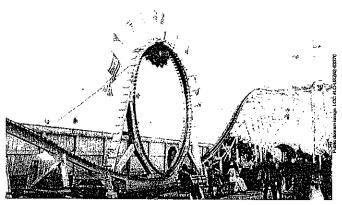
## LA7.1.6.a

Grade 7

#### **Designing Thrills**

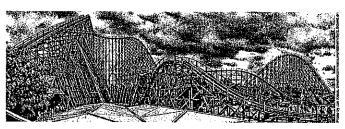
by Marcia Amidon Lusted



This Coney Island roller coaster, made of wood, was a thrilling ride in 1900.

- The loops twist upside down and sideways and the gravity-defying hills swoop up and down. As the car crests a hill, you look at the winding track ahead and desperately hope that whoever designed this roller coaster knew what they were doing!
- If you love roller coasters, then you probably think that designing them would be one of the coolest jobs in the world. And you'd be right. But designing a roller coaster isn't as simple as just deciding where to place the loops and twists. It takes both design knowledge and engineering skill to make sure that a roller coaster is both fun and safe.
- Roller coasters are always custom designed for the amusement park where they will be built. Designers start by thinking about the type of coaster based on the requirements of the amusement park. Will the coaster be made from traditional wood or from steel? What types of riders will the coaster attract? How many riders must it carry at any time? Will the coaster offer a gentle, slow ride or one that's fast and that includes tall hills, thrilling loops, and breath-taking drops? The coaster can be basic, suspended, looping or straight, or it can even be a log ride that skims on water instead of rolling on tracks. The designer also examines the landscape at the site. Is the land flat or hilly? Does the site offer great views that should be incorporated into the design? Also, roller coasters take up a lot of space, so a new coaster in an established park might have to be threaded around the existing rides and landscaping.
- Next the designer decides what kind of feel the coaster should have. The ride should be unique for its riders. Will it be whimsical, adventurous, mysterious, or even a bit scary? Then the designer decides on the materials for construction. Wooden coasters don't usually have a loop-the-loop feature, nor are they as fast as steel coasters, but wooden coasters have another advantage: they sway when you ride on them. On the other hand, coasters made of tubular steel allow for loops as well as higher, steeper hills, deeper drops and rolls, and much faster speeds.
- Once the materials have been selected, a designer might start with a steep hill leading to a sharp drop at the very beginning of the ride, and then flatten out the hills in the middle. Or the designer might add a drop with a quick change to a flat section—called a "slammer" because it slams the riders back in their seats.

  Because roller coasters can now be built out of steel, designers have even more options for creating a great ride. Designers can also use computers to help them calculate the force of the ride and the effect it will have on the passengers. Once the designer has created a proposal for the new roller coaster, the amusement park needs to approve the plan. Then the designer can begin thinking about the structures that support the coaster and the controls that are used to slow down or accelerate the ride.
- Finally, the roller coaster is constructed. Steel coasters are built section by section in a factory and then assembled on location at the amusement park. In contrast, wooden coasters are usually built from scratch at the site. Workers erect the supports first, and then install the track, walkways, and handrails. The chain mechanisms and the device that keeps the cars from rolling backwards come next. Meanwhile, the cars are built at another factory, where the bodies are either stamped from aluminum or molded from fiberglass. Two kinds of wheels—running wheels and guide wheels—are bolted onto the cars.
- Once the coaster and cars are completed and ready to roll, the coaster must be tested for safety. The cars are filled with weighted bags of sand that approximate the same weight as human riders. These sand dummies ride the roller coaster many times. The ride also must be inspected and approved by government officials. And then, usually a year from the start of the project, the day comes when roller coaster enthusiasts can line up to be the first ones to ride the new roller coaster.
- Being a roller coaster designer isn't for everyone. There are only about 100 companies in the United States that design such rides. These companies employ teams that include electrical and mechanical engineers, drafting engineers, and structural designers. There are no special schools for roller coaster designers. Aspiring roller coaster designers must earn a college engineering degree and then learn on the job. So get your pencil out and start sketching your ideas. And who knows? Maybe someday you'll design the next amazing roller coaster.



Riders on the Colossos, located in Germany, reach breathtaking speeds of

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#### 1. How does the author organize the information in Paragraph 6?

- A) by describing the steps of the process of building a roller coaster
- B) by providing details of roller coaster construction in order of importance
- C) by comparing and contrasting the construction of the frame with that of the cars
- D) by identifying problems and solutions that come up when building a roller coaster

#### 2. What is a MAIN purpose of Paragraph 8?

- A) to restate the main idea
- B) to explain how to accomplish a goal
- C) to provide a thorough summary of the information presented in the passage
- D) to invite the reader to consider new questions that extend beyond the ideas in the passage

#### 3. What is the MAIN purpose of Paragraph 1?

- A) to inspire the reader to build roller coasters
- B) to persuade the reader to ride roller coasters
- C) to question what the reader knows about roller coasters
- D) to interest the reader in the topic of designing roller coasters

#### Saving the California Condor

by Elaine N. Richman



- It looked like extinction for the California condor. Only 24 remained alive. Was the species doomed?
- 2 Almost. But this spring an egg hatched in the wild—for the first time in about 20 years. The chick and its parents bring new hope for the survival of the species.
- How did condors become endangered? Human development in the areas the big birds flew presented many hazards. Deadly collisions with power lines took many birds' lives. Habitat destruction meant the loss of nesting and territory. Pesticide poisoning led to unhealthy eggs and a drop in hatchlings.
- Scientists needed to move quickly to save the big birds. In California, the San Diego Zoo and the Los Angeles Zoo started bold programs. Biologists captured every California condor living in the wild. "No one had successfully raised a California condor in captivity before," says Greg Austin, of the U.S. Fish and Wildlife Service. Still, it was worth a try.
- 5 In zoos the birds could live and lay eggs safely. If all went as planned, condor numbers would increase, and the birds could be released back into the wild.
- 6. The plan to help condors included tricking them into laying more eggs. Normally condors lay one egg each year. But as researchers took each egg that a captive condor laid and placed it in an incubator to hatch, the female laid a replacement.
- Another sneaky tactic was for the researchers to hide their faces and feed the chicks with puppets that looked like adult condor heads. That kept the chicks from bonding with humans and becoming tame. Today 80 condors live free. Better yet, scientists are keeping a hopeful watch on the wild spring chick.

"Saving the California Condor" by Elaine A. Richman, from National Geographic World, June 2002, copyright © 2002 by National Geographic Society.

#### 4. Which sentence from the passage MOST indicates that the author has a bias in favor of the researchers' efforts?

- A) Human development in the areas the big birds flew presented many hazards.
- B) In California, the San Diego Zoo and the Los Angeles Zoo started bold programs.
- C) Biologists captured every California condor living in the wild.
- D) The plan to help condors included tricking them into laying more eggs.

-				
5.	The author MOST LIKELY included the quote from Greg Austin in order to tell  A) why the birds were endangered.  B) how hopeless the effort seemed.			
	D) what risk scientists were taking.			
	2) mai le colonida vel vincing.			
6.	The author MOST LIKELY concludes by saying that today 80 condors live free in order to			
	A) highlight the fact that the number of condors is still dangerously low.			
	B) provide evidence of the success of the experiment.			
	C) explain that little effort is needed to prevent extinction of a species.			
	D) suggest that rescue efforts are limited in what they can accomplish.			
7.	Read the sentence from the article.			
	Better yet, scientists are keeping a hopeful watch on the wild spring chick.			
	The author's words in this sentence show that she believes			
	A) that California condors should remain under the care of humans.			
	B) the wild chick does not have a very good chance of survival.			
	C) the scientists are successful because they think positively.			
	D) in the importance of saving the California condor.			
8.	What is the author's purpose in writing this passage?			
	A) to entertain readers with a story about condors			
	B) to persuade readers to visit the condor exhibit at their local zoo			
	C) to inform readers about the value of wildlife preservation			
	D) to advise readers on how they can prevent the condor from becoming extinct			

#### Save That Home!

The next month is a critical time for friends of history in Washington County.

One of our architectural treasures, the Richard Murphy home, is up for grabs. And we should not let it get away from us and our children.

As reported in another article in this paper, the Murphy family is about to sell the family homestead. The home, which is over 200 years old, is the last building of its type standing in Washington County. That fact should be enough to get the historical society's attention. In addition, it has been the home of one of the town's founding families for over 200 years.

Murphy family members, mindful of their heritage, have already restored the oldest part of the home. Now, the family has offered the home to the Washington County Historical Society for what is described as an "attractive" price. Society president Maureen Schwartz is right to proceed cautiously; the society must have a sense of what to do with the property before buying it. However, the society should be wary of what might happen to the home if they do not buy it.

Quite simply, it will probably be destroyed. The home is near downtown, not in a residential neighborhood. Few families would want to purchase it and live there. Gantt Industries has indicated that it would consider buying the home and would tear it down to provide parking for its visitors. The president of Gantt Industries doesn't even live in Washington County---what interest does he have in saving our history? Venture Financial Group, investment firm wants to build an office complex on the lot once the home is destroyed. Does Washington County really need another soulless office complex?

This is a time for the society to show some creative thinking. The historical society has a need for office space. Why not investigate using the newer parts of the home in this manner? This would solve their space problem, at least temporarily, and keep the door open for other uses in the future. In addition, society staff would be close at hand for occasional tours.

Schwartz has voiced concern about the stability of the home if more visitors come through it. If that truly would be a problem, perhaps a local construction or engineering firm would be willing to donate part or all of the costs as a community service project. This community is rich in talent, with many gifted craftspeople and artisans. These gifted members of the community could assist as volunteers with the project.

Within the next few weeks, the society must make its decision. Now is the time to be heard! Voice your support by attending the board's meeting next Tuesday at 3 p.m. in the society's headquarters. Together we can save one of our town's historical landmarks. Come join the citizens who care about the future of Michaelstown.

#### 9. Read this sentence from the passage.

Does Washington County really need another soulless office complex?

#### Which propaganda technique is used in this question?

- A) plain folks
- B) name calling
- C) compare and contrast
- D) faulty cause and effect

#### 10. Read this sentence from the passage.

Come join the citizens who care about the future of Michaelstown.

#### Which propaganda technique does the author use in this sentence?

- A) testimonial
- B) bandwagon
- C) name calling
- D) hasty generalizations

#### . 11. Read this sentence from the passage.

This community is rich in talent, with many gifted craftspeople and artisans.

#### This sentence contains an example of which propaganda technique?

- A) flag waving
- B) card stacking
- C) glittering generalities
- D) unreliable testimonial

#### 12. Which sentence from the passage is an example of ad hominem?

- A) As reported in another article in this paper, the Murphy family is about to sell the family homestead.
- B) Quite simply, it will probably be destroyed.
- C) The president of Gantt Industries doesn't even live in Washington County-what interest does he have in saving our history?
- D) Why not investigate using the newer parts of the home in this manner?

#### It's All in the Name

by Grace Todino-Gonguet

#### How did you get your name?

- Many of us have stories about our names that tell something about our families. In Nigeria too, a name is not just a name. It tells many things about a person, such as where they are from, their ethnic origin, the family circumstances when they were born, or the family's hopes for their future. Names exist for just about every event. Sometimes, new names are even created. Many Nigerians believe that names can influence a person's life and even that of his or her family, so a lot of thinking goes into choosing them. Nearly all Nigerian ethnic groups have naming ceremonies.
- Family is very important to all Nigerians. At a naming ceremony, most Nigerian families include remembrances of those who have died. The naming ceremonies are much more than simple naming ceremonies; they are joyous family celebrations in which the baby is welcomed as a new member of the family. Children are seen as a great gift. Everyone is expected to help the others in the family. Children do chores, which actually aren't even thought of as chores; they are simply contributions they make as part of a family unit.
- All Nigerian naming ceremonies have another aspect in common: they all give elderly relatives a key role to play on this special day. Nigerians hold their elders in special esteem and believe they are wise and have learned much through their long lives. A Yoruba proverb states that "what an old man sees while lying down, a young man can never see even when he climbs a tree." This saying means that people who are older have greater knowledge and wisdom.
- Some differences can be found among the various Nigerian naming ceremonies. Here is a sampling of traditions from the three largest groups in Nigeria: the Yoruba, the Igbo, and the Hausa peoples.

#### Yoruba Traditions

- Yoruba names are selected by family elders before the naming ceremony. These names can be any combination of three distinct names: the name that the child "brought from heaven," the christening name, and the name that denotes the hopes that the family or community cherishes for the child. The name could also reflect the way the child made an entrance into the world; for example, twins have special names. A child might have a name that shows the child was born in a country other than Nigeria. One name has the meaning that the parents were made very happy by the child's birth. Children usually take the father's family name, or surname,
- The ceremony is held in the early morning with the oldest family member officiating. The mother hands the baby to an elder, usually a woman, who washes the baby in herbal water.
- The baby gets a tiny taste of different foods that have special meanings. The basic items are water (for peace), salt (to add joy to life), honey (so that the child may help the community), alligator peppercorns (to wish that the child will grow up to have many children), kola nuts (for good fortune), wine (for prosperity), and palm oil (for power and health). After the baby tastes each one, so does everyone else.
- The elder performing the ceremony touches the baby's forehead and whispers the main name in the baby's ear before announcing the name. Traditional poetry, called the "family panegyric," is recited to formally welcome the child into the community. Each family has a panegyric, which tells the family's history, characteristics, and triumphs. A big party follows, with music and dancing, gifts of money, and traditional food, such as pounded yam with okra soup.

#### **Igbo Traditions**

- Like the Yoruba, Igbo people give a lot of thought to the choice of a name. Names bear a message or prayer, or are usually based on a characteristic of the child—for example, if the child resembles his father. The maternal grandmother has an active role. She is the first to suggest a name and she cooks the food that begins the ceremony. Guests leave gifts for the grandmother and the child. Guests may also be invited to suggest names, but the parents make the final decision.
- A paternal grandparent begins the ceremony with ancestor worship. The elder shares the names with the ancestors. After the breaking of kola nuts and daylong prayers, the ceremony ends with a procession, followed by festivities.
- Most Yoruba and Igbo are Christian, so they may supplement the traditional home ceremony with a baby dedication that is performed in a church. Some families may give the baby an additional biblical name, such as Moses, or a Western name like Henry.

#### **Hausa Traditions**

- The Hausa people are almost all Muslim, so their names not surprisingly reflect this culture. Compound personal names like AbdulRahman that begin with 'Abdul' (which means "servant to") followed by an attribute of Allah (God) are popular.
- Babies are named on the seventh day. The men stay in front of the house and the women stay inside. As a gesture of hospitality, the father offers kola nuts or candies to visitors as they arrive. An imam or other Muslim scholar offers prayers, blesses the child, and then announces the names chosen by the father.
- To Nigerians, a name carries family history, hopes for the child's future, and prediction for the child's fate. The importance of names to all Nigerians is best expressed in this proverb: "A good name is better than gold."

13.	With which statement would the author MOST LIKELY agree?
	A) Nigerian proverbs reflect the values of that culture.
	B) Naming ceremonies are the same throughout Nigeria.
	C) Traditional Nigerian foods have religious significance.
	D) Western names are replacing traditional Nigerian names.
14.	The author's MAIN purpose in writing the passage is to provide which of these?
	A) a history of Nigerian naming customs
	B) examples of holiday celebrations in Nigeria
	C) a summary of how religion affects life in Nigeria
	D) information about the importance of names in Nigeria
15.	What is the purpose of the list of foods in Paragraph 7?
	A) to show the Yoruba idea of a healthy diet
	B) to illustrate the wealth of the Yoruba culture
	C) to reveal the foods that the community prefers
	D) to demonstrate what the community wants for the child

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## LA.7.1.b.b

Grade 7

#### Rivals

#### Characters

Three teenagers: DAN, ERICA, AMY

The action takes place in and around school.

Time—the present

SCENE ONE

(We open during lunch at the school cafeteria. Erica sits drawing, forehead furrowed in concentration. She stops and leans back to appraise her handiwork: A masked hero leaping into the sky. Amateurish, but filled with energy. Dan, carrying a tray, stops.)

DAN: (looking at drawing) Nice. Hey, have you talked to the new girl yet? She draws in the same kind of style.

(He points to a smaller girl drawing across the room. Intrigued, Erica begins gathering her drawing instruction books.)

#### SCENE TWO

(Erica sits across from the new kid, Amy, fourteen, who looks up from her work.)

ERICA: I understand you like to draw.

AMY: I do. Somebody told me you draw too. Erica, right? Amy.

(Erica nods and glances at Amy's drawing pad.)

ERICA: What are you working on there?

AMY: A page for a story I just started. Would you like to see?

(Amy spins her drawing pad around. Erica leans over, expecting the worst. Erica reacts with shock as Amy's drawings are beautiful. Anatomy, angles, and layout are all professional.)

AMY: I'm not very good at drawing hands.

ERICA: It's . . . pretty good.

(Amy looks over her own work, seeing nothing but flaws.)

ERICA: Where do you take art classes?

AMY: Never took an art class.

ERICA: Got it all from books, then?

AMY: Nope. Never needed one.

ERICA: Even for buildings drawn at different angles?

AMY: I just draw them so they look right. Why, do buildings give you problems?

(Erica doesn't answer. She holds tightly to her bag with her books and drawings.)

AMY: Do you have some artwork I can see?

ERICA: Uh, no. I draw . . . mostly . . . at home.

AMY: Oh. Well, bring something tomorrow. I'd love to see it.

(Erica nods meekly.)

#### SCENE THREE

(In the art room at school. Along a wall covered in student artwork, Erica is taking her own art down, frantically stuffing it into her knapsack.)

ERICA: No one should see these. I don't even want to see them anymore.

(She moves down the wall to remove another drawing . . .)

#### SCENE FOUR

(Erica sits at a picnic table, hunched over her sketchpad. She's drawing the same masked character as before. As she works on a leg, she remembers drawings which were effortless. Frica stops drawing. The leas on her drawing look all wrong. She tears the paper out of the sketchpad, crumples it

ERICA: It's just a leg! Why is it so hard for me to draw sometimes?

SCENE FIVE

(Erica sits eating in the cafeteria. Across the room Amy tries to catch Erica's eye. She's got a pile of her drawings. Amy starts toward Erica.)

AMY: Hey, Erica! I want to show you something.

(Erica quickly leaves to avoid Amy, who looks confused.)

SCENE SIX

(Outside school Amy stands with Dan and a few others. They're going through Amy's sketchbook. Everyone is looking very impressed. On the other side of the yard, Erica watches with envy.)

ERICA: It's not fair.

SCENE SEVEN

(Erica walks along a street, head hanging, Amy comes running up behind her.)

AMY: Hey, Erica!

(Erica stops, unable to say a simple 'hello.')

AMY: How come you haven't brought any of your work for me to see? Dan thinks we draw in the same style,

(Pause. It's painful for Erica to admit what she says next.)

ERICA: It's . . . just not very good.

AMY: What isn't?

ERICA: My drawings. Compared to yours, mine look like baby scribbles. Why bother if you're just going to laugh?

(Erica starts walking away in a pout. Amy follows.)

AMY: What are you talking about?

ERICA: I'm talking about you knowing how to draw everything and me struggling every single time I draw a simple leg. I'm not as good as you.

AMY: So? I don't care who's better than whom.

ERICA: Easy for you to say.

(They each take a breath. Amy has something to confess.)

AMY: Do you know who my dad is?

ERICA: Who?

AMY: Jack Landis.

(This name registers with Erica.)

ERICA: No way. He's one of my all-time favorite cartoonists. Really? (Amy nods) He's amazing.

AMY: I know. Guess what? I don't like showing him my drawings. It's too embarrassing.

ERICA: You?

AMY: Yes. But, when I do, he shows me how to improve my work. That's really why I've never taken an art class. I live in one.

ERICA: That sounds great.

AMY: I suppose. But it's intimidating sometimes. It's not easy showing my work to my dad. I was even scared showing it to you.

ERICA: Really?

AMY: (nod) Terrified. So if you still don't want to show me your work, that's okay. It just sounds like we have a lot in common.

(Erica fights the self-doubt as Amy finally turns to leave. Erica takes a deep breath.)

ERICA: Wait a second, Amy. Okay. I'll . . . bring some drawings in tomorrow. Promise.

AMY: (relieved) Great. See you then.

1.	What indicates that Erica is initially confident with her drawings
----	--

- A) She compliments Amy's drawings and asks questions about them,
- B) She carefully appraises her own work after looking at Amy's.
- C) She approaches Amy and asks about her drawings.
- D) She readily agrees to show Amy her artwork,

#### 2. Which quote BEST exemplifies the central theme of the drama?

- A) "Adversity does teach who your real friends are." Lois McMaster Buiold
- B) "We secure our friends not by accepting favors but by doing them." Thucydides
- C) "You can always tell a real friend: when you've made a fool of yourself, he doesn't feel you've done a permanent job." Laurence J. Peter
- D) "Friendship is born at that moment when one person says to another, 'What! You too? I thought I was the only one.' "--- C. S. Lewis

#### Which piece of evidence BEST suggests that Amy has benefited from her father's help?

- A) Amy's drawings of buildings "look right."
- B) Amy's drawings are described as "professional,"
- C) Amy's artwork "impresses" people.
- D) Amy's artwork receives "unfair" attention.

#### 4. Which BEST represents the theme of the passage?

- A) Good opportunities are hard to find.
- B) Happiness can be found in unexpected places.
- C) People should not make decisions for others.
- D) No one is perfect at performing any one skill.

#### 5. Read this excerpt from Scene 7 of the drama.

AMY: But it's intimidating sometimes. It's not easy showing my work to my dad.

#### How does Amy's confession change Erica's attitude toward the situation?

- A) Erica is relieved that Amy also experiences doubt.
- B) Erica becomes enthusiastic about her art classes.
- C) Erica is relieved that she shares the same interests as Amy.
- D) Erica becomes enthusiastic about sharing her work with others.

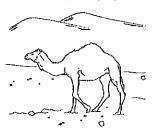
#### 6. The author uses Amy's admission about her father to help convey the theme that

- A) loyalty is important in a family.
- B) everyone has room for improvement.
- C) friends should be able to trust each other.
- D) competition can create conflict.

2

#### How the Camel Got His Hump

by Rudyard Kipling



In the beginning of years, when the world was so new and all, and the Animals were just beginning to work for Man, there was a Camel, and he lived in the middle of a Howling Desert because he did not want to work; and besides, he was a Howler himself. So he are sticks and thorns and tamarisks and milkweed and prickles, most 'scruciating idle;' and when anybody spoke to him he said "Humph!" Just "Humph!" and no more.

Presently the Horse came to him on Monday morning, with a saddle on his back and a bit in his mouth, and said, "Camel, O Camel, come out and trot like the

- . 3 "Humph!" said the Carnel; and the Horse went away and told the Man.
- 4 Presently the Dog came to him, with a stick in his mouth, and said, "Camel, O Camel, come and fetch and carry like the rest of us."
- 5 "Humph!" said the Camel; and the Dog went away and told the Man.
- 6 Presently the Ox came to him, with the yoke on his neck and said, "Camel, O Camel, come and plough like the rest of us."
- 7 "Humph!" said the Camel; and the Ox went away and told the Man.
- At the end of the day the Man called the Horse and the Dog and the Ox together, and said, "Three, O Three, I'm very sorry for you (with the world so new-and-all); but that Humph-thing in the Desert can't work, or he would have been here by now, so I am going to leave him alone, and you must work double-time to make up for it."
- That made the Three very angry (with the world so new-and-all), and they held a palaver,<sup>2</sup> and an *indaba*,<sup>3</sup> and a *punchayet*,<sup>4</sup> and a pow-wow<sup>5</sup> on the edge of the Desert; and the Camel came chewing milkweed *most* 'scruciating idle, and laughed at them. Then he said "Humph!" and went away again,
- Presently there came along the Djinn in charge of All Deserts, rolling in a cloud of dust (Djinns always travel that way because it is Magic), and he stopped to palaver and pow-wow with the Three.
- "Djinn of All Deserts," said the Horse, "is it right for any one to be idle, with the world so new- and-all?"
- 12 "Certainly not," said the Djinn,
- "Well," said the Horse, "there's a thing in the middle of your Howling Desert (and he's a Howler himself) with a long neck and long legs, and he hasn't done a stroke of work since Monday morning. He won't trot."
- "Whew!" said the Djinn, whistling, "that's my Camel, for all the gold in Arabia! What does he say about it?"
- "He says 'Humph!' " said the Dog; "and he won't fetch and carry."
- 16 "Does he say anything else?"
- "Only, 'Humph!'; and he won't plough," said the Ox.
- 18 "Very good," said the Djinn. "I'll humph him if you will kindly wait a minute."
- The Djinn rolled himself up in his dust-cloak, and took a bearing across the desert, and found the Camel most 'scruciatingly idle, looking at his own reflection in a pool of water.
- 20 "My long and bubbling friend," said the Djinn, "what's this I hear of your doing no work, with the world so new-and-all?"
- 21 "Humph!" said the Camel,
- The Djinn sat down, with his chin in his hand, and began to think a Great Magic, while the Camel looked at his own reflection in the pool of water.
- "You've given the Three extra work ever since Monday morning, all on account of your 'scruciating idleness," said the Djinn; and he went on thinking Magics, with his chin in his hand.
- 24 "Humph!" said the Camel.
- 25 "I shouldn't say that again if I were you," said the Djinn; "you might say it once too often. Bubbles, I want you to work."
- And the Camel said "Humph!" again; but no sooner had he said it than he saw his back, that he was so proud of, puffing up and puffing up into a great big lolloping humph.
- "Do you see that?" said the Djinn. "That's your very own humph that you've brought upon your very own self by not working. To-day is Thursday, and you've done no work since Monday, when the work began. Now you are going to work."
- 28 "How can I," said the Camel, "with this humph on my back?"
- 29 "That's made a-purpose," said the Djinn, "all because you missed those three days. You will be able to work now for three days without eating, because you can live on your humph; and don't you ever say I never did anything for you. Come out of the Desert and go to the Three, and behave. Humph yourself!"
- And the Camel humphed himself, humph and all, and went away to join the Three. And from that day to this the Camel always wears a humph (we call it "hump" now, not to hurt his feelings); but he has never yet caught up with the three days that he missed at the beginning of the world, and he has never yet learned how to behave.

3 <sub>ind</sub> 4 <sub>pm</sub> 5 <sub>pov</sub>	laver: quiet chatter faba: a council meeting in Southem Africa uchayet: a village council in India w-wow: a council meeting of Native Americans ic Domain
7.	Which is the MAIN theme of the passage?  A) Man should rule over animals.  B) Everyone has different strengths.  C) A consequence should fit the behavior.  D) The team is more important than the player.
8.	Which idea is central to the passage?  A) Communication is important.  B) Work hard to prove your worth.  C) Sharing the work makes it easier.  D) Enjoy life and its many pleasures.
9.	What is the theme of the passage?  A) Strength is desirable.  B) Companionship is necessary.  C) Laziness will achieve nothing.  D) Persistence will lead to harmony.
10.	Which point of view does the author use in the passage?  A) third-person limited  B) first person, the Djinn  C) first person, the Camel  D) third-person omniscient
11.	Which words best describe the Horse, the Dog, and the Ox?  A) understanding and sympathetic  B) overworked and restless  C) mischievous and playful  D) tired and lonesome
12.	Which excerpt from the passage expresses a possible theme?  A) " Camel, O Camel, come out and trot like the rest of us."  B) " Three, O Three, I'm very sorry for you"  C) "That's your very own humph that you've brought upon your very own self"  D) "Come out of the Desert and go to the Three, and behave"
13.	What purpose does the Djinn serve in the passage?  A) The Djinn narrates the events.  B) The Djinn resolves the problem.  C) The Djinn adds humor to the situation.  D) The Djinn introduces other characters.
14.	Which word BEST describes the Camel?  A) cruel  B) friendly  C) hungry  D) lazy

15.	How are the Horse, the Dog, and the Ox similar?
	A) Each works hard at its assigned job.
	B) All of them have been punished.
	C) None of them likes to work.
	D) Each complains constantly.
	The Recital
1	Mark wiped his hands on his pants, then cringed as he thought about his performance. "I spent an hour ironing these pants so the creases would be decent," he sighed to himself, however, he was not sure it was worth the effort. Standing nearby the curtain, he listened to the people entering the theater. Wondering who might be in the audience made Mark more anxious, so he walked farther backstage. Students were everywhere; some pacing like him, others simply waiting. None of them appeared as nervous as he felt. Mark searched for an abandoned corner where he could be alone for a moment.
2	He found a step by the emergency exit where it was quiet. Taking slow deep breaths, he closed his eyes and concentrated on the music he would soon perform. Mark began playing the violin when he was eight. Five years later, he was about to give the most important performance of his life. This was not just any performance. This performance was for the most prestigious recital in the state, one for which he had to audition. If he did well at the University Recital, there was an exceptional chance that he would be accepted to the university's music program when he graduated from high school.
3	The notes of his song were playing in his head for the third time when his instructor, Mr. Walsh, found him. "What are you doing? You're on stage next. Are you okay?" Mark's throat was too dry for him to answer even though he tried. He followed Mr. Walsh to the stage. His hands were a little shaky. He brushed himself off and cleared his throat.
4	"I'm nervous about my performance. What if I make a mistake?" he finally managed to croak.
5	Mr. Walsh took him by the shoulders, "You'll be fine. All you have to do is go out there and play. Don't worry about anything else. There will be other recitals."
6	Mark waited for the applause for the previous performer to fade away. Mr. Walsh gave him a nudge, and he walked carefully to the center of the stage.  Momentarily blinded by the lights, he forgot what he was supposed to do. Then the people in the front row came into focus. He saw their enthusiastic smiles, and he smiled back. Slowly, he raised the violin to his chin. His bow slid gracefully over the strings, filling the theater with rhythmical sound. The smile stayed on Mark's face as he played, knowing that this was what he loved to do. As Mark played, the expression on his face clearly showed the love he had for playing the violin.
16.	What happens after Mark goes on stage?
	A) He sees Mr. Walsh watching him.
	B) He feels encouraged and happily begins his performance.
	C) He is blinded by the bright lights and unable to perform.
	D) Mr. Walsh signals for him to play.
17	Which sentence from the passage foreshadows the outcome of Mark's performance?
17.	A) None of them appeared as nervous as he felt.
	B) Mark searched for an abandoned corner where he could be alone for a moment.
	C) Mark waited for the applause for the previous performer to fade away.
	D) He saw their enthusiastic smiles, and he smiled back.
18.	Why is Mark nervous about this performance?
	A) It will determine his future.
	B) It is his first recital.
	C) It is a unique opportunity.
	D) It will allow him to attend school.
19	Why is Mark nervous before his performance?
17.	A) He realizes that this recital is important.
	B) He knows that his teacher is watching him.
	C) He believes that the audience is filled with his friends.
	D) He understands that this recital is his chance to go to college.
	D) He understands that this rectiants his chance to go to confege.

20.	What does Mark do to	ealm himself before h	is performance?
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- A) He finds an isolated area.
- B) He listens to the audience.
- C) He worries about his music.
- D) He thinks about the university.

7

## LA.7.1.b.e

Grade 7

#### **Different Eggs, Different Colors**

- Can you imagine visiting a museum filled with bird eggs from all over the world? The Provincial Museum of Alberta, Canada, has one of the largest egg collections in North America. Visitors can see the world's largest eggs (ostrich eggs at 7 inches long) and the smallest (hummingbird eggs at just 1/2 inch long). They can also see that bird eggs can be almost every color of the rainbow.
- 2 Some eggs are one solid color, such as white, blue, or green. Others have colored markings that look like scratches, blotches, or streaks. What causes eggs from different birds to be different colors?
- To begin with, the color of a bird egg comes from pigments<sup>1</sup> found in cells and tissues within the mother bird's body. As the baby bird forms along with the shell that protects it, the natural pigment in the cells of the mother bird determines what color that bird's egg will be.
- Three basic types of pigment are found in the blood cells of mother birds. One produces eggshells with yellow, pink, and brown tones. The other two pigments produce eggs with green and blue tones. The mixture of all three pigment types can produce eggs with shades that range from violet-blue to olive-green. A single variety of bird, however, will always produce eggs with very similar coloring.
- Other factors seem to affect the color of an egg. Eggs from different kinds of birds often match the locale where the birds lay them. For example, birds that build nests of green leaves and brown twigs tend to lay eggs that are either green or brown. Eggs laid on rocky granite cliffs might be speckled gray and black. When the colors of eggs blend in with their surroundings, the eggs are better protected from other birds or mammals that eat eggs.
- Ornithologists, scientists who study birds, believe the colors and markings of bird eggs may help bird parents to distinguish their own eggs from those laid by other birds of the same species. This is helpful if thousands of birds are all nesting near each other, as seagulls do along rocky coastal cliffs.
- Some birds lay eggs that look just like the eggs of another type of bird. The European cuckoo, for example, lays eggs that look like sedge warbler eggs. The cuckoo often lays its eggs in the nests of the warblers. Because the cuckoo eggs look like the warblers' own, the warblers are fooled and they take care of the cuckoo eggs as if they are their own.
- Some bird eggs are as white as snow, just like most chicken eggs. Ornithologists have noticed that most of these birds that lay white eggs—such as downy woodpeckers and kingfishers—lay their eggs in dark hollows of trees. These experts think that the eggs may be easier for the birds to find in these dark cavities because they are white in color.
- 9 More than 8,700 species of birds exist on Earth. Their eggs are found in as many colors as flowers, rocks, leaves, and sunsets. Different colors may help bird eggs to survive, but they also make the study of birds and the viewing of their eggs a more enjoyable and interesting experience.

<sup>1</sup>pigments: substances used as coloring; tints

#### 1. Which statement about the colors of bird eggs is LEAST accurate?

- A) The weather can affect the color of a bird's egg.
- B) The eggs tend to blend in with their surroundings.
- C) The egg colors can vary somewhat within one species.
- The egg colors come from different tints in the mother's blood.

#### 2. Based on the passage, which statement is true?

- A) Eggs come in a wide variety of colors.
- B) Eggs do not get longer than six inches.
- C) The color of an egg is determined by the color of the mother bird.
- D) Bird species do not take care of eggs other than their own,

#### 3. In which paragraph does the author discuss how bird parents identify their own eggs?

- A) Paragraph 1
- B) Paragraph 3
- C) Paragraph 5
- D) Paragraph 6

#### 4. What does the author use to support statements about the causes of different colored eggs?

- A) stories about how eggs can fool other birds
- B) a discussion about scientists who study birds
- C) descriptions of eggs the author has observed
- D) a scientific explanation about various types of eggs

5.	Which bird passes off the responsibility of caring for its eggs to another bird?  A) the cuckoo  B) the kingfisher  C) the woodpecker
	D) the sedge warbler
6.	Different colors of eggshells help bird eggs survive EXCEPT when the colors of the eggs  A) match the locale where the birds lay them.  B) match the colors of nearby flowers in the area.  C) make it easier for parents to find their own eggs.  D) help parents tell their own eggs apart from others.
7.	Which of the following BEST states the MAIN idea of Paragraph 5?  A) Eggs laid in green leaves are often green.  B) Eggs laid on granite cliffs tend to be speckled.  C) Eggs are often the same color as their surroundings.  D) Eggs are not dependent on their surroundings for protection.
8.	What is the MAIN idea in this passage?  A) There are more than 8,700 species of birds on the planet.  B) Eggs come in many colors, depending on several factors.  C) Many bird eggs are similar in color to the environment the species lives in.  D) The Provincial Museum has one of the largest egg collections in the world.
9.	<ul> <li>Which sentence BEST summarizes the ideas in this passage?</li> <li>A) The place where eggs are laid can create differences in the color of birds' eggs; the species of bird laying the eggs makes a difference too.</li> <li>B) Although birds lay eggs of many different colors, the colors are all created by three natural pigments in the blood of the mother bird.</li> <li>C) All bird eggs are colored by natural substances in the blood of the mother bird; these egg colors often match or contrast with the color of the eggs' surroundings.</li> <li>D) Omithologists have discovered that eggs have different colors so that they will blend in their environment.</li> </ul>
10.	According to the passage, which factor might affect the color of a mother bird's egg?  A) her size B) her diet C) her feathers D) her environment
11.	What is the purpose of the passage?  A) to persuade the reader to begin bird-watching  B) to convince the reader to become an ornithologist  C) to inform the reader about where different bird species live  D) to educate the reader about how the color of birds' eggs differ
12.	What is another good title for this passage?  A) The Work of an Omithologist  B) A Rainbow of Colors in the Nest  C) A Trip to the Provincial Museum  D) European Cuckoos and Sedge Warblers

#### 13. Which question is NOT answered by information in the passage?

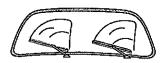
- A) Why do Cuckoos lay their eggs in the nests of other birds?
- B) What causes bird eggs to vary in color?
- C) What do ornithologists do?
- D) Why do some birds lay their eggs in the dark hollows of trees?

#### 14. According to Paragraph 8, why do downy woodpeckers lay their eggs in the dark hollows of trees?

- A) because the eggs are safe from harm
- B) because other species of birds may hatch the eggs
- C) because white eggs must be laid in dark places
- D) because the mother bird can see the eggs better

#### Windshield Wipers-Mary Anderson

by Catherine Thimmesh



- It was a dreadful day, weatherwise. Snow and sleet pelted the pavement, and people burrowed deep within their coats. Hoping to catch the sights and escape the blustery cold, Mary Anderson of Birmingham, Alabama, climbed aboard a New York City streetcar. The year was 1902. It turned out to be a ride she would never forget, but not because of the scenery. Instead, the ride would inspire her to invent the very first windshield wiper simply because she felt sorry for the streetcar driver who struggled to see through the glass. The invention would not only improve conditions for all drivers, but would save countless lives as well.
- Earlier, top-notch engineers had tackled the problem of poor visibility in bad weather and had come up with a solution. They split the windshield. Once the glass became covered with rain or snow, the streetcar driver could fling open the middle for a clear view. Trouble was, it didn't work. At least not very well. Mary watched helplessly as the driver desperately tried to see. When he opened the split glass, he was greeted with a burst of icy cold air and a blast of heavy, wet snow.
- "Why doesn't someone create a device to remove the snow?" Mary reportedly asked the people around her.
- 4 "It's been tried many times," they told her. "Can't be done."
- Nonsense, thought Mary, as she scribbled in her notebook. Why can't there be a lever on the inside that would move an arm on the outside to swipe off the snow? To her, it seemed perfectly simple.
- Later, when she returned to her home in Birmingham, she studied her sketches. She spent some time refining her drawings—making them more elaborate, adding more details. Satisfied at last, she brought her design to a small manufacturing company in Birmingham and hired the company to make a model. Then, she filed a patent application.
- "My invention relates to an improvement in window-cleaning devices in which a radially-swinging arm is actuated by a handle from inside of a car-vestibule," Mary stated in her patent specification.
- In other words, a lever on the inside that would move an arm on the outside. Mary's wiper was made of wooden strips and pieces of rubber. She designed it to be removed in good weather so that it would not interfere with the appearance of the streetcar. One of her most important elements was the addition of a counterweight.
- This was used, she writes, "to provide means for maintaining a uniform pressure upon the glass throughout the entire area swept by my improved window-cleaning device."
- In other words, it would swipe off the snow. Mary was awarded a patent in 1903 for a window-cleaning device—a windshield wiper. Once the invention was protected by a patent, she wrote a large Canadian company offering to sell her rights. They weren't interested. After reviewing her proposal, they decided that her invention had little, if any, commercial value. They simply didn't think it would sell. They encouraged her, however, to submit any other "useful patents" she might have for their consideration.
- Mary put the patent in a drawer and eventually it expired. Several years later, someone else revived her idea, patented it, sold it, and made a very large sum of money. Every day, lives are saved due to increased visibility during bad weather. Even in our high-tech society, the windshield wiper remains one of the greatest safety inventions of the modern-day automobile, and tourists can now see the sights despite the snow, sleet, or rain.

 $<sup>^{</sup>m 1}$  commercial: relating to buying and selling goods on a large scale

<sup>&</sup>quot;Windshield Wipers—Mary Anderson" from Girls Think of Everything by Catherine Thimmesh, text copyright © 2000 by Catherine Thimmesh. Reprinted by permission of Houghton Mifflia Harcourt Publishing Company. All rights reserved.

#### 15. Which of the following BEST traces the steps Mary followed in her invention process? A) original idea finding a buyer drawing of sketches refining of sketches application for patent B) original idea drawing of sketches refining of sketches application for patent finding a buyer C) finding a buyer drawing of sketches refining of sketches application for patent original idea D) application for patent finding a buyer drawing of sketches refining of sketches original idea 16. What safety advantage did Anderson's wipers have over the split windshields that the engineers had designed? A) They could be removed when weather conditions were good. B) They did not allow the weather elements to enter the vehicle. C) They made the window easier to see through in the dark. D) They allowed for larger pieces of glass that were harder to shatter, 17. Paragraph 2 was mainly written to A) describe a previous solution to improve visibility. B) show Mary Anderson was smarter than engineers. C) explain the problem with Mary Anderson's windshield wiper. D) illustrate the setting in which the windshield wiper was invented.

18. What is the purpose of this passage?

A) to show how to fill out a patent application
B) to explain what it is like to be a streetcar driver
C) to persuade readers to create their own inventions
D) to tell how windshield wipers were first invented

#### . 19. Which outline was probably created to write the passage?

- A) I. Mary Anderson
  - A. New York 1902
  - B. Early invention of split windshield
  - C. Radially-swinging arm invention
  - D. Patent awarded 1903
  - E. Who really invented the windshield wiper?
- B) I. Mary Anderson
  - A. Birmingham her home
  - B. Drawings to show her invention
  - C. Window cleaning important for safety
  - D. Good weather not usually a problem
  - E. Snow and sleet both required her invention
- C) I. Mary Anderson
  - A. New York 1902
  - B. Streetcars with bad visibility due to snow
  - C. Patent awarded 1903
  - D. Lives saved thanks to Mary's invention
  - E. Snow and sleet no longer a hazard to drivers
- D) I. Mary Anderson
  - A. Poor visibility made driving hazardous
  - B. Notebook sketches to show her ideas
  - C. Designed and manufactured but didn't catch on
  - D. Patent issued 1903
  - E. An important life-saving safety device

#### 20. The Canadian company rejected Mary's windshield wipers because

- A) they were too expensive to manufacture.
- B) they were unattractive and heavy.
- C) they would not be safe.
- D) they would not sell.

# LA 7.1.6.j

Grade 7

#### Ocean Wonder



- Can you imagine an animal with a head like a horse, a tail like a monkey, a pouch like a kangaroo, and eyes like a chameleon? The sea horse is a combination of the features that make these other animals so distinctive. Yet, even with these features, the sea horse, no matter how different it looks, is a fish. It belongs to the same class to which all other bony fish like salmon and tuna belong. When a sea horse is stretched out on its stomach from the top of its head to the tip of its tail, it is easy to see that it really does resemble a fish.
- The body of a sea horse is a series of bony plates that look like rings. Some types of sea horses may have bony bumps or spines that protrude from the rings. These features are very helpful when identifying certain species. There are even spines on the top of its horse-shaped head. These spines are called a coronet because they look like a crown. Even though the sea horse is a fish, its bony rings are covered with thin skin rather than scales.
- 3 Sea horses have many distinctive features. The sea horse's tail is prehensile, which means it is adapted for seizing or grasping by folding around an object. This adaptation allows the sea horse to wrap its tail around sea grass stems, coral, and sticks. Other features include eyes that can move independently of each other in all directions and a pouch for carrying the young.
- 4 Breathing through gills is a natural activity for a sea horse since it is a fish. But, unlike other fish, its gills are very small and shaped like clusters of grapes.
- A sea horse is measured from the tip of the tail to the top of the coronet. Fully grown sea horses can range from the 14-inch Australian big-bellied sea horse to the one-inch pygmy sea horse. Newborns measure less than one-half inch.
- Because it is a marine animal, the sea horse must live in saltwater. You will find this creature living among the sea grass beds, mangrove roots, and coral reefs in the warm, shallow water of the western Atlantic Ocean, as well as in the Indian and Pacific Oceans.
- Since a sea horse has no teeth or stomach, it takes prey in through a small mouth at the end of its long tubular snout. It depends completely on live food, which is swallowed whole and then passed directly through the digestive system. It is a greedy predator that eats anything small enough to fit into its mouth. It can eat 3,000 tiny shrimp in one day. It also eats plankton, tiny plants and animals, and fish larvae.
- Due to its excellent camouflage and its bony plates and spines, the sea horse has few predators. Its ability to change color to match the seaweed in which it lives provides protection. The most unusual camouflage belongs to the Australian sea horse. It has leaf-like markings all over its body, making it almost disappear in a seaweed bed. However, tuna, stingrays, penguins, and sea turtles do occasionally prey upon the sea horse. Researchers have learned that crabs may be one of the most serious predators. Researchers have discovered sea horses with damaged tails, which suggests that they barely escaped from hungry crabs.
- Without a fin on its tail like most fish have, a sea horse moves through the water by swimming upright. It is propelled forward by the quick fluttering of the dorsal fin on its back. The pectoral fins on both sides of the body are used for steering and stability. The sea horse is definitely more adapted to moving about easily than it is to moving about with speed. Because it is a very slow swimmer, it relies heavily on camouflage for protection.
- Scientists have provided us with much information about sea horses. There are, however, areas in which researchers do not yet have enough knowledge. Currently, between 32 and 35 different types of sea horses are recognized worldwide. This number will most likely increase with more research. Also, there is not much known yet about how long sea horses live. Most estimates come from knowledge of sea horses in captivity. The smallest lives about one year; the largest three to five years. Truly, the sea horse is one of the most fascinating underwater creatures.

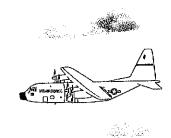
#### 1. What is the MAIN organizational structure in the passage?

- A) main idea and supporting details
- B) compare and contrast
- C) question and answer
- D) cause and effect

- Why does the author compare a sea horse to many different animals? A) to show what a sea horse can do B) to illustrate how a sea horse behaves C) to explain where a sea horse comes from D) to describe what a sea horse looks like How is Paragraph 3 organized? A) chronological order B) compare and contrast C) main idea and details D) order of importance How does the author organize this passage? A) by contrasting sea horses with many other animals B) by describing the life stages of a sea horse in order C) by discussing various features of the sea horse in detail D) by stating the dangers sea horses face living in the ocean Wrappings by Andy Rooney Depending on what mood I'm in, I find it either irritating, funny or civilized when I think about how we protect protective coverings in this country. When I come home from the grocery store and start to unpack, I am always unfavorably impressed with the layers of protective or decorative wrappings we cover our food with. There is hardly anything we buy that doesn't come in at least two wrappings, and then several of them are assembled by the cashier at the checkout counter 3 and put into a small bag. Then several of the small bags are grouped together and put into a big bag. If you have several big bags with small bags in them, they give you a cardboard box to put the-packages-in-the-little-bags-in-the-big-bags in. A lot of things we buy wouldn't really need any protective wrapping at all. The skin of an orange protects an orange pretty well for most of its natural life, but we aren't satisfied with what nature has given it. We wrap ten of them in plastic or put them in a net bag, and we put the plastic bag in a paper bag. The orange inside the skin, inside the plastic which is in a paper bag, must wonder where it is. A box of cookies or crackers often has waxed paper next to the cookies, a cardboard box holding the cookies and then waxed paper and a decorative wrapping around the cardboard box. What seems to be called for here is some stiff, decorative waxed paper. We have always wrapped our cars in an incredible number of protective layers. We put fenders over the wheels to protect ourselves from flying dirt. Then we 6 put bumpers front and back to protect the fenders. We proceed from there to put chrome on the bumpers to protect them from rust, and we undercoat the fenders to protect them from the dirt they're protecting us from.
- We paint the car to protect the metal, wax the paint to protect that and then we build a two-car garage to protect the whole thing. If it was a child, it would be spoiled.
- I'm laughing, but I'm a protector of things myself. I use wood preserver before I paint lumber, and when I buy a raincoat I always spray it with Scotchgard<sup>TM</sup> or some other silicone water resister. Over the years, I'll bet I've spent more on Scotchgard<sup>TM</sup> than I have on raincoats.
- A good book is designed with a hard cover to protect its contents. The hard cover is protected from dirt and abuse by a dust jacket. A lot of people who are very careful with books cover the dust jacket with a plastic cover of its own.
- A relative of ours bought a new couch recently because she liked the fabric it was covered with. She liked it so much she didn't want it to get dirty, so she bought a slipcover to put over it and she laid little oblong pieces of cloth over the arms where the wear is heaviest to protect the slipcover. She called them antimacassars.
- 11 We may never again see the fabric she's protecting.

- 5. What purpose does Paragraph 8 serve in the passage?
  - A) to describe a process that the author finds useful
  - B) to compare the author and the subjects of his criticism
  - C) to suggest that the author lacks the ability to remain objective
  - D) to explain reasons the author is annoyed by certain circumstances
- 6. How does Paragraph 10 contribute to the overall development of the ideas in the passage?
  - A) It illustrates the complex process of protection.
  - B) It highlights the commercial aspects of protection.
  - C) It offers a specific example of excessive protection.
  - D) It gives advice on a particular method of protection.
- 7. How is Paragraph 8 important to the overall development of ideas in the passage?
  - A) It questions humans' protective impulses.
  - B) It reveals the author's own need to protect.
  - C) It compares various methods of protection.
  - D) It emphasizes the value of protective features.

#### Into the Eye of the Storm



- They fly into the eye of a hurricane. Who are these people? Why would they do such a thing? They are "Hurricane Hunters." Even the most advanced satellites today cannot provide all the facts the National Hurricane Center forecasters need to predict when and where a hurricane will strike. Information is also needed to predict how powerful the storm will be. Satellites today can estimate the strength of a hurricane, but these numbers are not accurate enough. What is at first classified as a Category 2 hurricane may actually be determined to be a dangerous Category 3 after more information is gathered.
- In 1943 Colonel Joseph Duckworth became the first pilot to fly into the eye of a hurricane on purpose. He flew into a hurricane over land near Houston, Texas, on July 27, 1943. He had been an airline pilot who taught Army Air Corps pilots how to fly through bad weather during World War II. He taught pilots how to reduce risk by using their skill, their knowledge, and careful planning.
- Duckworth's success flying through the hurricanes and the damage done to Navy ships by incorrectly forecasted hurricanes persuaded the military to begin studying hurricanes. These studies collected useful information. The program's first accomplishment came with "The Great Atlantic Hurricane of 1944." At this time Navy and Army planes tracked the storm from Puerto Rico to New England. A similar storm with the same track had caused a great deal of damage in 1938 when it came ashore with no warning. The forecast information that came from these military flights was used to reduce all types of destruction in the path of the 1944 hurricane.
- Today the "Hurricane Hunters" are members of the 53rd Weather Investigation Squadron of the Air Force Reserve. They are based at Keesler Air Force Base in Biloxi, Mississippi. There is a six-person crew on each flight. It includes the pilot, the co-pilot, the flight engineer, the navigator, and the weather officer. There is also a dropsonde system operator. The dropsonde system operator releases the dropsonde, which is a weather-sensing canister attached to a small parachute. The canister can send back to the plane information about the temperature, humidity, pressure, and winds inside the hurricane. This information is then transferred to the National Hurricane Center by satellite.
- When the National Hurricane Center in Miami determines that a hurricane is approaching the United States, the "Hurricane Hunters" take off in two planes. One of the WC-130 planes will enter the hurricane close to the sea surface. The other plane will fly much higher into the storm. As the storm builds in strength, the planes will fly at increasingly higher altitudes. These planes are designed to withstand takeoffs, landings, and high altitude winds up to 200 miles per hour.
- Their goal is not to fly over or around the hurricane but to fly directly into it. Each mission will last about ten hours. During this time the crew will fly from the outer edge all the way through the eye wall, which is a solid ring of thunderstorms. The crew will fly to the eye, or center of the storm, four to six times. All the while, radar, computers, and weather instruments will collect valuable information inside the hurricane. This information cannot be attained any other way. The knowledge will inform weather forecasters where the hurricane is going, when it will get there, and how strong it will be.
- One day a plane with no pilot, such as the Aerosonde, may take the place of the "Hurricane Hunters." Until then, no hurricane can approach the shoretine of the United States without sufficient warning because of the skill and dedication of the "Hurricane Hunters."

#### 8. How did the 1944 hurricane differ from the storm in 1938?

- A) Forecasters used planes to help collect information about the 1944 storm.
- B) The 1944 storm caused more serious damage because nobody saw it coming.
- C) The 1938 storm was tracked with military airplanes.
- D) New computers and weather instruments collected storm information in 1938.

#### 9. Which of the following BEST describes the organization of the passage?

- A) cause and effect
- B) process
- C) compare and contrast
- D) chronological order

#### 10. How does the author organize Paragraph 5?

- A) The author compares the National Hurricane Center to the "Hurricane Hunters."
- B) The author makes a general statement about "Hurricane Hunters" and gives related details.
- C) The author describes the causes of hurricanes and the effects they have on "Hurricane Hunters."
- D) The author tells what happens when a hurricane is approaching the U.S. and the process the "Hurricane Hunters" use to track it.

#### 11. Read the excerpt.

The program's first accomplishment came with "The Great Atlantic Hurricane of 1944." At this time Navy and Army planes tracked the storm from Puerto Rico to New England. A similar storm with the same track had caused a great deal of damage in 1938 when it came ashore with no warning.

#### Why does the author include this comparison in the passage?

- A) to show the bravery that "Hurricane Hunters" showed in 1944
- B) to emphasize the benefit of forecast information from military flights
- C) to discourage average people from staying in a hurricane's path
- D) to illustrate how the "Hurricane Hunters" technology has not changed

#### 12. In paragraphs 6 and 7, the author uses the phrases "During this time," "All the while," and "Until then" to help the reader understand

- A) the causes of events.
- B) the comparisons being made.
- C) the order of events.
- D) the solution to a problem.

#### 13. Read the sentences,

One of the WC-130 planes will enter the hurricane close to the sea surface. The other plane will fly much higher into the storm,

#### Why does the author include this contrast in the passage?

- A) to emphasize that the crew of the WC-130 is extremely brave
- B) to show how both planes are vital to the hurricane forecasting process
- C) to explain how the missions for both planes have become less dangerous
- D) to illustrate that these planes will soon be replaced by planes with no pilots

#### excerpt from Remarks by the First Lady at the National Arts and Humanities Youth Program Awards

The White House Office of the First Lady

For Immediate Release November 19, 2012

- 2 AUDIENCE: Good afternoon.
- 3 MRS, OBAMA: And welcome to the White House. It's good to have you here. I am thrilled that all of you are here joining us today.
- I want to start by thanking the President's Committee on the Arts and Humanities, and all their work for sponsoring these awards each year. They've just done an amazing job. And I'd like to ask all of the members of the committee to please stand so that we can recognize you for all of your hard work. (Applause.) It's a pretty impressive group.
- 5 ... I want to thank all of the educators, the artists, leaders, all of you who are working every day in communities all across this country to run the programs that we are going to recognize here today.
- And every day, you all are doing the hard work. You are pushing and inspiring our kids. You're revealing their boundless promise, and teaching them to believe in themselves. Because of the programs that you all run, young people are learning breakdancing, hip hop, African drumming—a lot of stuff going on, right?—a little traditional music. They're putting on plays, publishing poems and articles, and working on museum exhibits. They're becoming historians, designers and champion debaters. Yes. (Laughter.)
- And the young people from the Mariachi Master Apprentice Program who will perform for us a little later on, they have even recorded their own CD. That's pretty good. (Applause.) So we are looking forward to that. I got to hear a little bit of their practice yesterday. They're pretty good, pretty good. (Laughter.) Very proud to have you guys here.
- And I know that many of you who are here today, you make all this happen on shoestring budgets; you do it in unbelievable ways, in some of the most difficult circumstances imaginable. And I know that you put a lot of late nights and long hours in to give these kids opportunities worthy of their promise.
- But you keep on doing this year after year because you have seen firsthand the transformative power of the arts and arts education in the lives of young people across this country. You know that the skills that you're teaching—skills like problem-solving and teamwork, self-expression—these skills aren't just valuable in the studio or in the theater, but they are critical in the classroom and will be in the workplace when you all get there, right?
- You all see that every day—the promise of the work in the rising GPAs, because all of these students are doing wonderful things. I met a young woman who is going to go into biology, studying at UCLA, in our mariachi band—women in science, great things.
- You see it in rising graduation rates, because all of these kids are going to college, right? Let's hear it again.
- 12 AUDIENCE: Yes! (Laughter.)
- 13 MRS. OBAMA: Yes, indeed.
- You see kids who never considered going to college finally saying to themselves, well, if I can publish my own writing; if I can create my own artwork; if I can get up in front of all these people and perform anywhere, including the East Room of the White House, well, then certainly I can go to college, right? (Laughter.) Of course I can continue my education and expand my ambitions and pursue my dreams, right? You are here. You can do anything.
- And that's why it is so critical that we preserve arts education in our schools. It is absolutely critical because we know how important it is for our children's development. We all know. Every one of us who are here in this room will do whatever it takes to make sure that our own kids get access to sports and music and arts and recreation. So if it's good enough for our kids, it's good enough for all of our kids, right? (Applause.)
- And that's one of the reasons why we've worked so very hard, and it's been a labor of love to make sure that the White House is a showcase for America's rich cultural life. And we've worked to open our doors as often as possible to as many young people as we possibly can. We have hosted youth workshops on everything from modern dance to classical music to spoken word poetry and so much more. And we're looking for another four years to do even more. (Applause.)
- Because what we do know is that ultimately, arts education doesn't just teach our kids valuable skills, it doesn't just give them an important forum of self-expression and self-reflection, it also helps to shape their character. In so many ways it shapes who they are.
- 18 ... That's what your programs are doing every single day. In spite of all the challenges and obstacles that our young people may face out there in the world—because life is hard, right? I say that to [my daughters] every morning when they get up tired. I'm like, yes, life is hard! (Laughter.) You've still got to get up. You've got to get up. (Laughter.) But in spite of all of this, all of your fears and your doubts, you teach them art. . . .
- You teach them that no matter what life throws their way, if they draw on their own talent and courage and creativity, if they are persistent and tenacious and bold—bold, right?—then they can truly make something extraordinary of their lives. Because that's what we expect: nothing but extraordinary. You all can do this, right? That's what we expect.
- And that is why it is such a pleasure to honor you all here today—for the work that you do, for inspiring our kids, for keeping their promise alive, loving them, supporting them. We thank you. We honor you, and we are so proud to support you as you continue your outstanding work. So don't get tired. (Laughter.) Because I know it gets hard, but don't get tired. The work you do is so critical, and we thank you.

14.	Why did the former President and Mrs. Obama work "to make sure that the White House is a showcase for America's rich cultural life" by inviting a variety of artists to perform?
	A) to increase their children's exposure to different art forms
	B) to inspire their children to develop a love of the arts
	C) to enhance the artistic reputations of Americans
	D) to promote access to the arts for Americans

#### 15. Which BEST describes how former First Lady Michelle Obama develops her central argument?

- A) compare and contrast: by describing different approaches to arts education
- B) analogy: by discussing the roles of specific artistic forms in arts education
- C) authority: by appealing to people who are experts in art education
- D) cause and effect: by explaining the results of arts education

## LA 7.1.5.b

Grade 7

1.	Read the sentence.
	Cara thought it highly improbable that Sacha would be sorry about participating in the science fair.
	What does the word improbable mean in this sentence?  A) amusing B) certain C) mysterious D) unlikely
2.	Read these sentences.
	Of all his science courses, Alan preferred chemistry. He especially enjoyed conducting experiments in the science lab. A guidance counselor at his high school suggested that Alan should <u>pursue</u> a career in pharmacy, since pharmacists are required to have an extensive background in chemistry. So Alan began to consider studying chemistry in college.
	Based on the context in these sentences, which words BEST fit the meaning of the word <u>pursue</u> as it is used above?  A) think carefully about  B) seek to accomplish  C) complete an application  D) change an opinion about
3.	The tactile system is the largest part of the sensory system. Which of the following is controlled by the tactile system?
	A) breathing B) sitting up C) swallowing D) sensing heat
4.	Read these sentences.
	Allison is at an <u>impressionable</u> age. When she saw some of her friends wearing red sneakers, she bought a pair. While shopping for the shoes, she, too, purchased a pair like the ones she had seen her friend Darla wearing.
	Based on the context of these sentences, which words BEST fit the meaning of impressionable as it is used above?  A) rather distrustful  B) very thoughtful  C) easily influenced  D) extremely modest
5,	Read the sentence.
	Before she ordered more potatoes, the grocery store manager asked an employee to check the current stock.
	In this sentence, the word stock means  A) a supply of goods kept in a store for sale.  B) the liquid used as the broth or base of a soup.  C) the trunk or stump of a tree that is left standing.  D) a small share of a company owned by many people.
6.	Read this sentence.
	We <u>brush</u> sand out of the car after each trip to the beach.
	Which sentence uses brush in the SAME way as in the sentence above?

C) If she sits on the sofa, she will need to brush the cat hair off her clothes.D) The actors brush by the photographers so quickly that the pictures are blurred.

A) The brush was so thick that we could not leave the trail.

B) She is concerned that the committee will brush off her complaint.

7.	Read this sentence.
	As the runners approached the finish line, they began to
	Which word BEST completes the sentence?
	A) radiate
	B) accelerate
	C) grapple
	D) flounder
8.	Read this sentence.
	Miguel was dissatisfied with his own performance in last night's basketball game, although his team won.
	What does the word dissatisfied mean in the sentence?
	A) encouraged
	B) impressed
	C) unhappy
	D) overcome
9.	Read the sentence.
	The audience was delighted when the bear in the zoo began scaling the tree.
	In the sentence, the word scaling means
	A) building a small version of an object.
	B) climbing up or over something.
	C) reducing the size of something.
	D) measuring logs or other objects.
10.	Read the sentence.
	John prepared to eat well at the wedding, but he was hardly prepared for the spread that covered the buffet table.
	In the sentence, the word spread means
	A) an advertisement in a newspaper that covers a large area.
	B) a large piece of cloth that can be placed atop a surface.
	C) a huge supply of food that is placed on display.
	D) the growth or increasing size of an object.
11.	Read the sentence.
	When the orchestra tuned, it sounded like a disorganized jumble of noises and notes.
	What does the word disorganized mean?
	A) having a slow pace
	B) having no order
	C) in a unique way
	D) in a joyful way

12.	Read the sentence.
	Because of the roof's <u>pitch</u> , it was hard for the workers to keep their balance near the chimney.
	In the sentence, the word pitch means
	A) a throw or toss.
	B) tar used for paving.
	C) slope or sharp angle.
	D) the property of a sound.
13.	Which word is closest in meaning to <u>fabric</u> ?
	A) debris
	B) fable
	C) radar
	D) textile
14.	Which sentence contains the MOST appropriate use of the word turbulent?
	A) All that remained of the <u>turbulent</u> riverbank was a sandy beach.
	B) The <u>turbulent</u> water temperatures in the gulf continued to rise.
	C) The huge boulders in the middle of the river created <u>turbulent</u> rapids,
	D) The motion of the waves created <u>turbulent</u> fishing along the shore.
15.	Which sentence correctly uses dismantled?
	A) The children dismantled the balloons and streamers before the birthday party began.
	B) The bustling bees dismantled the bee hive as they returned with nectar from flowers to make honey.
	C) The workers dismantled the machine to make it easier to move it through the small door.
	D) The windy weather <u>dismantled</u> the piles of leaves, blowing them from yard to yard.
16.	Read the sentence.
	Despite widespread public protest, air pollution is a problem that <u>persists</u> in many cities.
	Which word is closest in meaning to <u>persists</u> ?
	A) forms
	B) produces
	C) moves
	D) continues
17.	Read the sentence.
	Unlike the complicated plan that the team could not execute, Jennifer's plan was completely reasonable.
	In the sentence, the word <u>reasonable</u> means
	A) unique.
	B) possible,
	C) ridiculous.
	D) unexpected.

	Read this sentence.
	Because the workers and the management could not reach an agreement, they chose a third party to listen to both sides and settle the dispute.
	Which is the MOST accurate word to describe the process explained in the sentence?
	A) compromise
	B) concession
	C) arbitration
	D) judgment
19.	Read this sentence from an article titled "Email Etiquette,"
	Following appropriate email etiquette is as important as respecting each rule of behavior when communicating in person.
	At first Diego thought the word etiquette might have something to do with spelling or grammar, but he was not certain, so he reread the sentence. Which word in the sentence would BEST help Diego understand the meaning of etiquette?
	A) email
	B) important
	C) rule
	D) person
20.	Read the sentence.
	When Mrs. Moore arrived on the movie set, she was amazed to see four ropes suspending a car above her head.
	In this sentence, the word suspending means
	A) holding a particular musical note.
	B) hanging and keeping from falling.
	C) causing something to stop operating.
	D) keeping someone from attending school.
21.	Read the sentence.
	Because lace is such a <u>flimsy</u> material, it tears and damages easily.
	Which word is closest in meaning to flimsy?
	A) strange
	B) smooth
	C) delicate
	D) useless
22.	Read the sentence.
	While my classmate <u>omitted</u> some facts in his report, I decided to include everything.
	In the sentence, the word <u>omitted</u> means
	A) listed.
	B) added.
	C) left out.
	D) went over.

In the sentence, the abbreviated word bio means  A) signs. B) book. C) life story. D) line graph.  24. Read the sentence.  Like Terry, who detested the smell of gasoline, Bill was disgusted by the odor surrounding gas stations.  In the sentence, the word detested means A) hated. B) inhaled.		After reading over her bio, I knew all about the president's experiences and accomplishments.
B) book. C) life story. D) line graph.  24. Read the sentence.  Like Terry, who detested the smell of gasoline, Bill was disgusted by the odor surrounding gas stations.  In the sentence, the word detested means A) hated. B) inhaled.		In the sentence, the abbreviated word bio means
C) life story.  D) line graph.  24. Read the sentence.  Like Terry, who detested the smell of gasoline, Bill was disgusted by the odor surrounding gas stations.  In the sentence, the word detested means  A) hated.  B) inhaled.		
D) line graph.  24. Read the sentence.  Like Terry, who detested the smell of gasoline, Bill was disgusted by the odor surrounding gas stations.  In the sentence, the word detested means  A) hated.  B) inhaled.		B) book.
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Like Terry, who detested the smell of gasoline, Bill was disgusted by the odor surrounding gas stations.  In the sentence, the word detested means  A) hated.  B) inhaled.		D) line graph.
In the sentence, the word <u>detested</u> means  A) hated.  B) inhaled.	24.	Read the sentence.
A) hated. B) inhaled.		Like Terry, who detested the smell of gasoline, Bill was disgusted by the odor surrounding gas stations.
B) inhaled.		In the sentence, the word detested means
		A) hated.
		B) inhaled.
C) suspected.		C) suspected.
D) detected.		D) detected.
	Ro	ead this paragraph.
25. Read this paragraph.		Tim was vary talkativa when he came home from reheal to Jon III

23. Read the sentence.

Tim was very talkative when he came home from school today. His new science teacher, Ms. Bennington, told his class that the emphasis would be on laboratory experiments this year. Since experiments are Tim's favorite part of science class, he can hardly wait to get started!

Based on the context of the paragraph, what does the word emphasis mean?

- A) start of a project
- B) change made quickly
- C) special attention given
- D) new information provided

Name:		Date:	
	 	Date,	

### **Linear Equations Worksheet**

Solve the equations.

15. $5p + 2p = 12$
2b. 11v-7v = 4
3 b. 11v+6v = 12
4 b. w + 12 = 12
5b. 8 = 8n + 5n
6 b. $10 = \frac{Z}{3}$

Name:	Date:
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## Variable expressions Worksheet

Evaluate the expressions for the given values of the variable(s).

1 a. $t + d + 8$ , when $t = 10$ and $d = 9$	1 b. $a + q + 3$ , when $a = 6$ and $q = 7$
2 a. $t-q-5$ , when $t=6$ and $q=2$	2 b. $t - k - 8$ , when $t = 3$ and $k = 1$
3 a. n + 8, when n = 3	3 b. $2xg$ , when $x = 7$ and $g = 7$
4 a. $k-y-7$ , when $k=2$ and $y=10$	4 b. $c+3+g$ , when $c=7$ and $g=1$
$5a. s^3$ , when $s=9$	5 b. $b^2$ , when $b = 4$

# Simplify Expressions Worksheet

Simplify the expressions.

A CALL CONTRACTOR CONT	
4. 8 + 0   3   4   3   4   3   4   4   4   4   4	b. 9b - 10 + 10 - 2b
2a. 10n + 8 - 9n	2b. 8b + 5 - 4b
32. p+9p+p+p	3b. 4t - 4t
4a. 9z + 6 – 8z	4b. $8 - 7n + 9n + 7 + 10n$
5a. 8 + 9w - 6 - 5w	5 b. 5x + 9 - 4x
6a. 10w - 7w	6b. $10 - 9n + 5n + 5 + 10n$

Name _	Date	<del></del>	
Probal	bility of a Chance Event - Matching Worksheet		
Write t	he letter of the answer that matches the problem.		
	1. Max has a bag of 8 pens. 3 of the pens are plastic. What is the probability that a randomly selected pen will be a plastic pen?	a.	$\frac{10}{30}$
	2. Stella has balls. There are three types of balls. Basketball, soccer and baseball. If the probability of getting a Basketball is $\frac{4}{10}$ and the probability of getting a soccer ball is $\frac{2}{5}$ , what is the probability of getting a baseball?	b.	$\frac{1}{6}$
	3. Ellie has a bottle store. She has 30 bottles. 10 bottles are made of glass. What is the probability that a randomly selected bottle will be a glass bottle?	c.	$\frac{7}{20}$
<u>.</u>	4. Tyler and Maya want to play chess. They want to decide who plays first so they are flipping a coin. What is the probability of getting "tails" on the coin flip?	d.	$\frac{5}{16}$
	5. Leila plays Dungeons and Dragons. If he rolls a 6-sided die, what is the probability he will get a 5?	e.	$\frac{3}{8}$
	6. Gavin goes to the market and purchases some chocolate. There are 16 pieces of chocolate. 5 are vanilla chocolate. What is the probability that a randomly selected piece of chocolate will be vanilla?	f.	$\frac{1}{2}$

selected bowl be sugar free?

g.

7. Liam arranges a party. There are 20 bowls of

sweets at the party. 7 bowls contain sugar free sweets. What is the probability that a randomly

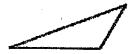
Name	Date	
Geometric Shanes with Given Condi	tions - Matching Workshoot	1

#### th Given Conditions - Matching Worksheet

Match the problems to their answers.

- 1. Draw an obtuse triangle, An obtuse angle is greater than 90° and less than 180°.
- 1 a.
- 2. Draw a 6-sided polygon (a flat shape with straight sides).
- 2 b.
- 3. Which measures will create a triangle? Possibilities to examine are:
- c.

- 1. 8 cm, 2 cm, and 10 cm
- 2. 7 cm, 2cm, and 4 cm
- 3. 5 cm, 3 cm, 1 cm



- 4. Identify the quadrilateral that has four sides and angles are equal.
- d.
- 5. Draw a polygon that has three corners or vertices and three sides.
- e.

g.



6. Draw quadrilateral whose opposite sides f. are parallel and equal in length.



- 7. Which possibility below will create a triangle:
  - 1. 5 cm, 2 cm, and 4 cm
  - 2. 6 cm, 3 cm, and 10 cm

