

Reading Test

65 MINUTES, 52 QUESTIONS

Turn to Section 1 of your answer sheet to answer the questions in this section.

DIRECTIONS

Each passage or pair of passages below is followed by a number of questions. After reading each passage or pair, choose the best answer to each question based on what is stated or implied in the passage or passages and in any accompanying graphics (such as a table or graph).

Questions 1-10 are based on the following passage.

This passage is adapted from Helen Oyeyemi, *The Icarus Girl*. ©2005 by Helen Oyeyemi. After a long journey from her home in England, eight-year-old Jessamy is meeting her mother's family in Nigeria for the first time.

Line
5
There they all stood, an uncertain circle, and then her grandfather came forward, greeted her mother, shook hands with her father. Although he seemed mellow and smaller than the picture that her mother had painted for her over the years, Jess had a sudden and irrational fear that he might start shouting at her.

He looked at her, put his hands on his hips in mock consternation, and her cousins and her mother laughed. Her father, standing slightly outside the circle, smiled encouragingly at her. Her grandfather held out a hand. His hands were big and square, spadelike, the palms deeply etched and callused. She took a step towards him, smiling a wobbly, nervous smile that she could not feel on her face.

She did not know what was expected of her.

She had nearly reached him when suddenly, on an outward gust of air, he half said, half announced a name.

20 "Wuraola."

Who?

She froze, not knowing what to say or do.

Of course, she knew that Wuraola was her Yoruba¹ name, the name that her grandfather had asked in a letter for her to be called when her mother

had held her Nigerian naming ceremony. Wuraola means gold.

She *knew* all this . . .

30 But nobody had ever called her Wuraola, not even her mother, whom she could now see from the corner of her eye making anxious, silent gestures for her to go to her grandfather.

35 Here, in this stone-walled corridor where the sunlight came in through enormous, stiff mosquito screens over every window and her clothes clung to her like another skin, Wuraola sounded like another person. Not her at all.

Should she answer to this name, and by doing so steal the identity of someone who belonged here?

40 Should she . . . *become* Wuraola?

But how?

45 She could not make herself move forward, so she stayed where she was, avoided his touch, looked up into her grandfather's face, smiled and said quietly, but firmly, in her most polite voice "Hello, Grandfather."

After they had taken baths and Jess had been made to eat a little, her mother disappeared with her youngest sister, Auntie Biola, and her father befriended Uncle Kunle, who was clearly a newspaper-minded as he was, and wanted to talk about politics. Swiftly dropping a kiss onto her forehead, her father released her into her grandfather's clutches before mounting the stairs that led up to the roof balcony of the house.

So her grandfather did have a face. It was a broad, lined face; the smile and frown lines ran deep into his

skin, his eyes made smaller by the loosened flesh around them. He had the same wide, strong jawline with the determined set as her mother, and the same prominent cheekbones, although Jess could see that his were made angular more through the emaciation of age than anything else. He was quite short and moved about very quickly.

65 As Jess sat in the parlor, keeping very still so that she wouldn't take up much space on the brown-and-white sofa, she allowed herself to stare openly and seriously at her grandfather, and he did the same. She felt as if she were a little piece of him that had
70 crumbled off maybe, which he was examining for flaws and broken bits before deciding whether it was worth taking it to be reattached. It was impossible to tell what he thought of her.

She sat at a right angle from him, breathing out
75 silence. He sat very upright (like her, she noted, with surprise), his hands on his knees, the crisp lines of his white shirt almost molding him, fixing him still in her sight. They were both waiting, supposedly for her Auntie Funke to bring them some soft drinks (her
80 grandfather had called them "minerals"), but really Jessamy sensed that they were waiting to see if they would like each other or not.

¹ A people in Nigeria and other West African nations

1

In using the phrase "uncertain circle" (line 1), the narrator most nearly means that the family members are

- A) disoriented after an unusually difficult journey.
- B) self-conscious and tentative about interacting.
- C) openly suspicious of each other's motives.
- D) dependent on one another for reassurance.

2

Based on the passage, which factor most decisively influences Jess's reaction to meeting her grandfather?

- A) His intimidating physical presence and mannerisms
- B) His indifference to other family members' attitudes toward him
- C) Her parents' concerns about being reunited with him
- D) Her mother's ominous descriptions of his temperament

3

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 1-3 ("There . . . father")
- B) Lines 3-7 ("Although . . . her")
- C) Lines 8-10 ("He looked . . . laughed")
- D) Lines 12-15 ("His . . . face")

4

In the passage, the actions of Jess's father suggest that he

- A) is less sociable than are the other members of the family.
- B) has an imperfect understanding of Nigerian culture.
- C) advocates for Jess to choose her own name.
- D) wishes to promote Jess's introduction to her grandfather.

5

Based on lines 21-32, which choice best describes Jess's initial reaction to being addressed as "Wuraola"?

- A) She resents that her Nigerian family insists on using the name.
- B) She recognizes the name but cannot recall its precise meaning in Yoruba.
- C) She is startled that her grandfather has remembered the name.
- D) She is aware that it is her name but is unable to acknowledge it as such.

6

Which choice best supports the idea that Jess is familiar with some of the customs that her mother's family observes?

- A) Lines 23-26 ("Of course . . . ceremony")
- B) Lines 29-32 ("But . . . grandfather")
- C) Lines 42-46 ("She could . . . Grandfather")
- D) Lines 59-63 ("He had . . . else")

7

The main purpose of the description in lines 33-37 is to

- A) underscore Jess's philosophical musings by invoking a natural setting.
- B) suggest the correspondence between Jess's physical surroundings and her emotional state.
- C) portray Jess's thoughts about her Nigerian background through a nostalgic lens.
- D) reveal Jess's acceptance of her new life by depicting a common occurrence.

8

The series of questions in lines 38-41 serves primarily to portray Jess's

- A) confusion over her grandfather's attachment to his culture.
- B) lack of familiarity with common Nigerian names.
- C) concern about constructing a new sense of who she is.
- D) uncertainty about the roles of other family members.

9

Jess's second encounter with her grandfather differs from her first encounter because in the second encounter Jess

- A) must face her grandfather without support from other members of her family.
- B) is more clearly startled by her grandfather's unpredictable behavior.
- C) has become more confident of her grandfather's ultimate approval.
- D) has little time to become acquainted with her grandfather before speaking to him.

10

As used in line 76, "crisp" most nearly means

- A) abrupt.
- B) fragile.
- C) sharp.
- D) refreshing.

Questions 11-21 are based on the following passage and supplementary material.

This passage is adapted from Jennifer M. Groh, *Making Space: How the Brain Knows Where Things Are*. ©2014 by Jennifer M. Groh.

The implication of the overlap between areas of the brain responsible for cognition and areas responsible for sensory and motor processing is that perhaps the operations of cognition are implemented at least in part via sensory and motor structures. That is, perhaps “thinking” also involves activating some subset of sensory and motor pathways of the brain. For example, when you mentally picture sitting on the couch in your living room, that thought might be implemented by partially activating the visual, tactile, auditory, olfactory, and motor responses that would have occurred if you were actually there. The theory that thought might involve simulating the activity patterns in our sensory and motor areas of the brain is called *grounded* or *embodied cognition*.

Some of the evidence in favor of this view comes from behavioral experiments that show that how you respond to something depends on otherwise irrelevant features of the sensory stimulus. And of particular interest here, these seemingly irrelevant features often involve space. In one classic study, Mike Tucker and Rob Ellis at the University of Plymouth asked subjects to judge whether items were upside down or right side up. The stimuli consisted of photographs of common household objects like frying pans or spatulas. Subjects were to indicate their choice by pressing a designated button, one button for upright and the other for upside down. One button was placed near the subject’s left hand and the other near the right hand—a detail we wouldn’t normally consider to be important but that was essential for what Tucker and Ellis were really getting at.

Secretly, Tucker and Ellis were not particularly interested in the upright/inverted choices, but whether the subjects would respond faster when they had to press the button with the hand on the *same side* as the *handle* of the object in the photograph. All the objects had handles and were photographed in multiple orientations, upright with the handle on either the left or right, and inverted with the handle on either the left or right. Tucker and Ellis found that when the handle on the frying pan was on the left, responses involving the left hand were indeed faster

than those involving the right. Subjects also made fewer errors when the correct choice involved a match between the hand and the handle. When the objects were mirror reversed, the response pattern reversed as well, indicating that it was not simply a matter of being faster or more accurate with one hand than the other.

Another classic illustration of a seemingly unnecessary connection between space and cognition comes from *mental rotation* experiments. In one early study, Roger Shepard and Jacqueline Metzler presented subjects with drawings of blocks of various shapes (think Tetris but in three dimensions) and asked them to judge whether two pictures involved the same shape from a different viewpoint or a different shape altogether. They found that how long it took the subjects to make the judgment varied proportionally with the amount of rotation that would have been needed to bring the two objects into alignment, had they been real.

Both of these experiments, although strictly behavioral, suggest that mental reasoning can show signatures of real-world spatial constraints. In the frying-pan experiment, there is no reason for the side of the handle to affect responses—subjects must merely indicate whether the frying pan is upright or not—but it does. In the case of the mental rotation, there is no physical object to be actually turned, and yet the amount of time required to perform the task varies with how far such an object would have needed to be turned if it did exist.

Effect of Object Orientation and Response Hand on Response Time

| Object handle orientation | Response hand | Mean response time (milliseconds) |
|---------------------------|---------------|-----------------------------------|
| Left | Left hand | 628.2 |
| Left | Right hand | 638.8 |
| Right | Left hand | 639.8 |
| Right | Right hand | 627.3 |

Adapted from Mike Tucker and Rob Ellis, “On the Relations between Seen Objects and Components of Potential Actions.” ©1998 by American Psychological Association, Inc.

11

Which choice best represents the overall structure of the passage?

- A) A hypothesis is put forth, an experiment testing that hypothesis is outlined, and an explanation for the findings of that experiment is offered.
- B) A theory is described, studies exploring that theory are recounted, and the significance of the results of those studies is suggested.
- C) A generalization is presented, two examples of that generalization are contrasted, and a revision of that generalization is provided.
- D) A theory is introduced, potential criticism of that theory is considered, and a rebuttal of that criticism is presented.

12

Based on the passage, how would the author most likely respond to another scientist's claim that the theory of embodied cognition cannot account for thoughts regarding abstract concepts such as "peace" and "honesty"?

- A) By arguing that the scientist has not fully considered the mechanics of the theory of embodied cognition
- B) By asserting that thoughts about abstract concepts are less common than thoughts about concrete objects
- C) By suggesting that the theory of embodied cognition should be tested under different experimental conditions
- D) By conceding that the theory of embodied cognition may not account for all aspects of thought

13

According to the passage, embodied cognition is the theory that thought

- A) emerges from reactions to certain powerful events.
- B) can be used to improve various physiological functions.
- C) may involve activation of signals that also control the body.
- D) demands conscious mental effort from the thinker.

14

As used in line 20, "interest" most nearly means

- A) sympathy.
- B) importance.
- C) responsibility.
- D) attention.

15

When the author refers to certain studies as "classic" in line 21 and line 52, she most nearly means that the studies are

- A) simple and understated in their design.
- B) based on antiquated ways of thinking.
- C) frequently performed by other researchers.
- D) long established and well regarded in the field.

16

Based on the passage, which statement regarding the subjects in Tucker and Ellis's experiment can most reasonably be inferred?

- A) They were unaware of the true focus of the study.
- B) They had been carefully selected based on their backgrounds.
- C) They frequently used the utensils seen in the photographs.
- D) They had unusually well-developed spatial skills.

17

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 21-24 (“In one . . . side up”)
- B) Lines 24-26 (“The stimuli . . . spatulas”)
- C) Lines 26-28 (“Subjects . . . down”)
- D) Lines 34-38 (“Secretly . . . photograph”)

18

Based on the passage, could the likelihood that most participants in Tucker and Elis’s study write with their right hands be used as an effective challenge to their conclusions?

- A) Yes, because right-handed people would naturally be able to grasp objects with their right hand more quickly than with their left.
- B) Yes, because right-handed people would be able to visualize objects on their right more clearly than those on their left.
- C) No, because the researchers’ study design had successfully ruled out the possibility that being right-handed would be a factor in the results.
- D) No, because the researchers switched the photographs shown based on whether participants were right- or left-handed.

19

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 29-33 (“One . . . getting at”)
- B) Lines 38-42 (“All . . . right”)
- C) Lines 42-45 (“Tucker . . . right”)
- D) Lines 47-51 (“When . . . other”)

20

Based on the table, which statement best represents the findings about the mean response times?

- A) Subjects responded slowest when presented with objects with handles on the left for both response hands.
- B) Subjects responded slowest when presented with objects with handles on the right for both response hands.
- C) Subjects responded fastest when presented with objects with handles on the opposite side from their response hand for both object handle orientations.
- D) Subjects responded fastest when presented with objects with handles on the same side as their response hand for both object handle orientations.

21

Based on the passage, how would an advocate of the theory of embodied cognition most likely explain the results presented in the table?

- A) When the response hand is on the same side as the object handle, the objects in the photographs are easier to recognize.
- B) When the response hand is on the same side as the object handle, sensory areas activate more slowly and deliberately.
- C) When the response hand is on the side that is opposite the object handle, the brain must take longer to adjust the mental visualization.
- D) When the response hand is on the side that is opposite the object handle, the brain is able to picture more sharply the object to be grasped.