

Name: _____

Directions

Read this article. Then answer questions 8 through 14

Birth of the Cool

by Katy Kelly

In the 1930s, nothing said sophistication like aspic.¹ Up-to-the-minute modern hostesses engaged in a frenzy of savory jelled-salad making, all thanks to the newly perfected electric refrigerator.

5 Such gracious living had been a long time coming. Until the mid-1800s, Americans kept food from spoiling by storing it in streams, cellars, snow, and ice. It was a system that worked better in the cool seasons. In the heat, bacteria bloomed so rapidly that killer food poisoning was referred to as “summer complaint.”

10 The icebox extended shelf and human life. In common use by 1838, the wooden cabinet lined with zinc or tin and insulated with sawdust, cork, or seaweed held ice above or below the food. Water from the melting ice drained into a pan. It was an imperfect solution. Sometimes the water would overflow the damp box. A 1929 *Collier's* magazine article noted: “Slime accumulates [in the drainpipes] constantly and should be removed with a long-handled circular brush. If your overflow pipe connects with an outside drain, be sure there is a trap to prevent poisonous gases and odors from flowing up it and
15 contaminating foods in the box.” Plus, says Pearl Buchbinder, 95, the icebox “was a good hiding place for mice.”

Cold comfort

To stock the box, city people bought ice, and country dwellers harvested it. In Robinhood, Maine, where Faith Reyher Jackson, 86, grew up, ice cutting was an all-town, all-day event, done at a neighbor's pond in the dead of winter. “They used saws and these
20 big tongs to pull it out,” she says. Then it was hauled from home to home on a horse-drawn cart, packed in sawdust, and put in the family's icehouse, where, she says, it lasted for months. City people depended on a delivery from the iceman. “Kids would chase him down the street, and he'd chip off a piece of ice and give it to them,” says B. J. Smith, 84, who was reared in Lima, Ohio. Customers used a card in their window to
25 place orders. The iceman, with a burlap or leather pad protecting his shoulder, would hoist a block weighing up to 100 pounds. When commercial icehouses opened in the early 1800s, they were considered a business with a future. But by the end of the century, pond ice was polluted. That, and unusually hot summers in 1889 and 1890, pushed ahead the advent of refrigerators.


¹aspic: a jelly made of fish or meat stock that is used to make a mold

30 In 1911, General Electric presented a machine that compressed chemical gases to cool
air. By 1920, there were some 200 different refrigerator models on the market. Even the
New Yorker raved: "A little water is put in some mysterious place: A few minutes pass,
a magic door opens, and a tray of small ice cubes appears before your startled eyes." But
such marvels were not for everybody or, in fact, almost anybody. Most machines were
35 powered by motors so large they were housed in separate rooms. That inconvenience was
trumped by cost. One 1922 refrigerator ran \$714 (the equivalent of \$7,856 today). A
competing invention, the Crosley Icyball, required putting part of the machine over a
kerosene burner every 24 to 36 hours. But the industry's biggest problem was the coolants
that, on occasion, leaked and killed people.


40 It wasn't until 1930, when Frigidaire began cooling with chlorofluorocarbons, that
people began upgrading to refrigerators. Small, with big fans on top, the appliance
changed the way America ate. Manufacturers provided books with menus for a lifestyle
that included ice tongs, bridge parties, and recipes showing off all that a refrigerator could
do for a single meal. (In 1929, Kelvinator suggested a raspberry cup, molded lamb, celery
45 curls, and Kelvinator fruitcake with whipped cream.) Pre-fridge, "frozen desserts and
frozen salads were nonexistent or just for wealthy people," says Sylvia Lovegren, author of
Fashionable Food: Seven Decades of Food Fads. "All of a sudden, the middle class could
have things that seemed high class a few years before." And what could be more high class
than frozen cheese salad or an icy frappé² made of condensed tomato soup?

50 By 1937, more than 2 million Americans owned refrigerators. By the mid-'50s, over
80 percent of the country had made the switch. Today, while the mechanics have remained
much the same, the refrigerator has gotten ever fancier. Freon, the chlorofluorocarbon that
changed the future, has been replaced with coolants that don't eat through the ozone layer.
Hydrators, automatic defrost systems, and icemakers have lured customers, but it is hard
55 to imagine any upgrade that could dazzle as much as the early promise of no ice—and
no mice.

²frappé: an iced or chilled drink

1  How does the author support the claim that “gracious living had been a long time coming” (line 4)?


- A by describing the excitement caused by new improvements in refrigerators
- B by describing the menus recommended by refrigerator manufacturers
- C by tracing the development of various methods for keeping food cool
- D by explaining the relationship between temperature and food safety

2  Read this sentence about pond ice from lines 20 through 22.

Then it was hauled from home to home on a horse-drawn cart, packed in sawdust, and put in the family’s icehouse, where, she says, it lasted for months.

Based on the information in lines 8 through 10, which was **most likely** the reason for packing pond ice in sawdust?

- A to keep the ice from chipping
- B to prevent the ice from melting
- C to keep the ice from becoming slimy
- D to prevent the ice from becoming polluted

3  What is the meaning of the word “hoist” in line 26?

- A lift
- B sell
- C carve
- D locate

GO ON

4

According to the article, what improvements were made to resolve a safety issue in the older refrigerators?

- A lining the cabinets with zinc
- B attaching an overflow pipe
- C using sawdust as insulation
- D changing the type of coolant

5

Which quotation from the article best supports the conclusion that advances in refrigeration improved life for the average person?

- A "To stock the box, city people bought ice, and country dwellers harvested it." (line 17)
- B "When commercial icehouses opened in the early 1800s, they were considered a business with a future." (lines 26 and 27)
- C "All of a sudden, the middle class could have things that seemed high class a few years before." (lines 47 and 48)
- D "Today, while the mechanics have remained much the same, the refrigerator has gotten ever fancier." (lines 51 and 52)

6

How do lines 50 through 53 develop a central idea of the article?

- A by showing that some people considered refrigerators unnecessary
- B by explaining that refrigerators have improved very little over the years
- C by comparing refrigerators sold in the past with refrigerators sold today
- D by showing that refrigerators gained widespread acceptance over time

GO ON

7

Which detail would be **most** important to include in a summary of the article?

- A Refrigeration was essential for making jelled salads.
- B "Summer complaint" was another name for food poisoning.
- C Modern refrigerators include icemakers and defrost systems.
- D Refrigerators gained popularity after they became small and affordable.

GO ON

Directions

Read this article. Then answer questions 8 through 14

Excerpt from *Coral Reef: A City That Never Sleeps*

by Mary M. Cerullo

By late afternoon, the daytime fishes become less interested in feeding and start to move closer to their evening retreats. Perhaps they grow nervous as their day vision becomes less efficient at dusk. The smallest fishes start the rush hour to return to their shelters for the night. Soon others follow their example.

5 The bright colors of the diurnal¹ fishes fade fast in the twilight. Some fishes can actually adjust color cells in their skin to alter their flashy daytime look to dull, darker night shades. The gathering gloom just makes others appear darker. The best defense is to disappear entirely inside the coral reef, because now the fishes' dark outlines are silhouetted against the setting sun to predators below.

10 Parrotfishes leave their feeding grounds in single file to seek out their individual hiding places in the reef. Some parrotfishes secrete a sticky cocoon from beneath their scales to seal their scent from hungry moray eels. If any creature tries to penetrate the mucus bubble, the parrotfish wakes up and bolts from its "bedroom." Some species of wrasses² also make cocoons for the night. Others bury themselves in the sand.

15 Because fishes don't have eyelids to close, it's impossible to tell whether or not most fishes are really sleeping. Parrotfishes do seem to go into a trancelike state at night. If they are disturbed from their rest, they act dazed and confused, like humans wakened out of a sound sleep.

20 A triggerfish locks itself inside a coral cave with a tall spine on its back fin. One spine folds down over the first spine like a door latch to hold it in place. Only the triggerfish can release its trigger spine, so a moray eel can't pull it from its retreat.

¹diurnal: active during the daytime

²wrasses: marine fish of tropical and temperate seas having thick lips, strong teeth, and usually a bright coloration; many are used as food

GO ON

Shadow Patrols

Many carnivores, such as jacks, snappers, sharks, barracuda, and groupers, take advantage of the weariness and confusion of transition time on the reef. Their eyes, sensitive to dim light, are better equipped for this time of day than those of the diurnal fishes. Though twilight predators are not very good at distinguishing colors, they can detect shape, outlines, and movement well. The daytime fishes flowing back to the reef offer a constant stream of shape and movement.

Many predators that have been quietly waiting in the background all day become more active at dusk and dawn. The crepuscular³ hunters have ingenious⁴ ways of picking off their prey. A grouper leaves its den beneath a coral overhang to vacuum up prey with its cavernous mouth. By thrusting out its lower jaw, its mouth becomes big enough to swallow almost any prey. It has been rumored that giant groupers (which may weigh up to 1,000 pounds) have been known to swallow divers whole! Then, the stories go, they spit them out again because they don't like the taste of their wetsuits.

Streamlined jacks hunt in packs like jackals. They surround a school of fish, separate several from their companions, and bring them down after a high-speed chase. A lionfish may use its winglike side fins to sweep fish into a corner of the reef where they can't escape. Other times, it lies motionless and gulps fish that come too close.

Although sharks visit the coral reef at dawn and dusk, they have such an effective array of sensory devices that they can zero in on prey at any time. Their excellent sense of smell has earned sharks the nickname of "swimming noses." Sharks' lateral lines are especially sensitive to the low-frequency vibrations given off by struggling fishes. Their most impressive sense is located inside sensory pores on the snout. This sense detects the faint electric pulses generated by the beating hearts of their victims. Vision is probably their weakest sense, yet many sharks have catlike eyes with mirror cells to reflect and concentrate dim light. Some sharks' eyes are so sensitive that they can hunt by starlight on a moonless evening.

Dusk, that time between twilight and full darkness, is the spawning time for many diurnal fishes. As one scientist explains, "It gives their eggs and sperm a twelve-hour head start to escape the hungry mouths on the reef." Many daytime fishes move into deeper water, rise to the surface, or spawn during outgoing tides to let ocean currents carry their eggs and sperm to less populated areas far from the reef.

³crepuscular: active in the twilight

⁴ingenious: clever

Ghost Town

About ten minutes after sunset, an eerie quiet descends on the reef. Swaying sea fans provide the only visible movement, like tumbleweeds blowing through a ghost town in a Western movie. The coral passages are silent, deserted, and vaguely menacing. The daytime
55 fishes have retreated to their shelters. Many large predators have headed off with the setting sun into the deeper waters beyond the reef. Others—some groupers, snappers, and reef sharks—remain hidden in the shadows where they can ambush any lone stragglers.

The quiet period lasts only about 15 to 20 minutes. Then, as abruptly as if a film
60 director had shouted “Cut!” nocturnal creatures burst onto the set and the scene changes to night maneuvers.

GO ON

8

According to the article, why do some parrotfishes make a cocoon?

- A to attract other fishes to their hiding place
- B to show other fishes they are asleep
- C to create a safe place for their eggs
- D to hide themselves from predators

9

Why are some diurnal fishes harder to see in the evening than in the daytime?

- A The movement on the reef blurs their shapes.
- B Their predators can only detect outlines.
- C The light casts shadows that hide them.
- D Their skin color changes to blend in.

10

What statement **best** summarizes the information in lines 1 through 9?

- A Daytime fish who live in the coral reef generally stop feeding at dusk.
- B Fish have the natural ability to become less visible at night in the coral reef.
- C Predatory fish hide in the coral reef so they can feed on the diurnal fish.
- D Fish in the coral reef have remarkably better vision during the day.

11

Which sentence from the article **best** explains why some fishes may be dangerous to humans?

- A "Though twilight predators are not very good at distinguishing colors, they can detect shape, outlines, and movement well." (lines 25 and 26)
- B "Many predators that have been quietly waiting in the background all day become more active at dusk and dawn." (lines 28 and 29)
- C "The crepuscular hunters have ingenious ways of picking off their prey." (lines 29 and 30)
- D "By thrusting out its lower jaw, its mouth becomes big enough to swallow almost any prey." (lines 31 and 32)

12

What does the phrase "zero in on" in line 40 mean?

- A to locate
- B to look
- C to threaten
- D to smell

13

The author develops a central idea about how fishes adapt to their environments by focusing **mostly** on the

- A light in the water
- B depth of the reef
- C currents in the water
- D shape of the reef

GO ON

14

Which detail is **most** important to include in a summary of the article?

- A "Because fishes don't have eyelids to close, it's impossible to tell whether or not most fishes are really sleeping." (lines 15 and 16)
- B "Many predators that have been quietly waiting in the background all day become more active at dusk and dawn." (lines 28 and 29)
- C "It has been rumored that giant groupers (which may weigh up to 1,000 pounds) have been known to swallow divers whole!" (lines 32 and 33)
- D "Many daytime fishes move into deeper water, rise to the surface, or spawn during outgoing tides . . ." (lines 49 and 50)

GO ON

Directions

Read this article. Then answer questions 15 through 21.

Need Those ZZZZZs: Young Night Owls Still Require Plenty of Sleep

by Kathiann M. Kowalski

1 You've got to get an early start tomorrow, but you're not sleepy yet. Blame your brain, at least in part.

2 Yet that same brain is still under construction. And much of that important work takes place on the night shift—while you sleep. Here's what's happening—and why it matters.

Hello, Night Owl!

3 Today's lifestyle is one reason for late bedtimes. Many teens don't finish with after-school activities, part-time jobs, dinner, chores, and homework until 10 p.m. or later. Add in some time for relaxing, and bedtime may not roll around until 11 p.m. or nearly midnight.

4 Those "relaxing" activities can actually delay sleep longer. Screens for television, games, computers, tablets, e-readers, and cell phones give off blue light. "The brain reads that as daylight," says Kyla Wahlstrom, an expert on education and sleep at the University of Minnesota.

5 In response, the brain cuts back melatonin, a hormone that promotes sleep, explains public health professor Lauren Hale at Stony Brook University. Plus, time is limited. "If you're doing more screen time, you're getting less sleep time," she says.

6 "There are emotions involved in going online," Hale adds. Falling asleep can be harder if texts, chat, social media, or even sports reports excite or upset you. Caffeine from sodas and energy drinks makes matters worse.

7 Even without modern technology, though, teens shift their circadian rhythm. That's the daily cycle for sleeping, waking, and various other activities. In particular, the brain's pineal gland starts releasing melatonin later. That's the "sleepy" hormone.

8 Teens' time shift is a little like the jet lag you'd feel traveling from New York to Colorado. Until your body adjusts, you'd stay up later despite the time change. But teens' brains stay in that later time zone.

GO ON

Sleep Deprivation

- 9 The rest of the world doesn't shift, however. So most teens must head to school before they've gotten the 8.5 to 9.5 hours of sleep recommended by the American Academy of Pediatrics (AAP). And that's a serious public health problem.
- 10 For one thing, lack of sleep makes it harder to pay attention. When studies compared teens who had earlier and later school start times, they found that those who had more time to sleep did better in class. They also suffered fewer accidents in sports, driving, and other activities.
- 11 Adequate sleep is important for learning too. "Basically at night the sleep processes all your information from the previous day," says Wahlstrom. She compares it to cleaning up a computer's hard drive.
- 12 Lack of sleep could hurt mental health. Studies have found an inverse correlation¹ between teens' amount of sleep and depression and other mental illnesses. As sleep time went down, the risks for the mental illnesses went up.
- 13 Beyond that, sleep-deprived teens report more relationship problems and feelings of inadequacy. "They just get overwhelmed," Wahlstrom says.
- 14 Having sleep cut short could curb the brain's processing of emotions from the previous day. For some reason, Wahlstrom says, "The negative stuff hangs on longer." Crankiness can result, especially if you don't feel well.
- 15 Other studies suggest sleep-deprived teens get sick more often. "Our immune system is negatively affected by inadequate sleep," notes psychologist and academic affairs vice president Amy Wolfson at Loyola University Maryland.
- 16 Weight control suffers from too little sleep too. "Hormonally, your body is saying 'eat more, eat more,'" explains Hale. And because lack of sleep lowers impulse control, you're more likely to grab chocolate cake than celery.
- 17 "You don't just think better and act better" when you get enough sleep, adds psychiatry professor Mary Carskadon at Brown University. "You look better." One study found that the more sleep people got, the more likely people were to find them attractive.

GO ON

Under Construction

- 18 Just as importantly, burning the midnight oil can interfere with brain development. When teens hit puberty, the number of long brain waves drops during non-REM (rapid eye movement) sleep.
- 19 Neuroscientists Ian Campbell and Irwin Feinberg at the University of California, Davis, suggest the drop shows that the brain is pruning unnecessary connections between nerve cells. The brain loses some plasticity—the ability to adapt in response to injury or other big changes. But the process lets the brain mature. “It will streamline your brain—make it a more efficient adult brain,” explains Campbell.
- 20 Lots of issues remain for sleep researchers to explore. For now, though, studies are clear: Teens’ brains need sleep!
- 21 In August 2014, the AAP urged high schools nationwide to delay start times to at least 8:30 a.m. Later starts can let teens get a bit more sleep when their brains really want it. Unfortunately, not all schools can or will heed that advice. And you can’t easily change your body’s natural circadian rhythm.

¹**inverse correlation:** a relationship between two factors, where when the value of one factor goes up, the value of the second factor goes down

15 Which phrase **best** describes how the article develops the idea presented in paragraph 2?

- A by providing counterarguments
- B by offering solutions to the problem
- C by discussing personal experiences
- D by introducing research results

16 The use of quotation marks around the word “relaxing” in paragraph 4 suggests that

- A some activities hinder true relaxation
- B deep sleep helps one experience true relaxation
- C teens do not value activities that give true relaxation
- D blue light helps one experience true relaxation

17 Which statement **best** describes how the section “Hello, Night Owl!” supports a central idea of the article?

- A It describes an important cause and effect relationship.
- B It creates an effective comparison and contrast between ideas.
- C It provides evidence that disproves a popular theory.
- D It presents a counterargument to the initial claim.

GO ON

18

Which idea would be **most** important to include in a summary of the article?

- A "Screens for television, games, computers, tablets, e-readers, and cell phones give off blue light." (paragraph 4)
- B "Caffeine from sodas and energy drinks makes matters worse." (paragraph 6)
- C "For one thing, lack of sleep makes it harder to pay attention." (paragraph 10)
- D "One study found that the more sleep people got, the more likely people were to find them attractive." (paragraph 17)

19

Which claim from the article is **most** strongly supported with evidence?

- A "Even without modern technology, though, teens shift their circadian rhythm." (paragraph 7)
- B "The rest of the world doesn't shift, however." (paragraph 9)
- C "Lack of sleep could hurt mental health." (paragraph 12)
- D "Lots of issues remain for sleep researchers to explore." (paragraph 20)

20

Which sentence from the article **best** shows the author's point of view?

- A "Blame your brain, at least in part." (paragraph 1)
- B "And that's a serious public health problem." (paragraph 9)
- C "Crankiness can result, especially if you don't feel well." (paragraph 14)
- D "And you can't easily change your body's natural circadian rhythm." (paragraph 21)

GO ON

21

Which paragraph **best** summarizes a central idea from the article?

- A paragraph 1
- B paragraph 3
- C paragraph 20
- D paragraph 21

GO ON

Directions

Read this article. Then answer questions ~~20~~ through ~~35~~

22 28

Excerpt from *The Statue of Liberty*

by Elaine Landau

1 Laboulaye felt a “genuine flow of sympathy” between France and the United States and described the countries as “two sisters.” Aware that the hundredth anniversary of the colonists’ independence was just eleven years away, Laboulaye hoped to give the United States a special hundredth birthday present on behalf of France.

2 He decided that the gift should be a monument honoring liberty. Laboulaye explained that this monument would have a dual purpose. It would reinforce France’s bond with America. In addition, the gift would stress to Napoleon III’s regime that the French people were dedicated to the concept of liberty and equality.

BARTHOLDI’S CREATION

3 Bartholdi wrote that the seed for the Statue of Liberty was sown at the party that night. It is generally thought that Laboulaye’s opinion influenced Bartholdi, who began thinking along the same lines. Nevertheless, actual plans for the monument did not begin for years. In July 1870, France declared war on Germany and the Franco-Prussian War began. Bartholdi served in the French Army, and art took a backseat as the sculptor fought for his country. By 1871 the war had ended, and Napoleon III had fallen.

4 Laboulaye and Bartholdi hoped that the time might be right for democracy to take root in France. They thought that creating the statue now might encourage others to see the value of such a system. Bartholdi is quoted as saying: “I will try to glorify the Republic and Liberty over there [in the United States] in the hope that someday I will find it again here.”

5 At first no one was sure what form the statue would take, but one thing was certain: If Bartholdi designed it, the monument was bound to be big. Nearly all of Bartholdi’s pieces were created on a grand scale. Many people believed that the sculptor had been greatly influenced by what he saw when he visited Egypt. Impressed by the size of such structures as the pyramids and the Sphinx, Bartholdi longed for a sense of massiveness in his own work. His first public monument—commissioned when he was just eighteen—was a 12-foot (3.7 m) high statue of one of Napoleon’s generals. Workmen had barely

GO ON

been able to remove the larger-than-life sculpture from Bartholdi's studio. Yet the work received a good deal of praise and helped establish its creator's reputation as an artist.

FINDING THE RIGHT PLACE

- 6 Bartholdi was excited about doing a sculpture for the United States. To explore how the Americans would feel about it, Bartholdi headed for the U.S. in the summer of 1871. He hoped to drum up enthusiasm for the project as well as find an appealing location to display the work. Bartholdi spent most of his days on the voyage making sketches of different views of Lady Liberty. The sculptor had also brought along a small model of the proposed monument to give Americans a better idea of how the finished product would look.
- 7 Bartholdi did not have to look very far to find the perfect spot for Lady Liberty. He spied the ideal place for her as soon as his ship entered New York Harbor. It was Bedloe's Island, one of a group of small islands in the harbor. At one time, the Mohegan Indians had called the island Minnissais, which means "Lesser Island," because it was so small. Despite its small size, the island seemed perfect for the project because New York Harbor was an active seaport where this tribute to liberty would get the attention it deserved. The French sculptor further described the location as a place "where people [immigrants] get their first view of the New World." He wanted them to see the statue before anything else.

SELLING THE IDEA

- 8 Finding a suitable site for the monument was just one phase of Bartholdi's mission. Creating a sense of enthusiasm for the statue among Americans proved to be much more difficult. Laboulaye had supplied the young sculptor with letters of introduction to a number of important Americans. Bartholdi met with President Ulysses S. Grant and American literary figures, including Henry Wadsworth Longfellow, to talk about the project.
- 9 Although Bartholdi managed to pique the curiosity of some Americans, few appeared very enthusiastic. While the statue was to be a gift from the French, Americans would have to help finance it. Most of the people Bartholdi spoke to were not especially anxious to part with their money to make his dream come true. When Bartholdi returned to France, both he and Laboulaye agreed that they were not ready to begin construction.

GO ON

- 10 The two Frenchmen made another attempt to get financial backing for the monument in 1874. They proposed dividing the cost of the monument between France and the United States. France would pay for the statue itself, while America was to pay for its pedestal and foundation. To speed things along, in 1875 Laboulaye formed the Franco-American Union, which included people from France as well as the United States. This organization worked to bring in donations on both sides of the Atlantic.
- 11 Though the original goal of completing the statue for the hundredth birthday (July 4, 1876) of the United States seemed unlikely, the group still did its best to meet that deadline. Appeals for donations for the statue appeared in the French press by the fall of 1875. The Franco-American Union proved quite creative in its fund-raising efforts. Banquets and balls were held in several French cities. The food and ballrooms for these occasions were donated, and all admission fees went to the statue's fund. Bartholdi came up with just enough money to begin work on Lady Liberty.

12

Paragraph 2 **mainly** contributes to a central idea of the article because it

- A shows that Napoleon III was an unpopular leader
- B gives the exact number of purposes for the gift
- C describes the loyalty of the French people
- D explains both reasons for the gift

13

Read this sentence from paragraph 3.

Bartholdi wrote that the seed for the Statue of Liberty was sown at the party that night.

The words “the seed for the Statue of Liberty was sown” refer to the

- A timetable for building the statue
- B first ideas about the project
- C plan for funding the project
- D design for the statue

GO ON

24

Read this sentence from paragraph 6.

He hoped to drum up enthusiasm for the project as well as find an appealing location to display the work.

The use of the phrase “drum up” shows that Bartholdi needed to

- A discover the best place for exhibiting the completed project
- B reduce the cost of the project
- C create a widespread public demand for the project
- D teach the public about the reason for the project

25

Why was Bedloe’s Island selected for the site of the Statue of Liberty?

- A The local people already knew about the history of the island.
- B The island was close to a populated city.
- C The size of the island would make the statue stand out.
- D The island was located in a busy harbor.

GO ON

20

Which evidence from paragraph 11 **best** supports the author's claim that the fund-raising efforts for the Statue of Liberty were "creative"?

- A "Though the original goal of completing the statue for the hundredth birthday . . . seemed unlikely, the group still did its best to meet that deadline."
- B "Appeals for donations for the statue appeared in the French press . . ."
- C "Banquets and balls were held in several French cities."
- D "Bartholdi came up with just enough money to begin work on Lady Liberty."

21

Which event showed a change in the attitude of Americans towards the construction of the Statue of Liberty?

- A President Ulysses S. Grant met with Bartholdi to discuss the project.
- B People from the United States agreed to support the Franco-American Union.
- C Americans wanted to hear more about the design of the statue from Bartholdi.
- D Americans learned that the statue was to be a symbol of freedom and democracy.

GO ON



Which statement **best** describes a major contribution of Bartholdi toward making the Statue of Liberty a reality?

- A He met with some of the most famous people in America.
- B He planned for a monument that would be extremely large.
- C He remained committed to the project over a long period of time.
- D He drew sketches to show the way the monument would look when completed.

STOP

Name: _____

Directions

Read this article. Then answer questions 43 and 44

1-34

Excerpt from *Weaving With Light*

by Emily Sohn

In the rugged Sierra Madre mountain range of west central Mexico, the native Huichol people live much the way their ancestors did—without electricity. That's because it's too expensive to string power lines to the remote mountain areas where they live. The lack of electricity has a direct effect on the Huichol economy.

5 To help support themselves, the Huichol create beautiful artwork, including paintings made from yarn and sculptures made from beads. They sell their art in cities hundreds of miles away from their villages. Often, they travel long distances by foot. And without electricity—at home or on the road, they can only work during daylight hours.

10 When it gets dark, they must stop whatever they're doing, explains Huichol community leader Miguel Carillo. The sales of their artwork are essential to this economy, where farming is difficult and crops often fail.

"We can only work during the day," Carillo tells a group of researchers as night approached. "Because now, as you see, we can't see anything, and it's still so early. Nobody can do anything. We just wait for the sun to come up again."

15 Now, a team of scientists, designers, and architects is using new technologies to provide the Huichol with light after the sun sets—no plugs necessary. The scientists' technique involves weaving tiny electronic crystals into fabrics that can be made into clothes, bags, or other items.

20 By collecting the sun's energy during the day, these lightweight textiles provide bright white light at night. Their inventors have named the textiles "Portable Lights."

Portable Lights have the potential to transform the lives of people without electricity around the world, says project leader Sheila Kennedy, head of Kennedy & Violich Architecture, Ltd., in Boston, Mass.

See the light

25 At the core of Portable Light technology are devices called high-brightness light-emitting diodes, or HB LEDs. These tiny lights appear in digital clocks, televisions, streetlights, and the blinking red lights on some sneakers.

30 LEDs are completely different from the light bulbs that you screw into lamps at home. Most of those glass bulbs belong to a type called incandescent lights. Inside, electricity heats a metal coil to about 4,000 degrees Fahrenheit, or 2,200 degrees Celsius. At that scorching temperature, bulbs give off light we can see.

GO ON

INFORMATIONAL

Book 2

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3/17/20

Ninety percent of energy produced by incandescent lights, however, is heat—and invisible. With all that wasted energy, bulbs burn out quickly. They are also bulky, can get hot, and are easily broken.

35 LEDs, on the other hand, are like tiny pieces of rock made up of molecules that are arranged in a crystal structure. When an electric current passes through an LED, the crystal structure vibrates and produces light.

LEDs are tiny and extremely lightweight. There are no breakable glass parts. While the technology is still somewhat expensive, researchers are increasingly looking to LEDs for a wide variety of applications, including Portable Lights.

40 “A lot of people see LEDs as being the future of lighting,” says Casey Smith, a technologist in Bozeman, Mont., and a member of the Portable Light team. He developed much of the technology that make Portable Lights work.

The spark

The Portable Light team found a way to weave two LEDs into a plastic-coated textile. When turned on, these LEDs can make the entire piece of fabric glow.

45 Their next challenge was to figure out how to power the LEDs without electricity. The researchers knew that they wanted to tap the sun’s energy, but they couldn’t use standard solar panels such as those found on rooftops. These bulky glass panels would be too big and heavy for the Huichol to carry as they traveled through the mountains.

50 Instead, the researchers used a new type of solar panel, which is flat and flexible, like a placemat. Just 10 inches long and 5 inches wide, these panels can be easily sewn onto a piece of fabric.

Circuits connect the solar panel to a lithium ion battery—the type of battery found in laptops and cellular phones. And the battery, in turn, is connected to the two LEDs in the fabric. A tough layer of plastic protects the circuitry.

55 With just 3 hours of exposure to sunlight, the battery accumulates enough charge to power a portable light for 10 hours, Kennedy says. A membrane switch, like the soft buttons on a microwave oven, allows a user to turn the lights on or off.

A Portable Light weighs less than a pound and can withstand abuse because textiles are strong for their weight. Kennedy has dropped Portable Light units from as high as
60 30 feet off the ground without damaging them.

“With no heavy parts to break, they just float down,” she says.

GO ON

1 ~~2~~ How is the new type of solar panel described in the section titled "The spark" more useful for the Huichol people than previous versions of solar energy technology? Use **two** details from the article to support your response.

2 ~~4~~ What is the author's central claim about LEDs? Use **two** details from the article to show how the author supports the claim.

GO ON

[illegible][illegible]

NAME: _____

Directions

Read this excerpt. Then answer questions 39 and 40.

**Excerpt from *Marine Mammals
in Captivity***

by The Humane Society of the United States

- 1 The public display industry captures many species of marine mammals from the wild, especially whales and dolphins. The Humane Society of the United States believes that these animals should not be taken from the wild simply to entertain and amuse people, for a number of reasons.

Life in the wild

- 2 The very nature of these animals makes them uniquely unsuited to confinement.¹ In the wild, whales and dolphins live in large groups (called pods), often in tight family units. Family bonds often last many years. In some species, they last for a lifetime.
- 3 Whales and dolphins travel long distances each day, sometimes swimming in a straight line for a hundred miles, other times remaining in a certain area for hours or days, moving several miles along a coastline and then turning to retrace their path. These marine mammals can dive up to several hundred meters and stay underwater for up to half an hour. They spend only 10 to 20% of their time at the surface.
- 4 The sea is to whales and dolphins much as the air is to birds—a three-dimensional environment, where they can move up and down and side to side. But whales and dolphins don't stop to perch. They never come to shore, as do seals and sea lions. Whales and dolphins are always swimming, even when they "sleep." They are "voluntary breathers," conscious of every breath they take. They are always aware, and always moving. Understanding this, it is difficult to imagine the tragedy of life in no more than a tiny swimming pool.

Life in captivity

- 5 Life for captive whales and dolphins is nothing like a life in the sea. It is almost impossible to maintain a family group in captivity. Tanks only allow a few strokes in any direction before coming to a wall. Because tanks are shallow, the natural tendencies

GO ON

of whales and dolphins are reversed—they spend more than half their time at the tank's surface.

6 This unnatural situation can cause skin problems. In addition, in captive killer whales (orcas), it is the probable cause of dorsal fin collapse, as without the support of water, gravity pulls these tall appendages over as the whale matures. Collapsed fins are experienced by all captive male orcas and many captive female orcas, who were either captured as juveniles or who were born in captivity. However, they are observed in only about 1% of orcas in the wild.

7 In a tank, the environment is monotonous and limited in scope. Sonar clicks, the method by which individuals define their surroundings, have limited utility in such an environment. These animals, who are perpetually aware, have nothing like the varied stimulation of their natural environment. In perpetual motion, they are forced into literally endless circles. Life for these animals is a mere shadow of what it was in the wild.

¹**confinement:** the state of being closed in or not free

GO ON

39

How does the section "Life in the wild" contribute to the author's argument in "Excerpt from *Marine Mammals in Captivity*"? Use **two** details from the excerpt to support your response.

GO ON

Read this sentence from paragraph 7 of "Excerpt from *Marine Mammals in Captivity*."

Life for these animals is a mere shadow of what it was in the wild.

What does the author mean by this sentence? Use **two** details from the excerpt to support your response.

GO ON

Directions

Read this excerpt. Then answer questions 41 through 43.

Dr. Jane Goodall is famous for her work with animals in the wild and her concern for animal rights. The author of this article, Jack Hanna, is the retired director of the Columbus Zoo.

Excerpt from *What Zoo Critics Don't Understand*

by Jack Hanna

- 1 Dr. Jane Goodall recently made two statements critical of zoos and aquariums. She said two elephants in a zoo in Seattle should be released to a sanctuary¹ and that SeaWorld should be shut down. After the Woodland Park Zoo in Seattle invited her to learn more about the zoo's decisions regarding elephants, she took them up on their invitation. I admire Dr. Goodall for her willingness to learn more and re-evaluate her initial comments. I hope Dr. Goodall will also engage in a conversation with SeaWorld about her concerns. . . .
- 2 Critics say the only place animals belong is in the wild, but those boundaries are shrinking each day. Having traveled the world, the only places I consider truly "wild" are Antarctica, parts of the Amazon and some places in Africa. Even in Africa, the "wild" places tend to be national parks with guarded boundaries. Animals face many challenges, including habitat loss, poaching,² severe weather, and war. The "wild" is not necessarily the idyllic place people imagine. Poaching has decimated the northern white rhino population—the last known male has his own personal 24-hour security to ensure he isn't poached for his horn. . . .
- 3 I can tell you firsthand that the animals in SeaWorld's parks receive world-class care. Their zoological team shares my commitment to protecting and preserving species; educating young people about the risks that animals face in the natural world; and inspiring the next generation of conservationists, marine biologists, scientists, and animal enthusiasts. The animal care teams at SeaWorld understand the value of studying animals in zoological settings in order to save future generations.
- 4 Furthermore, this spring I witnessed SeaWorld's rescue teams in full swing. More than 25,000 animals owe their lives to SeaWorld animal rescue teams. Just this year, they have saved more than 500 sea lions on the West Coast. The SeaWorld team has

GO ON

worked around the clock to rehabilitate these animals, all with the goal of returning them to the wild. The team at SeaWorld San Diego even built two new pools to accommodate them, and closed its Sea Lion and Otter Show so that its staff could dedicate more time to nursing the pups back to health.

¹**sanctuary:** a protected place for animals

²**poaching:** to hunt or take animals illegally

GO ON

41

In "Excerpt from *What Zoo Critics Don't Understand*," how does Jack Hanna distinguish his position about animals in captivity from Dr. Jane Goodall's position about animals in captivity? Use **two** details from the excerpt to support your response.

42

What is a central idea in “Excerpt from *What Zoo Critics Don’t Understand*”? Use **two** details from the excerpt to support your response.

GO ON

Name: _____

EXTENDED RESPONSE GRAPHIC ORGANIZER

ARTICLE 1 TITLE:

CLAIM: _____

SUPPORTING EVIDENCE 1:

SUPPORTING EVIDENCE 2:

SUPPORTING EVIDENCE 3:

ARTICLE 2 TITLE:

CLAIM: _____

SUPPORTING EVIDENCE 1:

SUPPORTING EVIDENCE 2:

SUPPORTING EVIDENCE 3:

In “Excerpt from *Marine Mammals in Captivity*” and “Excerpt from *What Zoo Critics Don’t Understand*,” the authors present arguments about whether or not animals should be kept in captivity. What claims does each author make? What evidence do the authors use to support their claims? Which author’s argument is more convincing? Use details from **both** excerpts to support your response.

In your response, be sure to

- identify the claims that each author makes
- identify the evidence that the authors use to support their claims
- explain which author's argument is more convincing
- use details from **both** excerpts to support your response

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Lined writing area with 20 horizontal lines.

STOP