer than the one-
paragraph preamble to the United States Constitution.
paragraph predmisie to the emited etates constitution.
Which choice completes the text so that it conforms to the conventions of Standard English?

- A. Bahrain—a
- B. Bahrain, a
- C. Bahrain a
- D. Bahrain: a

## ID: 1f39ab8b

In the novel *Things Fall Apart* by Chinua Achebe, Okonkwo is a leader of Umuofia (a fictional Nigerian clan) and takes pride in his culture's traditions. However, when the arrival of European missionaries brings changes to Umuofia, the novel asks a central question: How \_\_\_\_\_

- A. Umuofia's traditions will be affected.
- B. will Umuofia's traditions be affected.
- C. Umuofia's traditions will be affected?
- D. will Umuofia's traditions be affected?

## ID: 603755a5

In 1959, marine biologist Dr. Albert Jones founded the Underwater Adventure Seekers, a scuba diving that is the
oldest club for Black divers in the United States and that has helped thousands of diving enthusiasts become certified in the
field.

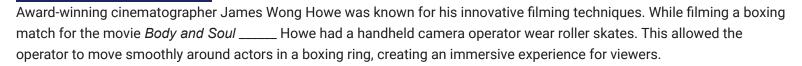
- A. club
- B. club,
- C. club-
- D. club, and

### ID: dddfa043

Before the Erie Canal was completed in 1825, transporting goods by wagon between New York City and the Midwest took up to forty-five days and cost one hundred dollars per ton. By linking the Hudson River to Lake \_\_\_\_\_ canal reduced transport time to nine days and cut costs to six dollars per ton.

- A. Erie; the
- B. Erie (the
- C. Erie, the
- D. Erie: the

## ID: 91fbd59d



- A. (1947), and
- B. (1947),
- C. (1947) and
- D. (1947)

## ID: b1e8b87f

Winding through the ice atop Norway's Jotunheim Mountains is the Lendbreen pass, an ancient route that was used by
nunters, farmers, traders, and travelers in the Middle Ages before eventually falling into disuse. Recently, archeologists have
knives, horseshoes, wool tunics, and thousands of other artifacts from the icy pass.

- A. unearthed:
- B. unearthed,
- C. unearthed—
- D. unearthed

#### ID: 96499989

Fans of science fiction will \_\_\_\_\_ multiple references to classic sci-fi stories in Janelle Monáe's song lyrics, including her recurring nods to the plot of the 1927 sci-fi film *Metropolis*.

- A. appreciate the
- B. appreciate. The
- C. appreciate, the
- D. appreciate: the

### ID: e15c50b2

A standard Argo float, a type of autonomous robot, measures	temperature and salinity in the upper regions of ice-free
oceans. More advanced floats can measure a wider range of _	and monitor seasonal ice zones.

- A. variables: travel to greater depths
- B. variables, travel to greater depths,
- C. variables travel to greater depths,
- D. variables, travel to greater depths;

# ID: 7b950fc2

2000, Nora de Hoyos Comstock, herself an owner of a successful consulting firm, sought to increase Latina
presentation in corporate founded Las Comadres para las Americas, an international community that for over two
ecades has served as a resource and information network for Latina business professionals.

- A. settings she
- B. settings, she
- C. settings and she
- D. settings. She

# ID: a466679a

In 1976, the Inuit rock group Sikumiut recorded the album <i>People of the Ice</i> . Though only their first record, it shows a band
already skilled at the difficult task of making music that sounds easy and fun. On songs like "Utirumavunga," Lucassie
Koperqualuk's guitar riffs effortlessly Charlie Adams's delightfully catchy vocal melodies.

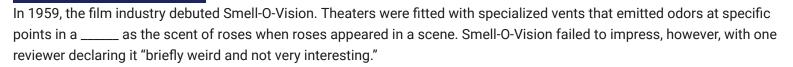
- A. blend, with
- B. blend. With
- C. blend; with
- D. blend with

#### ID: 577b09fa

Robin Wall Kimmerer of the Citizen Potawatomi Nation is a bryologist, a plant scientist who specializes in mosses. To Kimmerer, mosses are Earth's most adaptable plants: they can clone \_\_\_\_\_ enter a dormant state in times of drought, and grow in areas that don't have soil.

- A. themselves;
- B. themselves,
- C. themselves. And
- D. themselves

### ID: c21df211



- A. movie such
- B. movie; such
- C. movie. Such
- D. movie, such

#### ID: ea8f4658

When particles are suspended in liquid (like pollen in a water glass), they will zigzag randomly through the liquid and collide with one another in perpetuity. This type of random, continuous \_\_\_\_\_ is known as Brownian motion, can be observed throughout the natural world.

Which choice completes the text so that it conforms to the conventions of Standard English?

A. movement: which

B. movement, which

C. movement which

D. movement. Which

#### ID: 04bfd364

The intense pressure found in the deep ocean can affect the structure of proteins in fish's cells, distorting the proteins' shape. The chemical trimethylamine N-oxide (TMAO) counters this effect, ensuring that proteins retain their original \_\_\_\_\_ is found in high concentrations in the cells of the deepest-dwelling fish.

- A. configurations. TMAO
- B. configurations TMAO
- C. configurations, TMAO
- D. configurations and TMAO

# ID: 60713427

Polyphenols are organic compounds ultraviolet radiation from sunlight.	among their many roles, provide pigment that helps protect plants against
Which choice completes the text so that it o	conforms to the conventions of Standard English?
A. that—	
B. that;	
C. that,	
D. that:	

## ID: 89ab0d46

After the printing press was introduced in 1440, handwritten manuscripts from	Europe's medieval period were often
destroyed and the paper used for other purposes. In one instance, pages	a collection of Norse tales dating to 1270
were discovered lining a bishop's miter (hat).	

Which choice completes the text so that it conforms to the conventions of Standard English?	

B. from,

A. from:

- C. from
- D. from-

#### ID: 26c8c88c

About 70,000 meteorites have been found on Earth. Although most meteorites are fragments of \_\_\_\_\_ hundred have been identified as being from the Moon or Mars.

Which choice completes the text so that it conforms to the conventions of Standard English?

A. asteroids. Several

B. asteroids, several

C. asteroids; several

D. asteroids: several

## ID: 8a3998f1

After the United Kingdom began rolling out taxes equivale	ent to a few cents on single-use plastic grocery bags in 2011,
olastic-bag consumption decreased by up to ninety	taxes are subject to what economists call the "rebound effect": as
the change became normalized, plastic-bag use started to	o creep back up.

- A. percent, such
- B. percent and such
- C. percent. Such
- D. percent such

#### ID: aab78b25

Psychophysicist Howard Moskowitz was hired by a soda company to determine how much artificial sweetener \_\_\_\_\_ After conducting consumer taste tests, he found that no such ideal existed: participants expressed a wide range of preferences for different blends of sweetener, carbonization, and flavoring.

- A. do most people prefer in a diet drink?
- B. do most people prefer in a diet drink.
- C. most people prefer in a diet drink?
- D. most people prefer in a diet drink.

# ID: b35cefb7

The fine, powdery substance that covers the Moon's surface is called regolith. Because regolith is both readily available and nigh in oxygen scientists have wondered whether it could be used as a potential source of oxygen for future lunar settlements.
Which choice completes the text so that it conforms to the conventions of Standard English?

- A. content and
- B. content,
- C. content
- D. content, and

# ID: a1e0c981

In her bool	<i>The Woman</i>	Warrior: Me	emoirs of a (	Girlhood Am	ong Ghosts,	author Max	ine Hong Ki	ngston ex	xamines the	emes
chile	dhood, woman	hood, and	Chinese Am	erican ident	ity by intertw	ining autob	iography an	d mytholo	ogy.	

Which choice completes the text so that it conforms to the conventions of Standard English?

A. of:

B. of

C. of—

D. of,

# ID: 1724dac2

A subseasonal weather forecast attempts to predict weather conditions three to four weeks in its predictions are
therefore more short-term than those of the seasonal forecast, which attempts to predict the weather more than a month in
advance.

- A. advance,
- B. advance
- C. advance;
- D. advance and

# ID: 6fece68e

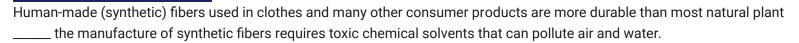
Emperor Ashoka ruled the Maurya Empire in South Asia from roughly 270 to 232 BCE. He is known for enforcing a mora code called the Law of Piety, which established the sanctity of animal the just treatment of the elderly, and the abolition of the slave trade.
Which choice completes the text so that it conforms to the conventions of Standard English?
A. life
B. life;
C. life:
D. life,

#### ID: 9091458d

Emperor penguins don't waddle out of the ocean. They launch themselves at such a high speed that they travel up to two meters before landing. How \_\_\_\_\_ A layer of microbubbles on their plumage reduces friction as the penguins speed to the surface.

- A. they are able to move so fast!
- B. are they able to move so fast.
- C. they are able to move so fast.
- D. are they able to move so fast?

### ID: 148be4da



- A. fibers,
- B. fibers but
- C. fibers
- D. fibers, but

#### ID: 333b2b65

D. not; aerobic

While one requires oxygen and one does and anaerobic respiration are both forms of cellular respiration—that is, they are processes by which cells break down glucose to use as energy.
Which choice completes the text so that it conforms to the conventions of Standard English?
A. not aerobic
B. not. Aerobic
C. not, aerobic

## ID: de55ec71

Generations of mystery and horror have been influenced by the dark, gothic stories of celebrated American author
Edgar Allan Poe (1809–1849).
Which choice completes the text so that it conforms to the conventions of Standard English?
A. writers
Dthere
B. writers,
C. writers—
D. writers;