New Jersey Assessment of Skills & Knowledge 2007

Grade 6

Language Arts Literacy/Mathematics Assessment Samples
Acknowledgments

“King of All Animals” by Vashanti Rahaman, illustrations by Allan Eitzen, from 
Directions to the Student

Today you will be taking the Language Arts Literacy New Jersey Assessment of Skills and Knowledge. The test consists of a writing task and reading passages. The passages are followed by multiple-choice and open-ended questions.

Sample questions have been included. They show you the different types of questions on the test and how to mark or write your answers in your answer folder.

There are several important things to remember:

1. Read each passage carefully to learn what it is about. You may refer back to the reading passage as often as necessary.

2. Read each question carefully and think about the answer. Then choose or write the answer that you think is best.

3. When you are supposed to write your answers, write them neatly and clearly on the lines provided in your answer folder.

4. When you are supposed to select the answer, make sure you fill in the corresponding circle in your answer folder.

5. If you finish a part of the test early, you may check over your work in that part.

6. If you do not know the answer to a question, skip it and go on. You may return to it later if you have time.
Language Arts Literacy
Writing Task

Every day for the past month, the lunch period at school has become louder and less orderly. The principal has decided to solve these problems by making the lunch period a silent lunch. This has caused a conflict in your school.

Write a letter to the principal expressing whether you agree or disagree with the principal’s decision. Use examples and other evidence to support your position.

You may use the box provided on pages 2 and 3 of your answer folder to plan your ideas before you begin writing your letter. Then write your letter on the lines that follow.
Sample Questions

Look at the sample test questions that follow. These questions do not relate to the passages in the test. These questions will show you what the questions in the test are like and how to mark or write your answers in your answer folder.

Multiple-Choice Sample Question

For this type of question, you will select the answer and fill in the corresponding circle in your answer folder.

S1 What does the last sentence of the story mean?

A. The boy and the pups were rescued by a hunter and his grown hounds.

B. The boy and his pups made the lion think they were a grown man and experienced hunting dogs.

C. The boy fell asleep and dreamed that he and the pups were grown up and experienced hunters.

D. By morning, the lion was finally scared off by another mountain lion.

Multiple-Choice Sample Answer

S1 A ● C D

For this sample question, the answer selected was B. Therefore, in the answer folder, circle B was filled in.
Open-Ended Sample Question

For this type of question, you will write a longer and more detailed answer in your answer folder.

S2 Compare how Billy feels when he first realizes there is a mountain lion nearby to the way he feels by the end of the story.

Use information from the story to support your response. Write your answer in your answer folder.

Open-Ended Sample Answer

S2

When Billy first realizes there is a mountain lion nearby, he feels fear. But then Billy starts to feel brave when he sees how brave his pups are. Together, they scare off the mountain lion. By the end of the story, Billy feels great pride in his and his pups’ accomplishments of having scared off the lion and having made it think they were grown up and experienced hunters.
In this story, writer Vashanti Rahaman describes an encounter between a tiger and a fox.

**King of All Animals**  
Retold by Vashanti Rahaman

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When Tiger walked openly through the jungle, he was Fear.

The deer fled in alarm. The monkeys swung, screaming, to the highest branches. The frogs dived into the deepest pools. And the turtles closed their shells and hoped to be mistaken for mere rocks. Even the wild oxen and wild boar, crashing their way through the undergrowth, kept a respectful distance.

**Truly,** thought Tiger as he uttered a roar that shook the jungle, *I am King.*

When Tiger stalked and hunted, none could see him.

He crouched, unmoving, in the dappled shadows. The light that filtered through the leaves and branches made patterns on the jungle floor that matched his coat. The deer grazed quietly. The monkeys played in the lowest branches. The frogs basked on the lily pads, and the turtles lumbered by. Even the wild oxen and wild boar crashed through the undergrowth, just inches from Tiger’s nose.

With one swift bound, Tiger could have the dinner of his choice.
There were times, however, when Tiger got bored—bored with deer and monkey and frog and turtle and ox and boar. During those times, Tiger roared his dissatisfaction into the night and went looking for other prey.

One day, Tiger hid in the tall grass at the edge of the jungle. Even there, the grass shadows blended with his stripes, and none could see him.

Mice and voles scurried by. A snake slid into its hole. Tiger kept waiting.

It was evening when a strange creature with a pointed nose and a bushy tail appeared, creeping stealthily through the grass.

Tiger watched the stranger. He had heard of such a creature, but he had never seen it before. Stories told of how difficult this creature was to catch, but Tiger welcomed the challenge.

He watched as the bushy-tailed stranger stalked a mouse. He waited with his powerful muscles tensed. Then, just as the stranger pounced on his unhappy prey, Tiger leaped out.

The mouse darted away, but Tiger kept a firm grip on the stranger, who snarled in fury.

“How dare you!” cried the stranger with great indignation. “How dare you bare your fangs and claws to me, Fox, King of All Animals!”

“King, indeed!” said Tiger in surprise. “What gives you the right to make that claim?”

“Listen, and know,” said Fox. “When I prowl the jungle, the deer flee in alarm. The monkeys swing to the highest branches. The frogs dive into the deepest pools. And the turtles close their shells and hope to be mistaken for mere rocks. Even the wild oxen and wild boar, crashing through the undergrowth, keep a respectful distance.”

Tiger roared with fearsome laughter. “If you can show me that this is so,” he said, “I will let you go free. But if you cannot, I will eat you.”

“Very well,” said Fox, smiling slyly. “Follow me. We will walk together in the jungle.”

So Fox and Tiger strolled openly along the jungle paths. Fox went first, and Tiger followed close behind. And indeed, the deer fled, as did the monkeys and frogs. The turtles lay still in fear, and the oxen and boar kept their distance.

Tiger looked around in wonder at the frightened animals. Could it be possible that this small doglike creature in front of him was truly King of All Animals? Something smelled of trickery.

But Tiger had made a promise, and he always kept his promises.

“Go, strange one,” he said to Fox. “I do not know whether or not you are King of All Animals. But you have shown that Fear can walk the jungle with you. Go!”

And, lifting his bushy tail in triumph, Fox disappeared into the underbrush, leaving Fear behind.
1. When the author says, “When Tiger walked openly through the jungle, he was Fear,” he is
   A. appealing to our senses.
   B. using figurative language.
   C. exaggerating Tiger’s feelings.
   D. comparing Tiger to the other animals.

2. Why does Tiger hunt Fox?
   A. to meet the challenge set by Fox
   B. to overcome his boredom with his food
   C. to prove he is the only king of the animals
   D. to surprise the first animal he sees while hunting

3. Paragraphs 2 and 5 are similar because they contrast
   A. when a monkey swings from trees and from branches.
   B. how frogs and turtles hide from each other.
   C. when Tiger is hunting and is out in the open.
   D. how oxen and boar close in on Tiger.

4. Why do the animals hide when Fox walks by?
   A. Fox tells the animals to hide.
   B. Fox is the king of all animals.
   C. The animals think Tiger is afraid.
   D. The animals are hiding from Tiger.
5 In paragraph 14, the word *indignation* means
   A. fear.
   B. insult.
   C. happiness.
   D. admiration.

6 Why do the animals walk right by Tiger when he is hunting?
   A. They do not see Tiger.
   B. They are not afraid of Tiger.
   C. They know Tiger will not eat them.
   D. Tiger tells them to play at that time.

7 When the author writes that “Stories told of how difficult this creature was to catch, but Tiger welcomed the challenge,” he means that Tiger was
   A. uncertain if he could catch this new animal.
   B. pleased to have another animal act as king.
   C. eager to hunt an animal that is difficult to catch.
   D. interested in how to hunt by watching the other animals.

8 Which theme **best** fits this story?
   A. Pride can lead to jealousy.
   B. Good things rarely last forever.
   C. New people bring fresh ideas with them.
   D. A strong mind is as valuable as a strong body.
9 Which trait does Fox most likely value?
   A. curiosity
   B. leadership
   C. cleverness
   D. cooperation

10 At the end of the story, which question would Tiger most likely have?
   A. Why do the other animals hide from Fox?
   B. Where in the jungle does Fox live?
   C. Should I work together with Fox?
   D. How can I catch Fox?
Near the end of the story, the author says, “Something smelled of trickery.”

• As used in this story, what does this phrase mean?
• Explain why Fox was able to outsmart Tiger.

Use specific information from the story and any additional insight to support your response.

Tiger is surprised by Fox’s reaction to him.

• Is Fox afraid of Tiger? Explain.
• Do you think the other animals should fear Tiger? Why or why not?

Use specific information from the story and any additional insight to support your response.
Directions to the Student

Today you will be taking the Mathematics New Jersey Assessment of Skills and Knowledge. This is a test of how well you understand mathematics.

The test consists of two different types of questions: multiple choice and open ended.

Sample questions have been included. They show you the different types of questions on the test and how to mark or write your answers in your answer folder.

There are several important things to remember:

1. Read each question carefully and think about the answer. Then choose or write the answer that you think is best.

2. When you are asked to select the answer, make sure you fill in the corresponding circle in your answer folder.

3. When you are asked to write your answers, write them neatly and clearly on the lines or in the space provided in your answer folder.

4. If you finish a part of the test early, you may check over your work in that part.

5. If you do not know the answer to a question, skip it and go on. You may return to it later if you have time.
Mathematics

Sample Questions

To help you understand how to answer the test questions, look at the sample test questions that follow. These questions will show you what the questions in the test are like and how to mark your answers in your answer folder.

Multiple-Choice Sample Question

For this type of question, you will select the answer and fill in the corresponding circle in your answer folder.

**S1** Sam has a 30-gallon aquarium for his fish. Which metric unit of measure is best for calculating the volume of the tank?

- A. liter
- B. centimeter
- C. millimeter
- D. meter

Multiple-Choice Sample Answer

**S1** ⬜ B ⬜ C ⬜ D

For this sample question, the answer selected was A. Therefore, in the answer folder, circle A was filled in.
Open-Ended Sample Question

For this type of question, you will write an answer in your answer folder that may consist of a few words or numbers, or an explanation to support your answer.

S2 Paul rakes leaves in his neighborhood after school and on weekends. The chart below shows Paul’s work record for the week.

Complete the chart by finding the number of hours and minutes Paul worked each day.

<table>
<thead>
<tr>
<th>Day</th>
<th>Starting Time</th>
<th>Ending Time</th>
<th>Amount of Time Spent in hours (hr) and minutes (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>4:00</td>
<td>5:30</td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>6:15</td>
<td>7:15</td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td>3:30</td>
<td>5:30</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>2:00</td>
<td>3:15</td>
<td></td>
</tr>
</tbody>
</table>

How many total hours and minutes did Paul rake leaves during the week? Use the space in your answer folder to show your work and record your answer.

Open-Ended Sample Answer

S2

Show your work here.

<table>
<thead>
<tr>
<th>Day</th>
<th>Amount of Time Spent (hr) (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>1 hr 30 min</td>
</tr>
<tr>
<td>Wednesday</td>
<td>1 hr 0 min</td>
</tr>
<tr>
<td>Friday</td>
<td>2 hr 0 min</td>
</tr>
<tr>
<td>Saturday</td>
<td>1 hr 15 min</td>
</tr>
</tbody>
</table>

1 hr 30 min

1 hr 0 min

2 hr 0 min

+ 1 hr 15 min

5 hr 45 min

Answer: 5 hr 45 min

For this sample question you would find the number of hours and minutes Paul worked each day and complete the chart in your answer folder, and find how many total hours and minutes Paul worked during the week, and write 5 hr 45 min on the line in your answer folder.
1 Adnan asked 20 friends to tell him their favorite season of the year. Autumn was the favorite season of the year for 30% of Adnan’s friends. How many of his friends chose autumn?

A. 3  
B. 4  
C. 5  
D. 6

2 Mrs. Baumann needs to replace the permanent markers for her art classes. She must buy 1 marker for each student. At the store, the markers come in different-sized packs. She can buy packs of 12 for $2.40 per pack or packs of 24 for $4.50 per pack.

<table>
<thead>
<tr>
<th>Mrs. Baumann’s Art Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Period</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Period 1</td>
</tr>
<tr>
<td>Period 2</td>
</tr>
<tr>
<td>Period 3</td>
</tr>
<tr>
<td>Period 4</td>
</tr>
<tr>
<td>Period 5</td>
</tr>
</tbody>
</table>

If she estimated that she needs 8 packs of 12, which of the following would be true?

A. She overestimated the number of markers needed.  
B. She underestimated the number of markers needed.  
C. She would have more markers if she bought 4 packs of 24.  
D. She would have spent more for the markers buying 4 packs of 24.
3 Which of the following would best be measured using square centimeters?
   A. the length of a bee
   B. the weight of an ant
   C. the area of a book cover
   D. the volume of water in a swimming pool

4 Lou was writing a report about the Exxon Valdez oil spill for science class. He learned that 10,080,000 gallons of crude oil spilled near Alaska. Lou estimated that if an Olympic-sized swimming pool holds about 650,000 gallons of water, it would take about 25 of the pools to hold all the oil that spilled. Which of the following is a true statement about this estimate?
   A. It is an overestimation by about 9 pools.
   B. It is an underestimation by about 5 pools.
   C. It is an accurate estimate about the number of pools.
   D. More information is needed to determine the accuracy of the estimate.
5 Yolanda and Michelle go out to lunch. They each decide to order the lunch special that costs $4.95. The tip is 15%, and tax is 5%. They estimate they have just enough money. About how much money do the girls have?
A. $6.00
B. $9.00
C. $10.00
D. $12.00

6 Amy is using a coordinate grid to create a quadrilateral with 4 right angles.

Where would she plot the next point?
A. (4, 5)
B. (6, 3)
C. (7, 2)
D. (3, 6)

7 The table below shows the rate of growth of a flower over a 9-month period. In the table, x represents the number of months, and y represents the number of inches grown.

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>

Which of the following is true about the graph that would result from plotting these ordered pairs on a coordinate grid?
A. It would show a linear relationship.
B. It would show a steep decreasing trend.
C. It would show a steadily increasing trend.
D. It would show a pattern of level plots across the x-axis.
Denice is saving her allowance that she earns from doing chores. The graph below shows how much she has saved each month.

Based on the trend in the graph, which of the following would you expect for Denice to do in the month of December?

A. save less money than she will in January
B. save less money than she did in November
C. save the same amount of money she saved in November
D. save more money than she did in the previous months combined
9 Damien wants to know what percent of the students at his school attended the school dance. He determines the total number of people at the school, \( n \), and the total number of people who went to the dance, \( d \). Which expression can Damien use to determine the percent?

A. \( d - n \)
B. \( d - (n - d) \)
C. \( \frac{d}{n} \cdot 100 \)
D. \( \frac{n - d}{d} \)

10 Dory went hiking along the Appalachian Trail in Stokes State Forest. She hiked about 100 meters before realizing she forgot her water bottle. About how many feet had she hiked?

A. 30
B. 100
C. 300
D. 1,000

11 The students at Sanders Elementary School sold a total of 525 raffle tickets for their annual fundraiser. In a raffle, people buy tickets hoping to win a prize. For this fundraiser, only 1 ticket will be drawn and 1 prize given away. Sergio bought 15 tickets. What is the probability that Sergio will win the prize?

A. \( \frac{1}{15} \)
B. \( \frac{1}{35} \)
C. \( \frac{1}{52} \)
D. \( \frac{1}{525} \)
12 Mrs. Kabel is making a new vegetable garden. She needs to add a total of 75 cubic feet of dirt to her garden. Each bag of dirt contains 2 cubic feet of dirt. Mrs. Kabel estimates that she needs about 140 bags. Which statement best describes her estimate?

A. It is an overestimate because she needs to add only 38 bags to cover the 75 cubic feet.
B. It is an overestimate because she needs to add only 75 bags to cover the 75 cubic feet.
C. It is an underestimate because she needs to add 150 bags to cover the 75 cubic feet.
D. Her estimate of how many bags of dirt she needs is correct.

13 Roberto made the following table to show how many horses, saddles, and riders he has on his ranch.

<table>
<thead>
<tr>
<th>Horse</th>
<th>Saddle</th>
<th>Rider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appaloosa</td>
<td>Black</td>
<td>Sam</td>
</tr>
<tr>
<td>Mustang</td>
<td>Brown</td>
<td>Leah</td>
</tr>
<tr>
<td>Palomino</td>
<td>Tan</td>
<td>Hank</td>
</tr>
<tr>
<td>Thoroughbred</td>
<td></td>
<td>Meg</td>
</tr>
</tbody>
</table>

How many combinations of one horse, one saddle, and one rider can Roberto make?

A. 54
B. 48
C. 24
D. 11
Sam is helping his aunt lay tile in her bathroom. The first tile is placed like the one above. The directions say to rotate the next tile $180^\circ$ to begin the pattern. How will the next tile look after it has been placed?

A.  
B.  
C.  
D.  

Namarta wants to set up some goalposts in her backyard so she can practice soccer. She uses the coordinate grid below to plan where to place the posts. If the 4 posts are to form a rectangle, at which point in the coordinate grid should Namarta put the last goalpost?

A.  $\ (2, \ 5)$  
B.  $\ (6, \ 4)$  
C.  $\ (4, \ 2)$  
D.  $\ (6, \ 1)$
Dina is measuring these two leaves from the same tree. Leaf B has been growing 1.5 times as long as Leaf A.

If all the leaves on this tree grow at the same rate, about how long is a leaf that has been growing twice as long as Leaf A?

A. 8 cm
B. 12 cm
C. 16 cm
D. 24 cm
Bethany is going to play tennis with her friend. She brought a cylinder-shaped can of three tennis balls.

How are the dimensions of the cylinder most likely related to those of the tennis balls?

A. The height of the can is 3 times the diameter of one tennis ball.
B. The volume of the three tennis balls is equal to the volume of the can.
C. The height of the can is equal to three times the radius of one tennis ball.
D. The circumference of the opening of the can is equal to the radius of one tennis ball.
Vanessa is going to order a sundae with 1 scoop of ice cream and 1 topping. There are 6 flavors of ice cream and 3 choices of toppings. How many possible combinations of ice cream and topping does Vanessa have to choose from?

A. 9
B. 12
C. 15
D. 18

The diagram below shows several cities and the driving distances, in kilometers, between the cities.

The diagram is not drawn to scale.

What is the distance of the shortest route from Fieldview to Cornell?

A. 14 kilometers
B. 15 kilometers
C. 16 kilometers
D. 17 kilometers

Vanessa is going to order a sundae with 1 scoop of ice cream and 1 topping. There are 6 flavors of ice cream and 3 choices of toppings. How many possible combinations of ice cream and topping does Vanessa have to choose from?
20 Look at the table below.

<table>
<thead>
<tr>
<th>Age in Months</th>
<th>Weight in Pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>13.4</td>
</tr>
<tr>
<td>6</td>
<td>17.5</td>
</tr>
<tr>
<td>9</td>
<td>20.5</td>
</tr>
<tr>
<td>12</td>
<td>22.9</td>
</tr>
</tbody>
</table>

The information in this table shows the average weights for babies at 3, 6, 9, and 12 months old. Which of the following describes the information given in this table applied to a graph?

A. a vertical line  
B. a decreasing line  
C. a linear function  
D. a nonlinear function

21 Ming took out the following spinner from a new board game.

When she spins the spinner, what is the probability that the spinner will stop in a space marked 2?

A. \( \frac{1}{3} \)  
B. \( \frac{1}{6} \)  
C. \( \frac{2}{5} \)  
D. \( \frac{3}{8} \)

22 Melvin rents a picnic table at a cost of $11.25 for the first day and $6.75 for each additional day. Which correctly shows the sequence of rental costs for the first 3 days?

A. $0.00, $11.25, $18.00  
B. $6.75, $13.50, $20.25  
C. $11.25, $18.00, $24.75  
D. $11.25, $22.50, $33.75
23 The coordinate grid below shows Alice’s neighborhood. Point A represents Alice’s house. Her friends Barbara, Carlos, and Dana also live in the neighborhood.

Part A
Plot Point A on the grid in your answer booklet. Barbara’s house is at the point (1, 5). Plot that point and label it Point B. Carlos’ house is at the point (1, 2). Plot that point and label it Point C.

Part B
If Alice walks to Barbara’s house and the two girls then walk to Carlos’ house before returning to Alice’s, which type of triangle is formed?

Part C
Point D represents Dana’s house. When the four houses are connected by line segments, they form a trapezoid.

Find and label a Point D on the grid. Identify the coordinates of the point you labeled as Point D and explain why quadrilateral $ABCD$ is a trapezoid.