Student Name

Grade 8 English Language Arts/Literacy **Test Booklet** 

**Practice Test** 

# Unit 1

#### **Directions:**

Today, you will take Unit 1 of the Grade 8 English Language Arts/Literacy Practice Test.

Read each passage and question. Then, follow the directions to answer each question. Mark your answers by completely filling in the circles in your answer document. Do not make any pencil marks outside of the circles. If you need to change an answer, be sure to erase your first answer completely.

One of the questions will ask you to write a response. Write your response in the space provided in your answer document. Be sure to keep your response within the provided space. Only responses written within the provided space will be scored.

If you do not know the answer to a question, you may go on to the next question. If you finish early, you may review your answers and any questions you did not answer in this unit ONLY. Do not go past the stop sign. Today you will analyze passages from two novels. As you read these texts, you will gather information and answer questions about the characters and points of view so you can write an analytical essay.

Read the passage from the novel *Confetti Girl*. Then answer questions 1 and 2.

# from Confetti Girl

by Diana López

- 1 Mom always had after-school projects waiting for me. "Can you help decorate cookies?" she'd say. Or, "Go outside and pick some flowers." Or, "Fix my nails, please." She loved to paint them, but since she wasn't coordinated with her left hand, her right-hand nails looked like a preschooler's coloring page.
- 2 I guess these projects were chores, but they were fun, too. Now when I come home, I've got to sweep, fold towels, or scrub the bathroom sink. Dad helps, but sometimes he makes a big mess.
- 3 Like today. He's got flour, potato skins, and crumpled napkins on the counter. The pot boils over with brown scum. And I don't want to talk to him because I'm still mad about the volleyball game, but I have to know what he's up to.
- 4 "What are you doing, Dad?"
- 5 "Making dinner. Thought I'd give you a break."
- 6 Except for game nights, dinner's my responsibility. I cook while Dad cleans that's our rule. And even though I don't cook as well as Mom did, Dad never complains.
- 7 "What are you going to make?" I ask.
- 8 "Carne guisada and papas fritas."
- 9 "You need a recipe for that?"
- 10 "Are you kidding? I need a recipe for peanut butter sandwiches."
- 11 How mad can a girl be at a man who makes fun of himself and wears a green frog apron that says KISS THE COOK and tube socks over his hands for potholders?



- 12 We clear space on the table. Dinner's served. The beef's tough and the *papas* are mushy, but who cares? I pretend it's delicious because my dad lets me blabber about the Halloween carnival. He laughs out loud when I describe Vanessa's potato baby and Ms. Cantu's creative cascarones,<sup>1</sup> so I don't complain when I notice he served ranch-style beans straight from the can instead of heating them up first.
- 13 Everything's great until he asks about my English class.
- 14 "Any new vocabulary words?" he wants to know.
- 15 "I guess. Maybe. Super . . . super . . . super something. Can't remember."
- 16 "Was it supersede?" he asks. "Supercilious? Superfluous?"
- 17 "I don't remember, Dad. It could have been *super-duper* or *super-loop* for all I care."
- 18 He gets sarcasm from his students all the time so he's good at ignoring it.
- 19 "Remember that *super* is a prefix that means 'above and beyond," he says. "So no matter what the word is, you can get its meaning if you take it apart."
- 20 "Okay, Dad. I get it. So did I tell you we're having a book sale for our next fundraiser?"
- 21 "What else are you doing in English?" he asks. "Reading any novels?"
- 22 I sigh, bored, but he doesn't get the hint. He just waits for my answer. "Yes," I finally say. "I don't remember the title, but it's got a rabbit on the cover."
- 23 "Is it Watership Down? It's got to be Watership Down."
- 24 "Yes, that's it. But I left it in my locker. I guess I can't do my homework."
- 25 "Nonsense. I've got a copy somewhere. Let me look."
- 26 He leaves the table to scan the bookshelves, and all of the sudden, I *care* about the tough beef, the mushy potatoes, and the cold beans. Why should I eat when my own father has abandoned his food? Nothing's more important than his books and vocabulary words. He might *say* I matter, but when he goes on a scavenger hunt for a book, I realize that I really don't.
- 27 I take my plate to the kitchen, grab my half-finished soda, and head to my room. When I walk past him, he's kneeling to search the lower shelves. He's got a paper towel and wipes it lovingly over the titles as if polishing a sports car. He doesn't hear my angry, stomping footsteps. I catch the last part of his sentence.

<sup>1</sup>cascarones—hollow eggs filled with confetti or toys



- 28 ". . . a classic epic journey," he says as if he were in class with a bunch of students. I can't stand it. I just can't stand it. I'd rather have Vanessa's crazy mom.
- 29 Later, just as I write *I love Luís* for the three-hundredth time, my dad peeks through my bedroom door.
- 30 "Found my copy of *Watership Down*," he says, handing me a paperback whose spine's been taped a dozen times. "How far do you have to read tonight?"
- 31 "The first four chapters," I say.
- 32 "That's a lot. You better get busy."
- 33 "Sure, Dad. I'll start reading right away."
- 34 But I don't. As soon as he leaves, I put the book on my nightstand and use it as a coaster. The condensation from my soda makes a big, wet circle on the cover.

From CONFETTI GIRL by Diana López. Copyright © 2009 by Diana López. By permission of Little, Brown, and Company.

What is the meaning of the word **sarcasm** as it is used in paragraph 18 of the passage from *Confetti Girl*?

- **A.** a remark indicating mockery and annoyance
- **B.** a response that is meant to be taken literally
- C. an answer that indicates confusion or skepticism
- **D.** an observation that is silly and childish

# Part B

Which quotation from the passage helps clarify the meaning of **sarcasm**?

- A. "Super . . . super . . . super something. Can't remember." (paragraph 15)
- **B.** "'It could have been *super-duper* or *super-loop* for all I care.'" (paragraph 17)
- **C.** "So did I tell you we're having a book sale for our next fundraiser?" (paragraph 20)
- D. "Yes, that's it. But I left it in my locker. I guess I can't do my homework." (paragraph 24)



What attitude does the narrator of *Confetti Girl* reveal when she uses the book as a coaster in paragraph 34?

- **A.** worry about being able to finish her schoolwork
- **B.** dishonesty in lying to her father about her homework
- **C.** carelessness when it comes to doing household chores
- **D.** resentment of her father's efforts to impose his interests on her

## Part B

Which quotation from the passage **best** shows additional evidence of the attitude in Part A?

- **A.** "Dad helps, but sometimes he makes a big mess." (paragraph 2)
- **B.** "And I don't want to talk to him because I'm still mad about the volleyball game . . . ." (paragraph 3)
- C. "Nothing's more important than his books and vocabulary words. He might say I matter, but when he goes on a scavenger hunt for a book, I realize that I really don't." (paragraph 26)
- **D.** "Later, just as I write *I love Luís* for the three-hundredth time, my dad peeks through my bedroom door." (paragraph 29)

# GO ON TO NEXT PAGE



Read the passage from *Tortilla Sun*. Then answer questions 3 and 4.

# from Tortilla Sun

by Jennifer Cervantes

- 1 *Clang cla-clang, clang clang.* The next morning, I found Mom in the kitchen with a chisel and hammer, chipping away at the kitchen counter. Little flecks of white flew through the air like ceramic snow, landing softly on her olive-colored cheeks.
- <sup>2</sup> I ducked as a piece of tile flew at me. "Hey!"
- <sup>3</sup> She turned toward me with a look of surprise. "Morning, Izzy. I didn't see you standing there."
- 4 "Wha . . . what are you doing?" I asked.
- <sup>5</sup> She stepped back and surveyed the half-demolished counter the way someone stands back to study a newly hung photograph. Wiping her cheek with the back of her hand she said, "There was this"—she searched the mess on the floor— "this one broken tile poking out and I thought I should fix it and . . ."
- <sup>6</sup> I pushed past her to get the broom but she grabbed me by the elbow. A feeling of nervousness swelled inside me.
- 7 "Izzy, wait. I have something to tell you."
- <sup>8</sup> There it was. My heart buckled in my chest. Something was wrong.
- <sup>9</sup> Mom leaned back against the counter and sucked in a great gulp of air. "It's strange actually. I wasn't expecting it, but then at the last minute the funding came through." She folded her arms across her waist. "I'm going to Costa Rica to finish my research."
- 10 Her words buzzed around me like a swarm of confused bees. "When? For how long?"
- 11 "I'll be gone for most of the summer. I leave Tuesday."
- 12 Mom wouldn't leave me. We'd go together. Right? "But that's only three days away." I stepped away from Mom and the shards of tile.
- 13 "I don't have a choice."
- 14 "But what am I supposed to do? That's three whole months."
- 15 "Two. I'll be home at the end of July. And after this I can finally graduate. Our



lives will change then." She reached over and stroked my hair. "For the better."

- 16 I rolled those three words around in my mind: for the better.
- 17 Suddenly last night's phone call made perfect sense. I inched closer and pushed at the broken tile with my toes.
- 18 "Are you sending me to Nana's?" I asked. "In New Mexico?"
- 19 A flash of surprise crossed Mom's face. Like she knew I had heard her phone conversation. "She's so excited to have you and . . ."
- 20 "What happened to all your talk about you guys not seeing eye to eye?" I asked.
- 21 "It's not that we don't see eye to eye. We just don't see the world the same way."
- 22 "Why can't I go with you?" I said.
- 23 "Izzy . . ."
- 24 "New Mexico is worlds away from California. And what am I going to do for two whole months with someone I haven't seen since I was six? That was half my life ago. She's a stranger!" I felt a sudden urge to bolt for the front door and run.
- 25 Mom rolled her eyes. "Oh, Izzy. She's hardly a stranger. She's family. I already have your ticket. You leave Monday." Mom opened the refrigerator and took out a diet soda, pressing the cold can against her face before opening it.
- 26 I stared at the mess on the floor. "Why can't I stay here? Alone." My voice quivered.
- 27 Mom took a swig of her soda, then closed her eyes and took a deep breath. When she opened them, she spoke slowly and deliberately.
- 28 "You're going to New Mexico and that's final."
- 29 I swallowed hard and tried not to cry. "Why do you always get to decide everything? We just unpacked and I—I had plans."
- 30 She raised her eyebrows, surprised. "Plans?"
- 31 Mom was always bugging me to make friends, which I didn't see the point of, considering we moved every few months. And we moved for all sorts of reasons: closer to the university for her, better school for me, quieter, prettier, bigger, smaller.
- 32 "I was going to try and find some girls my age here in the complex so I



wouldn't have to be the new kid in school *again*," I said, trying to sound believable.

- 33 "Honey, you can make friends at your new school in the fall. Besides, this is a wonderful opportunity for you."
- 34 "Opportunity? For me? Or for you?"
- 35 I stormed off to my room and threw myself onto my bed. I ached inside. Like the feeling you get watching a lost balloon float far into the sky until it becomes an invisible nothing.
- 36 I reached for a story card and scribbled:

### 37 Gypsy was sent to prison for stealing the magic ball. And when she was tossed into the dungeon below the castle she found the word "opportunity" written across the stone wall.

- 38 Staring at the card, I wondered what should happen next. Maybe a daring escape or a sorceress could rescue her. When nothing came to me, I scratched out the word *opportunity* until it was a big blob of blue ink and tossed the card on the floor.
- 39 I heard Mom's footsteps coming toward my closed bedroom door. I held my breath, hoping she wouldn't knock.
- 40 *Tap. Tap.*
- 41 Silence.
- 42 "Izzy?" she spoke quietly.
- 43 My hands wandered beneath my pillow and gripped the baseball I had hidden there. I squeezed my eyes closed and whispered, "I wish I didn't have to go. I wish I didn't have to go."
- 44 "I've brought your suitcase." She stood outside my door for what seemed like forever. I pictured her on the other side, arms crossed, head down.
- 45 "I think you're going to like the village." Her voice became a little muffled now, like her mouth was pressed right up against the door. "It's strange and beautiful at the same time and a perfect place to explore. You just might be surprised what you find there." She paused for a moment then continued. "Would you please talk to me?"
- 46 I burrowed my head under the pillow with the baseball. A tiny piece of me felt guilty for stealing it, but it belonged to my dad and that made it special. That made it a part of me.



Unit 1

47 "I'll just leave the suitcase here for you," she said. Her bare feet slapped against the tile and carried her away.

From TORTILLA SUN, © 2010 by Jennifer Cervantes. Used with permission of Chronicle Books LLC, San Francisco. Visit ChronicleBooks.com.

How do the phrases **stormed off**, **float far**, and **invisible nothing** in paragraph 35 contribute to the tone of the passage?

- **A.** They call attention to the narrator's feelings of guilt and disappointment.
- **B.** They emphasize the narrator's growing sense of hopelessness.
- **C.** They reflect the narrator's escape into comforting daydreams.
- **D.** They highlight the narrator's strong sense of independence.

## Part B

Which paragraph **most** directly reinforces the tone created in paragraph 35?

- A. paragraph 32
- B. paragraph 37
- C. paragraph 38
- D. paragraph 39

Which statement provides an objective summary of the passage?

- **A.** A mother chooses to neglect her daughter's interests in favor of completing her degree. She informs her daughter of this decision, and the daughter rightly points out the mother's selfishness.
- **B.** A mother decides it would be best for her daughter if they both moved to another country. The daughter complains that this will disrupt her life, but the mother holds firm to her decision.
- **C.** A girl learns that she and her mother are moving in with their grandmother. The girl believes her mother is trying to take the easy way out. In response, the girl states that her father is a better parent.
- **D.** A girl finds out her mother is going to leave her for the summer. She believes her mother is being selfish. In response, she becomes negative and withdrawn.

# Part B

Select the **three** paragraphs that are **most** relevant to providing an objective summary of the passage.

- A. paragraph 1
- **B.** paragraph 5
- **C.** paragraph 9
- **D.** paragraph 17
- E. paragraph 28
- F. paragraph 34
- **G.** paragraph 45

Refer to the passages from *Confetti Girl* and *Tortilla Sun*. Then answer questions 5 through 7.

## 5. Part A

In both passages, what causes the conflict between the narrator and her parent?

- **A.** The narrator does something to disappoint her parent.
- **B.** The narrator misunderstands her parent's intentions.
- **C.** The parent acts in a way that neglects the narrator's interests.
- **D.** The parent makes a mess that the narrator will have to clean up.

# Part B

Which paragraphs from the two passages **best** support the answer to Part A?

- A. paragraph 3, Confetti Girl; paragraph 1, Tortilla Sun
- B. paragraph 12, Confetti Girl; paragraph 5, Tortilla Sun
- C. paragraph 19, Confetti Girl; paragraph 6, Tortilla Sun
- D. paragraph 26, Confetti Girl; paragraph 9, Tortilla Sun

The passage from *Confetti Girl* begins with the narrator's memories of her mother (paragraph 1). The passage from *Tortilla Sun* ends with Izzy's thoughts about the baseball that belonged to her father (paragraph 46). How do these paragraphs contribute to an understanding of both narrators?

- **A.** The paragraphs reveal that the narrators have little reason to feel upset about their present situations.
- **B.** The paragraphs suggest the efforts the narrators will go to so that they may please their parents.
- **C.** The paragraphs emphasize the fact that the narrators may not be reporting events truthfully.
- **D.** The paragraphs highlight the narrators' strong desire to regain a sense of closeness.

## Part B

What additional similarity between the narrators builds on the same idea?

- **A.** They both have trouble connecting with their remaining parent.
- **B.** They both have an active and rich imaginary life.
- **C.** They both feel as if there is no point in making friends.
- **D.** They both have parents who value education above all else.



**7.** In the passages from *Confetti Girl* and *Tortilla Sun*, the narrators have points of view different from those of their parents. Write an essay analyzing how these differences in points of view create tension in both stories. Remember to use details from both texts to support your ideas.

Unit 1



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Read the passage from "Emerald Ash Borer." Then answer questions 8 through 11.

# from "Emerald Ash Borer"

by Department of Energy and Environmental Protection

- 1 The emerald ash borer is a small, green beetle that belongs to a large family of beetles known as the buprestids, or metallic wood boring beetles. The description is apt, as many of the adult buprestids are indeed glossy, appearing as if their wing covers are made of polished metal. The emerald ash borer, with its green, iridescent wing covers, fits right in. Adult EABs are between 0.3 to 0.55 inches in length—small by most standards but large compared to other buprestids—and relatively slender.
- 2 During its life cycle, EAB undergoes a complete metamorphosis. It starts as an egg, becomes a larva (alternatively called a grub), and then changes to become a pupa and then an adult. The life cycle of an EAB takes either 1 or 2 years to complete. Adults begin emerging from within ash trees around the middle of June, with emergence continuing for about 5 weeks. The female starts laying her eggs on the bark of ash trees about 2 weeks after emergence. After 7 to 10 days, the eggs hatch and the larvae move into the bark, to begin feeding on the phloem (inner bark) and cambium of the tree. Throughout each of its successive instars (larval growth stages), the larva continues to feed within this same part of the tree. The larval stage may last for nearly two years. Before becoming an adult, the insect overwinters as a pre-pupal larva. It then pupates in the spring and emerges as an adult during the summer.
- 3 EAB feeds strictly on ash trees. The larvae feed on the phloem and cambium, while the adults feed on leaves. In Connecticut, there are three species of ash trees—the white ash (*Fraxinus americana*), the green or red ash (*F. pennsylvanica*) and the black ash (*F. nigra*). Despite its common name, mountain ash (*Sorbus* spp.) is not a true ash and does not attract the EAB.
- 4 Two other buprestids are well-known to those in Connecticut who are concerned about trees. The bronze birch borer is a pest of ornamental birch trees. The two-lined chestnut borer often attacks stressed oak trees, including oaks in the forest.

## Why is EAB a Problem?

5 EAB is an insect that is not native to North America. It was first found in 2002 in the vicinity of Detroit, MI, and Windsor, ON. It had arrived sometime within



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the several years previous, presumably on woody packaging materials. It is now known to be found in 12 states. It is considered to be established in several of the upper Midwest states where it was first found. Movement of ash, in particular ash nursery stock and ash wood in the form of firewood, logs and wood packaging materials, has been cited as a likely means by which EAB has been assisted in its spread. More recently, strict regulations have been initiated to prevent the movement of these materials from infested areas.

from Emerald Ash Borer by Department of Energy and Environmental Protection—Public Domain



How does the author organize the information about the emerald ash borer?

- **A.** by providing general facts followed by a statement of a problem
- **B.** by defining the problem in scientific terms followed by an argument for proposed action
- **C.** by presenting a problem followed by a suggested solution
- **D.** by listing facts in order of importance followed by causes of a problem

## Part B

How does paragraph 3 contribute to the organizational pattern of the passage?

- **A.** by showing why some facts about EABs are of greater significance than others
- **B.** by explaining what course of action should be taken to prevent borer infestations
- **C.** by providing the scientific names of various species of borer insects
- **D.** by contrasting the food sources of the mature and immature EABs



What is one reason why the author includes the explanation about the EAB in paragraph 5?

- **A.** to help the reader understand the types of damage the EAB causes
- **B.** to help the reader understand why the EAB issue did not exist in the previous century
- **C.** to help the reader understand how the EAB exists in ash trees
- **D.** to help the reader understand where the EAB will mostly likely travel next

# Part B

Which detail from paragraph 5 **best** supports the answer to Part A?

- A. ". . . not native to North America."
- **B.** ". . . known to be found in 12 states."
- **C.** ". . . in particular ash nursery stock and ash wood . . ."
- **D.** ". . . movement of these materials from infested areas."

What is the meaning of **established** as it is used in paragraph 5 of the passage?

- A. in a strong position permitting growth
- **B.** proven beyond a doubt
- C. well known and respected
- D. accepted as a rule or law

## Part B

Which phrase from paragraph 5 helps the reader understand the meaning of **established**?

- **A.** "... not native ..."
- **B.** ". . . first found . . ."
- C. ". . . several years previous . . ."
- D. ". . . found in 12 states."

Based on the information in the passage, what is one conclusion that can be drawn about the emerald ash borer?

- **A.** The habits of the emerald ash borer are harmful to ash trees.
- **B.** The emerald ash borer is the most destructive of the buprestids in North America.
- **C.** The buprestids, including the emerald ash borer, cause problems for Connecticut homeowners.
- **D.** Additional laws are needed in North America to protect the ash trees from the emerald ash borer.

## Part B

Which evidence from the passage supports the answer to Part A?

- **A.** "The larvae feed on the phloem and cambium, while the adults feed on leaves." (paragraph 3)
- **B.** "Two other buprestids are well-known to those in Connecticut. . . ." (paragraph 4)
- **C.** "The two-lined chestnut borer often attacks stressed oak trees. . . ." (paragraph 4)
- **D.** "More recently, strict regulations have been initiated to prevent the movement of these materials from infested areas." (paragraph 5)





You have come to the end of Unit 1 of the test.

- Review your answers from Unit 1 only.
- Then, close your test booklet and answer document and raise your hand to turn in your test materials.



# Unit 2

#### **Directions:**

Today, you will take Unit 2 of the Grade 8 English Language Arts/Literacy Practice Test.

Read each passage and question. Then, follow the directions to answer each question. Mark your answers by completely filling in the circles in your answer document. Do not make any pencil marks outside of the circles. If you need to change an answer, be sure to erase your first answer completely.

One of the questions will ask you to write a response. Write your response in the space provided in your answer document. Be sure to keep your response within the provided space. Only responses written within the provided space will be scored.

If you do not know the answer to a question, you may go on to the next question. If you finish early, you may review your answers and any questions you did not answer in this unit ONLY. Do not go past the stop sign.



Today you will read about three texts involving elephants. First you will read an article about an experiment. Then you will read a passage from the actual study of the experiment. Finally you will read about a different study of elephant behavior. As you review these sources, you will gather information and answer questions about the purposes and points of view of the authors and researchers. Then you will write an analytical essay.

Read the article "Elephants Can Lend a Helping Trunk." Then answer questions 12 through 14.

# Elephants Can Lend a Helping Trunk

by Virginia Morell

- 1 Elephants know when they need a helping hand—or rather, trunk. That's the conclusion of a new study that tested the cooperative skills of Asian elephants (*Elephas maximus*) in Thailand and showed that the pachyderms understand that they will fail at a task without a partner's assistance. The ability to recognize that you sometimes need a little help from your friends is a sign of higher social cognition, psychologists say, and is rarely found in other species. Elephants now join an elite club of social cooperators: chimpanzees, hyenas, rooks, and humans.
- 2 To test the elephants' cooperation skills, a team of scientists modified a classic experiment first administered to chimpanzees in the 1930s, which requires two animals work together to earn a treat. If they don't cooperate, neither gets the reward. For the elephants, the researchers used a sliding table with a single rope threaded around it. Two bowls of corn were attached to the table, but the elephants could reach them only by pulling two ends of the rope simultaneously. Working with mahout-Asian elephant trainers-trained elephants at the Thai Elephant Conservation Center in Lampang, the researchers first taught individual animals to pull the rope with their trunks. The 12 elephants were then divided into six pairs, and each pair was released to walk to their waiting ropes. If one animal pulled the rope before the other, the rope would slip out, leaving the table—and treats—in place. "That taught them to pull together," says Joshua Plotnik, a postdoc in experimental psychology at the University of Cambridge in the United Kingdom and the lead author of the study, which appears online this week in the Proceedings of the National Academy of Sciences.



- 3 To find out if the elephants understood that they needed one another's assistance, the researchers upped the challenge by releasing the elephants at different times. Thus, one elephant would arrive at the table before the other and would have to wait for a partner to show up before pulling the rope. "They learned to do this faster than the chimpanzees," says Plotnik. "They would stand there holding their end of the rope, just waiting." In another experiment, the partner's rope was placed out of reach. "When the partner couldn't do anything, the other one would just give up," Plotnik says. That shows the elephants understood why the partner was needed, he adds.
- 4 "These are clever experiments," says Karen McComb, a behavioral ecologist at the University of Sussex in the United Kingdom who studies social cognition in wild elephants. The findings are consistent with observations in nature, she says. For instance, in East Africa biologists have seen elephants work together to lift a fallen companion with their tusks. "It's particularly striking that the elephants were able to inhibit pulling" longer than chimpanzees do, says comparative psychologist Nicola Clayton of the University of Cambridge in the United Kingdom. She and her team showed that rooks, too, could pass a similar dual-rope exam, although they failed to wait. The study "adds to the growing body of evidence that elephants show some impressive cognitive abilities."



"Elephants Can Lend a Helping Trunk" by Virginia Morell, from *Science*, March 2011 issue. Copyright © 2011 by American Association for the Advancement of Science. Reprinted by permission of AAAS.



The key terms **cognition** and **cognitive** are used in paragraphs 1 and 4 of the article "Elephants Can Lend a Helping Trunk." What elephant trait do these key terms refer to?

- A. physical strength
- **B.** emotional expression
- C. mental awareness
- **D.** visual sensitivity

#### Part B

Which group of phrases from the article helps the reader understand the meaning of **cognition** and **cognitive**?

- A. "Elephants know . . . ."; ". . . pachyderms understand . . . ."; and
  ". . . ability to recognize . . ." (paragraph 1)
- **B.** "... they will fail ...."; "... partner's assistance ..."; and "... a little help from your friends ..." (paragraph 1)
- **C.** "... clever experiments ...."; "... observations in nature ...."; and "... body of evidence ...." (paragraph 4)
- **D.** "... work together to lift a fallen companion ..."; "... inhibit pulling ..."; and "... dual-rope exam ..." (paragraph 4)

How does paragraph 4 of "Elephants Can Lend a Helping Trunk" contribute to the topic?

- **A.** The brief summary of other scientists' research on animal cooperation suggests that the elephant experiment has not revealed many new insights.
- **B.** The quotations from the researchers' fellow scientists emphasize the fact that these findings about elephants are original and important.
- **C.** Statements from scientists who are more familiar with elephant behavior in the wild question the researchers' assertion that elephants cooperate.
- **D.** The scientists' descriptions of similar experiments on rooks and chimpanzees show that the elephant study challenged similar research.

#### Part B

What detail from the article supports the answer to Part A?

- **A.** The ability to recognize the need for cooperation requires higher-level intelligence.
- **B.** Other species like chimpanzees, hyenas, rooks, and humans also cooperate with each other.
- **C.** The study on elephants appeared in the *Proceedings of the National Academy of Sciences*.
- **D.** The elephants learned to wait for a partner even faster than chimpanzees did.

How does the photograph help readers understand technical information presented in the article?

- **A.** by illustrating a pair of elephants waiting for their partners
- **B.** by demonstrating how elephants behave in a natural setting
- **C.** by clarifying how the objects in the experiment were set up
- **D.** by showing how the rope might slip out and leave the table out of reach

#### Part B

Which paragraph from the article supports the same understanding as the answer to Part A?

- **A.** paragraph 1
- **B.** paragraph 2
- C. paragraph 3
- **D.** paragraph 4



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Read the passage from a study on elephants. Then answer questions 15 and 16.

# from "Elephants Know When They Need a Helping Trunk in a Cooperative Task"

by Joshua M. Plotnik

#### **General Setup of the Experimental Apparatus.**

- 1 The table apparatus was comprised of two pieces of plywood painted and bolted to a rectangular PVC pipe frame 3.3 m wide and 1.2 m deep. The table was placed 4 m beyond two trees, and three wooden planks set in the ground ensured smooth movement of the table. A 7-m-wide volleyball net was strung between the two trees, anchored by two strong, taut wire ropes, forming a transparent but impassable barrier between the elephants and the table. In training trials, a single piece of rope,  $\approx 6$  m in length, was clipped to the front of the table and fed through a metal ring set in the ground beneath the net. Elephants could approach this rope and pull, drawing the table toward them. A wooden post embedded in the ground (replete with rubber shock absorber made from old tires) served as a stopper that prevented the table from advancing past the net. To keep the table centered as it was pulled in, a  $\approx$ 2.5-cm-thick wire rope—running perpendicular to the volleyball net—was strung from the buried table stopper, through the central PVC pipe of the table's frame, and then fixed to a tree on the central axis beyond the table. This rigid guide cable prevented any skewing of the table and thus eliminated incongruities in food availability. Two red food bowls were attached to wooden boards, 50 cm in length, one on each side of the table; as the table reached the stop point, the two bowls became available to the elephant just under the net. In test trials, a single piece of 16.5-m-long, 1-cm-thick hemp rope was threaded through guides and around the back and two sides of the PVC frame so that the loose ends appeared out of two openings on either side of the front of the table. Each side's rope end was then threaded through a metal ring set in the ground underneath the net, leaving 1.6 m of rope available to each elephant upon approach.
- 2 To demarcate the test area, from each of the two central trees was strung a single, flagged green rope ≈1.5 m above the ground and reaching back 10 m behind the net to the release point. During testing and control trials, a third flagged rope was strung down the center of the test area, dividing it into two equally wide lanes (3.5 m); thus, each elephant was released into a single lane



and had access only to a single rope end. These two lanes are similar to the separation between subjects in some previous studies (6), but not others, in which subjects were allowed to move around (e.g., refs. 5, 7, and 11). Because of the sheer size of the elephants and their regular, free-contact interaction with the experimenters and mahouts between trials, these lanes were necessary for safety reasons, whereas they did not prevent the elephants from reaching over to their partner or their partner's food bowl. The lanes did not seem to compromise the elephant's ability to learn the experimental task contingencies.

3 All data were coded from two video cameras. A Panasonic PV-GS500 miniDV camera was fixed to a metal mount on a 7-m-long bamboo ladder, which was hoisted on pulleys between the two trees to a height ≈8 m above the ground. This camera's view was monitored on the ground via closed-circuit television. A second camera, a Canon HV20, was placed on a tripod beyond the table, providing a heads-on view of the elephants.

#### Procedure

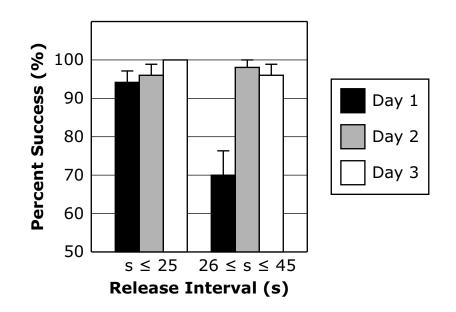
4 In training trials, a mahout<sup>1</sup> would walk with his elephant to the single available rope end and train his animal to pick up and pull the rope by using vocal commands. Rope-pulling strategies were ultimately at the discretion of the elephant, but all elephants had earlier, as part of the facility's routine, been trained to pull chains. In testing trials, the two mahouts stood at the release point with their elephants and restrained them by touching the ear or front leg. When signaled by the experimenters—who were positioned 10 m to the side and back from the setup—elephants were released down their respective lanes. Upon release, mahouts turned away from the elephants and remained silent to minimize chances for cuing, and in position behind the elephants for safety. Trials began when the mahouts gave release commands—they released their hold on the elephant and gave a single word, "go" command once so that it was up to the elephant whether to proceed—and ended when the rope became unthreaded from the drawer, or when all of the food had been eaten (at which point a simple "stop" command was given by the experimenters and the elephants were recalled). During simultaneous and delayed release trials, each of the two food bowls on the table contained two halves of a full ear of corn, a highly desirable but rarely used food reward at the elephant facility. During the final tolerance condition, two trials each of the following were randomized over six trials: (i) each bowl was baited as in test trials, with two half-ears of corn, (*ii*) one (or the other) bowl was baited with six half-ears of corn. In between all

<sup>1</sup>mahout—the keeper or driver of an elephant



trials, mahouts gave elephants pieces of banana and sugarcane to ensure they remained relaxed. Commands were never given during trials, and mahouts were cued to release their elephants with a hand signal that was not visible to the subjects. The interval between trials was 30 s, and elephant pairs never received >30 trials a day. Testing occurred between January and May 2009. Depending on prior obligations at the facility, elephants were tested in the early morning or early afternoon and were often hosed down with water on exceptionally hot days.

5 Success rate per day of delayed release testing in previously trained ( $\leq 25 s$ ) and untrained ( $26 \leq s \leq 45$ ) delay intervals. Elephants were given 10 trials of each type per day randomized across the session.



From "Elephants Know When They Need a Helping Trunk in a Cooperative Task" by Joshua M. Plotnik. From Proceedings of the National Academy of Sciences, February 3, 2011, edition. Copyright © 2011 by Joshua M. Plotnik. Reprinted by permission of Proceedings of the National Academy of Sciences.

In the explanation of the procedure, the author includes the information that the elephants were released after the mahouts were given a hand signal that the elephants could not see. Why was this step included in the procedure?

- **A.** to guarantee the elephants were making their own choices rather than following direction
- **B.** to keep the elephants calm and make sure they would not be startled by sudden movements
- **C.** to prevent the elephants from misunderstanding the commands they were being given
- **D.** to protect the mahouts and the researchers during their close contact with the elephants

#### Part B

What other step in the procedure serves the same purpose?

- **A.** "In training trials, a mahout would walk with his elephant to the single available rope end and train his animal to pick up and pull the rope by using vocal commands."
- **B.** "In testing trials, the two mahouts stood at the release point with their elephants and restrained them by touching the ear or front leg."
- **C.** "Upon release, mahouts turned away from the elephants and remained silent to minimize chances for cuing, and in position behind the elephants for safety."
- **D.** "In between all trials, mahouts gave elephants pieces of banana and sugarcane to ensure they remained relaxed."



How does the chart build on information provided in the passage?

- **A.** It provides more specific information about the length of time between the release of the first elephant and the release of the second, and whether the pair was successful in the test.
- **B.** It confirms that the length of time between tests for each pair of elephants was never more than 30 seconds and that no elephant pair had more than 30 trials in a day.
- **C.** It shows the length of the rope in each trial and the distance that the pairs of elephants had to pull the table in order to get the corn close enough to eat.
- **D.** It records the distance that the mahouts stood away from the elephants in each trial and whether the elephant pairs were successful in retrieving the treats.

# Part B

The chart provides further details for which paragraph in the passage?

- A. paragraph 1
- **B.** paragraph 2
- **C.** paragraph 3
- **D.** paragraph 4



# **GO ON TO NEXT PAGE**



Read the article "Elephants Console Each Other." Then answer questions 17 through 19.

# Elephants Console Each Other

by Virginia Morell

- 1 Elephants, both African and Asian, have long been considered empathetic animals. They help baby elephants stuck in mud holes, use their trunks to lift other elephants that are injured or dying, and even reportedly reassure distressed individual elephants with a gentle touch of their trunk. But it's one thing to witness something that looks like consolation, and another to prove that this is what elephants are doing. Now, scientists have shown that Asian elephants do indeed get distressed when they see others in trouble, and they reach out to console them—just as we do when we see someone suffering. Elephants, thus, join a short list of other animals, including great apes, canines, and some birds, that scientists have shown to reassure others.
- 2 The study "is the first to investigate responses to distress by Asian elephants," which "is inherently difficult to assess because one has to wait for opportunities to arise spontaneously," says Shermin de Silva, a behavioral ecologist at the Uda Walawe Elephant Research Project in Sri Lanka. It would not be ethical to intentionally create stressful situations for the animals as a test, she notes— which is why, until now, researchers have had to rely on well-documented but anecdotal observations of wild and captive elephants to back up claims that they reassure each other.
- 3 Joshua Plotnik, a behavioral ecologist at Mahidol University, Kanchanaburi, in Thailand, and Frans de Waal, a primatologist at Emory University in Atlanta, got around this problem by comparing Asian elephants' behaviors during times of stress to periods when little upset them. For 1 to 2 weeks every month for nearly a year, Plotnik spent 30 to 180 minutes daily watching and recording 26 captive Asian elephants. The animals ranged in age from 3 to 60 years old and lived within a 30-acre area of Elephant Nature Park in northern Thailand. Most of the elephants, aside from mother-juvenile pairs, were unrelated and did not live in family groups as wild elephants do. Instead, the park's Mahouts, or keepers, organized them into six groups which they then guided through a daily routine—bathing and feeding them in the morning, and tethering them at night. But during the day, the elephants were left alone to roam and graze at will.



- 4 Plotnik watched the elephants during their free periods and recorded their reactions to stressful events, such as a dog walking nearby, a snake rustling in the grass, or the presence of an unfriendly elephant. Other researchers have previously shown that when upset, an elephant flares its ears and erects its tail; it may also trumpet or roar, or make a low rumble to show its distress. When elephants in the park saw another elephant behaving in this manner, the observers typically responded by "adopting the same emotion," Plotnik says, "just as we do when watching a scary movie together. If an actor is frightened, our hearts race, and we reach for each other's hands"—a reaction known as "emotional contagion."
- 5 For example, in one event recorded on video, the female Mae Perm rushes to the side of another adult female, Jokia, who was upset after hearing the roar of a captive bull elephant in another nearby park. Both elephants push their ears forward and raise their tails—but Mae Perm does so only after seeing Jokia's distress. Mae Perm also makes loud chirps, which are known to be reassuring calls, and then caresses Jokia with her trunk, finally placing it in Jokia's mouth—an act which "might send a signal, 'I'm here to help you, not hurt you,'" Plotnik says. Jokia, in turn, places her trunk in Mae Perm's mouth—a gesture which is probably like a hug, the researchers say.
- 6 Sometimes several elephants were present when one was spooked by something. These bystanders typically reacted the same way, adopting the agitated behavior of the victim, as Plotnik calls the distressed individual, raising their tails, flaring their ears, and sometimes urinating and defecating while chirping. In some cases, they also formed a protective circle around the victim.
- 7 Plotnik recorded 84 such stressful incidents, noting where each occurred, the time of day, weather, and what other elephants were present—and how these individuals reacted. For a control, he compared these incidents with periods with as many matching variables as possible, but when nothing stressful occurred. The researchers' subsequent analysis—reported today in *PeerJ*—showed that the elephants' emotional contagion and distinctive, reassuring behaviors happened almost exclusively in response to some stressful trigger.
- 8 Most significantly, the elephants seemed capable of recognizing distress in their fellows, a behavior that may require empathy. "It's that ability to put yourself emotionally into another's shoes," Plotnik says.
- 9 But proving that is what elephants are doing will take more studies, he and others say, and preferably in wild, not captive, populations. "What is unclear is whether this reassurance primarily benefits the distressed animal, or the responders," de Silva says.



Unit 2

- 10 Nevertheless, the study "provides a very interesting first exploration" into the "post-distress behavior of elephants," says Graeme Shannon, a behavioral ecologist at Colorado State University, Fort Collins, adding that the findings are "intriguing because they parallel what has been observed in captive and wild non-human primates, further underlining the complex cognitive abilities of elephants."
- 11 Some think the work may aid conservation efforts. "Any good science that supports the idea that elephants are sentient<sup>1</sup> beings capable of empathy is important," adds Cynthia Moss, an ethologist and director of the Amboseli Elephant Research Project in Kenya, who has observed "reassurance behaviors" daily among the elephants there for more than 40 years.

<sup>1</sup>sentient—capable of feeling

From "Elephants Console Each Other" by Virginia Morell, 18 February 2014. Web. 21 July 2014. Reprinted with permission.



What does the phrase **anecdotal observations** mean as it is used in paragraph 2?

- **A.** a method of recording an event using special processes
- **B.** a perspective on a subject area that reveals its inner significance
- **C.** a description of an event that lacks seriousness and seeks to entertain through humor
- **D.** a report that is somewhat unreliable because it is based on a personal account

#### Part B

Which sentence from paragraph 1 provides the **best** evidence for the answer to Part A?

- **A.** "Elephants, both African and Asian, have long been considered empathetic animals."
- **B.** "But it's one thing to witness something that looks like consolation, and another to prove that this is what elephants are doing."
- **C.** "Now, scientists have shown that Asian elephants do indeed get distressed when they see others in trouble, and they reach out to console them—just as we do when we see someone suffering."
- **D.** "Elephants, thus, join a short list of other animals, including great apes, canines, and some birds, that scientists have shown to reassure others."



Which statement **best** expresses the central idea in the article?

- **A.** Science plays an important role in educating people about elephants, which may help protect elephants in the wild.
- **B.** Science has provided new support for long-held beliefs that elephants possess advanced social characteristics.
- **C.** Researchers believe that many gestures made by elephants are similar to human hugs.
- **D.** Researchers have used creative methods to design successful studies of elephants.

#### Part B

Which quotation **best** expresses the central idea in the answer to Part A?

- A. "Instead, the park's Mahouts, or keepers, organized them into six groups which they then guided through a daily routine—bathing and feeding them in the morning, and tethering them at night." (paragraph 3)
- **B.** "What is unclear is whether this reassurance primarily benefits the distressed animal, or the responders . . . ." (paragraph 9)
- **C.** "... the findings are 'intriguing because they parallel what has been observed in captive and wild non-human primates, further underlining the complex cognitive abilities of elephants." (paragraph 10)
- **D.** "Some think the work may aid conservation efforts." (paragraph 11)



What is the purpose of paragraph 2 of the passage?

- **A.** to give a broad overview of the scientific study before describing the study in greater detail
- **B.** to introduce the perspective of an expert whose opinion differs from that of the other scientists described in the article
- **C.** to suggest that some aspects of elephant behavior are more important to study than others, even though that has only recently been recognized
- **D.** to establish that some elephant behaviors have proved difficult to study, in order to reinforce the importance of the study described in the article

# Part B

Which sentence from the passage provides the **best** support for the answer to Part A?

- \*Elephants, thus, join a short list of other animals, including great apes, canines, and some birds, that scientists have shown to reassure others." (paragraph 1)
- B. "Joshua Plotnik, a behavioral ecologist at Mahidol University, Kanchanaburi, in Thailand, and Frans de Waal, a primatologist at Emory University in Atlanta, got around this problem by comparing Asian elephants' behaviors during times of stress to periods when little upset them." (paragraph 3)
- **C.** "Most of the elephants, aside from mother-juvenile pairs, were unrelated and did not live in family groups as wild elephants do." (paragraph 3)
- **D.** "Other researchers have previously shown that when upset, an elephant flares its ears and erects its tail; it may also trumpet or roar, or make a low rumble to show its distress." (paragraph 4)

Refer to the article "Elephants Can Lend a Helping Trunk," the passage from "Elephants Know When They Need a Helping Trunk in a Cooperative Task," and the article "Elephants Console Each Other." Then answer question 20.

- **20.** You have read three passages about studies involving the behavior of elephants:
  - "Elephants Can Lend a Helping Trunk"
  - from "Elephants Know When They Need a Helping Trunk in a Cooperative Task"
  - "Elephants Console Each Other"

Write an essay analyzing each author's purpose in describing the studies of elephant behavior, and compare the information about the behavior of elephants each author presents in the passages. Remember to use evidence from all three passages to support your response.

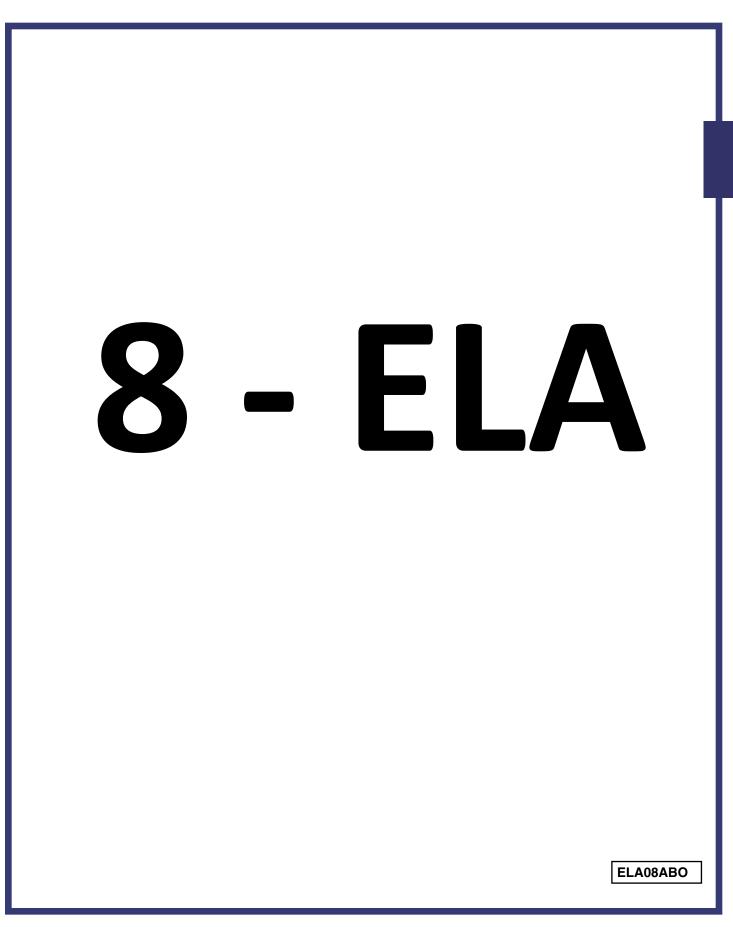




You have come to the end of Unit 2 of the test.

- Review your answers from Unit 2 only.
- Then, close your test booklet and answer document and raise your hand to turn in your test materials.





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