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4th Grade

Packet 6

BAILEY
EDUCATION GROUP, LLC

4th Grade ELA

To Proficiency and Beyond!

Table of Contents

Glossary of Academic Terms

accurate – exact; correct

acquire– to learn or gain control of something

analyze – to examine in detail the structure or elements of a text

annotate – add notes to text to clarify understanding

antonym – a word opposite in meaning to another

appropriate– relevant

argument – a set of reasons to persuade that something is a correct or right choice

attributes - characteristics

author's point of view – the perspective or feeling of the author about characters, ideas, details

author's purpose – the author's reason for writing/creating text or features in text

background knowledge – information the reader has outside of the text

casts – creates, brings to the reader's attention

challenges – problems within the text

central idea – the message the author is trying to convey throughout the text; the author's main point; the author's claim

characterization – the construction of literary characters; the description of characters

cite – to quote text

claim – a statement of truth which can be backed up by reasons and evidence

clarify – to make clear

climax – the highest point of action/tension in a literary/fiction text

coherent – makes sense from start to finish; logical

compare – state similarities between things/ideas

concluding statement/ section – conclusion, final section

conflict- a struggle between two ideas/forces/characters in literature

context clues – hints the author gives to help with a difficult word or phrase

contrast – state differences between things/ideas

contributes - adds to, makes stronger

definition- meaning of a word/term

describe- to give details about an event, character, or idea

description– words used to give details about a part of a story/text

details – a particular item of information about a character, event, or idea in a text

determine – to discover

development of ideas – how the claim, central idea, or prompt answer in a piece of writing is created through evidence and support

dialogue – conversation between characters in a text

drama – literary text written in the form of a play for the theater

drama elements – all of the important parts of a play, such as the actors, script, stage directions, etc.

draw conclusion – come to a decision or inference

evaluate – judge or analyze

explain – describe in detail, giving important facts and ideas

explanatory – type of writing that describes, gives details, and provides information

explicit – word for word, clear

fact – a statement that can be proven true, a piece of evidence

falling action – the point in a story between the climax and the resolution

figurative language – the use of words or phrases outside of their literal, everyday meanings

figures of speech – a word or phrase used in a non-literal way

first person – a story or account told from the perspective of the speaker (using personal pronouns such as I, me, my, we, our)

genre – type of writing, category of art

graphics – features in informational text which provide additional information

imagery – the use of descriptive language to paint a picture for the reader

infer – to draw a conclusion based upon what is read and what is already known

inference – a conclusion reached by using what is read (evidence) and what is known (reasons)

influence – an effect on the creation of something

irrelevant information – information that is not important to the text

item – a MAAP question

key idea- the most important idea within a paragraph

literal language– word for word, when words mean exactly what they say; explicit

literary devices – a technique the author/writer uses to

literary text – a fictional book, story, or poem

logically – in a way that shows sound reasoning and makes sense

main idea – a statement which tells what the passage is mostly about.

metaphor – a comparison of unlike things which is not directly stated, it is implied

meter – the beat of poetry

narration – the story (in literature)

narrator – the character or voice who tells the events/story in a literary text.

nonliteral – figurative; inferred

opinion – how a writer feels about a certain topic, situation, or statement

structure – how writing/text is put together

paraphrase – to take a quote and rephrase it in one's own words

persuasive techniques– techniques a writer uses to explain his/her opinion (evidence, questions, examples).

personification – when an author gives human characteristics to a nonhuman thing

plot – the series of events in the text, the action in the text

plot structure – how the plot is organized

poem – a piece of writing, written in specific form or verses, which uses figurative language to achieve its purpose

point of view – how the author, a character, or the reader sees something or feels about something within the text

prose – stories, articles, opinions written in paragraph form

quote – a specific line or group of lines from text

question – confusion left in the readers' minds after reading the text.

reasons – they writer's justification of his opinion/claim.

recount – to relay the important ideas and facts in a text

relationships – connections between elements, ideas, or characters within a text.

relevant evidence – evidence that is directly connected to the argument, claim, or idea.

retell – to put the main points of the story in different words or tell the story from the perspective of a different character.

resolution – how the story ends, specifically how the conflict is solved.

rhymes – repeated sounds within poetry, usually at the end of a line.

rising action – all action leading up to the climax which builds suspense or tension in a story

setting – the location where the story or part of the story takes place

signal words – words which signal a change from one idea to another

similes – comparisons of unlike things by using the words like, as, or than

spatial order – a way to organize by describing the way items are arranged in the setting.

speaker – the narrator of a poem

stage directions – instructions from the author to the reader to help understand a play.

stanza – a group of lines in poetry which are set apart (like a paragraph in prose).

story elements – parts of a story, specifically devices or techniques used to tell the story (plot, setting, characters, structure, etc.)

structure – how a text is set up, ordered, and organized

summary – a brief statement, set of statements which go over the main points of a story, including the theme and/or central idea.

support – evidence which helps hold up the claim

synonym – a word with the exact meaning as another word.

text – a book, story, article, or other printed work

textual evidence – facts and details found in a text which support a claim or statement

text feature – pictures, captions, and graphs added in text to give additional information to help with understanding.

theme – the lesson or moral within the story, either major or minor

tone – the attitude of the writer

topic - a subject in a text

turning point – the turning point leads the rising action into the falling action; a change in the action of a story

unfold – reveal or make clear

vivid language – words used to help the reader picture what is happening

word choice – the specific selection of words by an author to achieve an effect

TEXT ANNOTATIONS

USE TEXT ANNOTATIONS TO HELP YOU READ ACTIVELY AND REMEMBER KEY IDEAS. READERS MAKE NOTES OR HIGHLIGHT IMPORTANT DETAILS WHILE THEY ARE READING.

SYMBOLS	USE IT FOR...
!	Important information or something that says "WOW!"
?	Information that is confusing or that makes you have another question
♡	Parts of the passage you like
○	Circle any unknown words
★	Mark the main idea of the passage
E	Mark any evidence you find to support your main idea or conclusion

Vocabulary Practice Items

1. Read the following sentence.

"How ridiculous I was as a Marionette!"

Which of the following words means the same as ridiculous as it is used in the sentence?
A boring
B complete
C different
D silly

2. Read the following sentence.

He looked all about him and instead of the usual walls of straw, he found himself in a beautifully furnished little room, the prettiest he had ever seen.

What does the word furnished mean as it is used in the sentence?
A available
B circled
C cleaned
D decorated

3. Read the following sentence.

He ran into the next room, and there stood Geppetto, grown years younger overnight, spick and span in his new clothes and gay as a lark in the morning.

Which word would **best** replace spick and span as it is used in the sentence?
A alive
B kind
C neat
D slim

4. Read the following sentence.

Every time it rained, the butte eroded and more of the fossil was exposed.

What is the meaning of the word eroded as it is used in the sentence?
A dug up
B grew
C protected
D washed away

5. Read the sentence from paragraph 13.

Paleontologists carefully excavated the fossils.

Which word means the same as excavated as it is used in the sentence?
A examined
B plastered
C protected
D uncovered

6. Read the sentence from paragraph 11.

Skulls from saber tooth cats are usually broken or Fragmented.

Which two words mean the same as fragmented as it is used in the sentence?
A cracked
B fixed
C removed
D shattered
E whole

7. Read the following sentence.

"You all have fine-looking throats, as fine as ever crickets had, and yet our singing is very faint; there is not as much volume to it as in the old days."

Which word means the same as faint as it is used in the sentence?
A clear
B loud
C quiet
D strong

8. Read the following sentence.

In 1961, President John F. Kennedy challenged the nation to land astronauts on the moon by the end of the decade.

What does the word challenged mean as it is used in the sentence?
A told to do something
B dared to do something
C made it harder to do something
D questioned about doing something

9. Read the following sentence.

The first manned mission to the moon was Apollo 8.
What is the meaning of the word mission as it is used in the sentence?
A astronaut
B exploration
C orbit
D rover

10. Read the following sentence.

Neil climbed out first and descended Eagle's ladder to the Moon's surface.

What is the meaning of the word descended as it is used in the sentence?
A to raise
B to fall off
C to lower
D to extend out

11. Read the following sentences.

But a curious thing happened. The coconuts floated away.

Which word would **best** replace curious as it is used in the paragraph?
A difficult
B perfect
C playful
D strange

12. Read the following sentence.

If they do, they will help this endangered animal outfox its threats and survive.

Which word from the passage is the **best** synonym for threats?
A areas
B citizens
C dangers
D chambers

13. Read the following sentence.

This hole does not have a golf ball in it. Instead, it cradles the smallest fox in North America, the San Joaquin (wakeen) kit fox.

Select the meaning the author suggests by using the word cradles to describe the hole.
A The fox is a large animal.
B The only food is leftovers.
C The hole is deep underground.
D The hole is holding something gently.

14. Read the following sentence.

The tracker shades her eyes from the bright sun and scans the golf course.

Which word has nearly the same meaning as scans?
A searches
B darkens
C travels
D mows

15. Read the following sentences.

Suddenly he asked, "Who made this trail?"
"We," his mother answered.
Bambi was astonished. "We? You and I?"

How does the word astonished describe Bambi's reaction to his mother's answer?
a. It shows that Bambi was ready to ask another question.

b. It shows that Bambi was surprised by his mother's answer.

c. It shows that Bambi had already asked the same question.

d. It shows that Bambi was almost ready to stop walking.

KEY: 4th Grade Vocabulary Practice Items Answer Key

Question	Answer	Standard
1	D	L 4.5
2	D	RL 4.4
3	C	L 4.4
4	D	RI 4.4
5	D	L 4.4
6	A	RI 4.4
7	C	RL 4.4
8	B	RI 4.4
9	B	L 4.6
10	C	L 4.4
11	D	RL 4.4
12	C	L 4.5
13	D	RI 4.4
14	A	L 4.5
15	B	RL 4.4

Around the World

by Paula Morrow

1 "No one but a man can do this;' the business manager of the *World,* a New York newspaper, said to the young woman. The year was 1888. A popular book at the time told about a character who traveled around the world in 80 days. Now Nellie Bly, a young reporter for the newspaper, wanted to do it in real life.

2 "Very well;' said Nellie. "Start the man, and I'll start the same day for some other newspaper and beat him:'

3 In those days it was very unusual for a woman to travel alone. But Nellie Bly was an unusual woman. Her real name was Elizabeth Jane Cochran. When she was 20, she wrote a fiery letter to the editor of the *Pittsburgh Dispatch.* The editor was so impressed with her letter that he offered her a job as a writer.

4 It wasn't considered "proper" to use a woman's name in a newspaper. So, the editor signed Elizabeth's work *Nellie Bly,* a name from a popular song.

5 Back then, women were only supposed to write about things considered to be "women's topics:' such as fashion and society. But Nellie had other ideas. She reported on issues that were important, even controversial. Newspaper readers were fascinated-but they didn't believe that Nellie Bly was really a woman. They thought men were writing the articles!

6 After Nellie threatened to make the trip for another newspaper, her editor gave in and allowed her to do it for the *World.* One year after asking to do the trip, Nellie set out. Traveling east across the Atlantic, Nellie took just one bag in order to move quickly. As she traveled, she wrote. She telegraphed her articles about people and places to the newspaper. Schoolchildren followed her route across Europe and Asia. Geography became a national fad as readers tracked her around the world.

7 On day 68 of her trip, Nellie reached San Francisco. Quickly, she

dashed across the country on a train hired by her newspaper. She reached New York in 4½ days.

8 She met her challenge! Along the way, every train stop was a "maze of happy greetings, happy wishes, congratulating telegrams, fruit, flowers, loud cheers, wild hurrahs, rapid hand-shaking:' she wrote. While traveling through France, Nellie was thrilled to meet Jules Verne, author of the book that inspired her trip, *Around the World in 80 Days.*

9 Nellie Bly beat the 80-day goal. She also invented a new style of journalism. She reported to her readers what she saw, thought, and felt during her adventure. She also proved that a woman is as competent and resourceful as a man. Her journey around the world was a journey toward equal opportunity for both women and men.

1. What does the phrase "set out" mean as it is used in paragraph 6 of the article?
A. grabbed her suitcase

B. began her journey

C. accepted work

D. started writing

2. Read this sentence from paragraph 6.

Traveling east across the Atlantic, Nellie took *just* one bag in order to move quickly.

How is this detail important to paragraph **1?**

A. It shows how she is the same as the character in the book.

B. It shows one way to help her reach her goal.

C. It shows a young reporter exploring the world in real life.

D. It shows that a young woman taking a trip alone is unusual

3. How does the author organize the information in paragraphs 6 and 7?

A. by listing events in the order, they happened

B. by comparing and contrasting the places Nellie visited

C. by showing what caused Nellie to want to take the trip

D. by stating how the problem of traveling so far was solved

4. What does the word "journalism" mean as it is used in paragraph 9?

A. writing for newspapers

B. traveling for women

C. finding adventures

D. discovering opinions

5. Which detail from the article does the map support?

A. "Start the man, and I'll start the same day..." (paragraph 2)

B. "She reached New York in 4½ days..." (paragraph 7)

C. "She met her challenge!" (paragraph 8)

D. "She reported to her readers what she saw, thought, and felt..." (paragraph 9)

6. Which sentence **best** states the main idea of "Around the World"?

A. Traveling around the world in a short period of time is a difficult goal.

B. It was unusual for a woman to travel in the past.

C. Geography is an important subject to study.

D. A woman showed she can do anything.

Mouse Deer and the Tigers

retold by Marilyn Bolchunos

1 King Tiger thought he was the greatest tiger in the world. While I do not know if that was true, he was certainly the greediest. One day he said to himself, "I wonder if there is tasty food nearby on the Island of Borneo:'

2 He called three of his

strongest tigers and said to them, "I have a job for you. You must swim to Borneo and ask their tiger king for food. Tell them the King of All Tigers demands it. If they don't agree, we will attack:'

3 The King pulled out one of his large whiskers. "Show him this and he will see what kind of tiger he is dealing with:'

4 The three tigers swam over to Borneo, roaring all the way. Now, there were no tigers on Borneo, but all the animals hid when they heard the strange sounds and splashes. All except for Mouse Deer. He didn't hear them coming because he was busy eating his lunch of tender grass. Suddenly he looked up and saw three pairs of golden eyes staring at him.

5 "Brave little morsel, isn't he?" said one of the tigers. "We have a message for your tiger king. Where is he?"

6 Mouse Deer thought, we have no tiger king. We have no tigers. But if I tell them that, I will be lunch for these tigers. I must think fast or, or ... I will be lunch for these tigers.

7 He thought fast.

8 "I can take your message to our tiger king;' he said. "But you look tired. Rest in the shade, and I will get him:'

9 "Good idea;' said the biggest tiger. "Tell him that he must give us food, or we will attack. Show him King Tiger's whisker:'

10 The whisker was so big it made Mouse Deer tremble. But he bravely hurried away with it in his mouth.

11 If I promise them food, they may eat me, he thought. What should I do?

12 He bounded on. Finally, he had an idea. He found his friend Porcupine. "Friend, the King of All Tigers wants to attack Borneo;' he said. "He says we won't be able to fight him. Would you please let me have one of your quills?"

13 "Gladly;' said Porcupine.

14 Mouse Deer waited awhile so that the tigers would think he had traveled far. When he came back, they said, "Well?"

15 "O, Great Tigers:' said Mouse Deer, "when I reached our king, he was sharpening his claws between two mountains. I gave him your message. He said, 'Good. It is too quiet around here. I'd be happy to fight that tiger. Send him over.' Then he pulled out one of his whiskers for you to give your king:'

16 The tigers were astonished. They had never seen a whisker as big and thick as that. They turned and left for their long swim back.

17 Mouse Deer pranced off on his tiny hoofs.

18 As soon as the tigers reached their island, they went to the King of All Tigers.

19 "What took you so long?" he roared.

20 "Well;' one tiger said, "the King of Borneo looks forward to fighting the King of All Tigers. He sends his whisker:'

21 The King stared at it for a while. Then he spoke, "I have been thinking while you were gone. We should demand food from the Island of the Elephants instead of the Island of Borneo:'

22 And that is why, even today, there are no tigers on Borneo. There are plenty of mouse deer, but no tigers.

1. What does the word "demand" mean as it is used in paragraphs 2 and 21?

A to correct

B to look for

C to work on

D to insist

2. What does the reader know in paragraphs 6 through 8 that the tigers do not know?

A King Tiger wants to take food from the Island of Borneo.

B The Island of Borneo has no tiger king.

C Mouse Deer is afraid of King Tiger's whisker.

D The whisker from Mouse Deer is not from a tiger.

3. Paragraph 15 supports a theme of the story by showing that Mouse Deer...

A honors the tigers

B is clever and brave

C is happy to be telling lies

D finds his king

4. In paragraph 17, the phrase "pranced off" shows that Mouse Deer feels...

A eager to run far away from the tigers

B satisfied with how things went with the tigers

C worried that the tigers will return with their king

D surprised to see that the tigers could swim

5. Which sentence **best** describes how Mouse Deer causes the event in paragraph 21?

A He sees three tigers looking at him.

B He carries King Tiger's whisker in his mouth.

C He asks Porcupine for one of his quills.

D He waits so the tigers will think he went far.

6. What do the details in paragraph 21 suggest about King Tiger?

A He wants to avoid showing that he is scared.

B He believes there is more food on a different island.

C He knows that it is important to plan ahead.

D He thinks he is the greatest tiger in the world.

The Day I Rescued Einstein's Compass

By Shulamith Levey Oppenheim

1 "When I was five years old, I was quite ill. I had to stay in bed for many days. My father gave me this compass." He peered at me. "You know what a compass is, of course?" I nodded. "Good." He continued, "It was the first compass I had ever seen. There was the needle, under glass, all alone, pointing north no matter which way I turned the compass."

2 I took a deep breath. "Because the needle is magnetic, and there is a magnet at the North Pole that attracts the needle."

3 My sailing partner raised his bushy eyebrows. "Nearly correct. There are two magnetic poles, north and south. So far away. And there, on the palm of my hand, was my compass, always pointing north! For me, it was the greatest mystery I could imagine. And so, I decided, then and there, that I would learn all about the forces in the universe that we cannot see. For I certainly could not . . ."

4 At that moment a large motorboat zoomed past us, stirring up the water into high waves. One of them hit Fleet Felix smack against the side, knocking the compass from the professor's hand, right into the water!

5 He stared at his empty palm. "The compass, Theo. It is gone! Overboard?" Suddenly there was so much sadness in his eyes. "I should hate to lose it. And I cannot swim very well . . . and my eyesight is not good . . ." His voice trailed off, and he was looking far into space.

6 But I could swim! In a split second I dropped anchor into the water to keep the boat in place. I pulled off my life jacket. The waves had quieted down now. The compass would float. If I were lucky.

7 I jumped into the water.

8 Then I started swimming farther away from the boat. Under and under and round and round. No compass. I had to find it! Herr Professor Einstein might be the most famous man alive right now, but he was once five years old, and his father had given him a compass that he had treasured all these years. I thought about the splendid binoculars my parents had given me and how I would feel if I lost them.

9 I made another dive under the boat. As I came up for air, I felt something ever so gently hit my cheek. It was the compass, bobbing alongside Fleet Felix, just waiting to be rescued! Clutching it in my left hand, I grabbed hold of the boat with my right. Professor Einstein's eyes were closed.

10 He opened his eyes. "So," he said with a smile, "this is why I became a physicist," continuing as if nothing had happened. "As you know, a physicist studies the forces in nature that we cannot know directly, only we know they are there from what we observe, like the compass needle or," he paused.

11 "Or gravity?" I offered, a bit tentatively.

12 "Bravo, young man. Or gravity. All these forces keep our planet running quite smoothly most of the time. And thank you, dear Theo. For me, you are the most famous boy alive!"

13 His eyes were merry again. I was still trying to catch my breath, but I had to ask another question. "Would you say it is because of the compass that you are now the most famous man alive?"

14 He sat very still. "The compass was my first mystery, and all my life I have worked to solve mysteries:' He put the compass in his pocket- the one with the hole in it. "And I am not the most famous man alive, no matter what your dear father says. But you are surely the bravest and kindest boy I know."

1. In the story, how does Einstein feel about the compass his father gave him? Use two details from the story to support your response.

2. What does paragraph 6 show about Theo's point of view? Use two details from the story to support your response.

3. Read this sentence from paragraph 8 of the story.

I thought about the splendid binoculars my parents had given me and how I would feel if I lost them.

How does this sentence support a theme of the story? Use two details from the story to support your response.

Saving Snow Leopards

by Pamela Crowe

"Mountain Ghost"

1 The snow leopard is rarely seen by humans. This mysterious cat lives in 12 Asian countries among the world's tallest mountains.

2 The snow leopard is smaller than the tiger, the lion, and the leopard of Africa and Asia. It weighs as much as a cheetah but is shorter and stockier. The cat's compact shape and thick fur help keep it warm in glacier-chilled air. Dark markings dapple its light-gray coat, camouflaging it in rocky terrain. Big paws make padding over snow easier. An extra-long tail provides balance on steep, rugged ground.

3 You might think the snow leopard would be safe living in such harsh, remote places. But it faces multiple threats from humans. The cat has lost important stretches of habitat. (A habitat is the place that fills an animal's needs-mainly food, shelter, and mates.) Mining, wars, and overgrazing by farm animals have all led to this loss of habitat.

Protecting the Herd

4 The loss of habitat has caused a food shortage. Snow leopards eat wild goats and sheep. When farm animals eat too much vegetation, wild plant eaters can't find enough food to stay healthy. Females don't have enough babies. Over time, the numbers of wild goats and sheep go down, and snow leopards have less to eat. Then the big cats eat livestock, and the herders kill the leopards to protect their livelihoods.

5 Agencies are working to save the cats and help herders at the same time. Some agencies give herders wire mesh and wood to keep snow leopards from entering their stables at night. Some pay herders for the animals they lose to snow leopards. In exchange, the herders stop killing snow leopards and leave more room and plants for the wild goats and sheep.

6 Are the conservation programs working? Researchers estimate that only 3,500 to 7,500 snow leopards are alive today. But they need more reliable ways to count leopards before they will know.

7 That's where scientists like Dr. Kyle McCarthy are needed. He traveled to Kyrgyzstan to test ways of estimating snow leopard numbers. He camped

in the mountains with Dr. Jennifer McCarthy (his wife) and other co-workers. They saw no leopards, but they hadn't expected to. Instead, they looked for evidence the cats left behind. "You have to find something related to them: poops, scrapes (claw marks), and pee;' Dr. Kyle McCarthy says.

8 The group collected scat (poop) for DNA analysis. Along with the waste material of digestion, scat contains cells from the animal's own body. DNA is material inside those cells that, like fingerprints, can identify an individual animal.

9 The team also used automatic cameras. The scientists placed motion-and- heat-sensitive cameras along a mountain ridge. When a snow leopard neared one of these "camera traps;' the camera snapped its picture.

1o Each snow leopard's spot pattern is different. Researchers compared patterns in the photos to identify cats. The cameras had taken photos of 15 different snow leopards at two study sites.

A Close Encounter

11 Shannon Kachel, Dr. Kyle McCarthy's graduate assistant, has searched for snow leopards in Tajikistan, where he almost saw one. "I was hiking along a ridgeline in the late afternoon and came around the corner of a rock outcropping to find a steaming, fresh kill site with snow leopard signs all round;' Kachel says. "I could see and hear where the cat had knocked some rocks loose as it ran away from me, but even though I waited until it was nearly dark, I never saw the cat:'

12 "Most people will never see a snow leopard, yet it has a right to exist;' Dr. Kyle McCarthy says. "It's too magnificent to think about losing."

THREATS TOSNOW LEOPARDS	
illegal hunting	• Snow leopards are hunted for their fur and bones.
Loss of habitat	• People and livestock move into snowleopard range.
Loss of prey	• Fewer prey are available to snow leopards when wild sheep and goats are hunted. • Livestock compete with the wild sheep and goats for food and the number of wild animals is reduced.
Killed by herders	• Sheep and goat herders kill the leopards when the leopards eat livestock.
Lack of effective protection	• The areas in which the snow leopards live are too large to protect. • Many countries cannot afford to pay for protection.
Lack of awareness and support	• Herders do not understand the importance of snow leopards to the ecosystem.

1. What does the word "conservation" mean as it is used in paragraph 6?

A. action

B. education

C. preparation

D. protection

2. How does paragraph 9 connect to paragraph 6 in the article?

A. by describing a method for counting snow leopards

B. by describing what it is like to see a snow leopard

C. by explaining why snow leopards are rarely seen by humans

D. by explaining how scientists identify individual snow leopards

3. Which idea best explains why Dr. McCarthy and his co-workers traveled to Kyrgyzstan?

A. "The loss of habitat has caused a food shortage" (paragraph 4)

B. "But they need more reliable ways to count leopards before they will know" (paragraph 6)

C. "They saw no leopards, but they hadn't expected to" (paragraph 7)

D. "Researchers compared patterns in the photos to identify cats" (paragraph 10)

4. Which idea from the article best supports the main idea?

A. "The snow leopard is smaller than the tiger, the lion, and the leopard of Africa and Asia" (paragraph 2)

B. "Researchers estimate that only 3,500 to 7,500 snow leopards are alive today" (paragraph 6)

C. "Each snow leopard's spot pattern is different" (paragraph 10)

D. "The cameras had taken photos of 15 different snow leopards at two study sites" (paragraph 10)

5. How is the article mainly organized?

A. compare

B. sequence of events

C. question then answer

D. cause and effect

6. How does the table at the end of "Saving Snow Leopards" support the main idea of the article?

A. by showing reasons why snow leopards are struggling to survive

B. by listing ways to better protect snow leopards

C. by presenting new information about the habitat of snow leopards

D. by providing evidence that there are fewer snow leopards alive now than in the past

The Scarlet Ribbon

by Emily Hoffman

1 Long ago, in Australia, there lived a girl named Kanikiya. From the time she was small, Kanikiya loved to dance. She moved as gracefully as the brolgas, the tall, slender cranes that courted along the riverbank. The people in the camp would often see Kanikiya dancing down by the water, for she wore a scarlet ribbon around her neck, and it floated as she moved. People believed she danced like moonlight shining on the running river.

2 Dancing was fine for a young child, but by the time she was twelve, the people in the camp did not approve of such frivolity in a young woman. She should be working, they insisted. Only the youngest children danced away the day.

3 Kanikiya's mother, hearing disapproval around the camp, warned her that she must stop dancing. "Remember the story of the lazy girl who would not work;' she said. "She turned into a dingo. The rest of her life she ran with packs of wild dogs, preying on sheep at night:'

4 Kanikiya, who knew the camp legends, shivered at her mother's words. Such tales frightened her. But she knew she wasn't lazy. It wasn't laziness that made her forget her work. The need to dance surged through her. She could not stop dancing any more than she could stop breathing. She feared that if she stopped doing either, she would die.

5 Flocks of silvery gray brolgas stopped near Kanikiya's camp during their migration in the spring and fall of each year. Then, more than any other time, Kanikiya would forget her work, steal to the river, and watch the birds dance as the day darkened. As if impelled by a strong, mysterious force, Kanikiya would join in their dance at the river's edge, her scarlet ribbon flying behind her. If only I could dance with the cranes all my life, thought Kanikiya as she trudged back to the camp, then I would be at peace. One spring evening Kanikiya's mother found her daughter dancing near the river before she had finished gathering cabbage palms for their evening meal.

6 "I can do nothing with you, Kanikiya!" her mother shouted. "I have decided. You must not leave the camp until the brolgas have left. I feel they have powers over you that must be broken ' While her mother spoke, Kanikiya felt tears gather. She sensed the eyes of the brolgas upon her.

Glancing up, she marveled as they dipped their heads and danced a slow, mournful dance. They understand my sorrow, Kanikiya thought, the knowledge warming her.

7 Her mother grabbed her arm, pulling her toward the camp. Within Kanikiya's heart something died as she left the river that evening. Plodding up the bank, she felt her life begin to ebb away. The next day, instead of going out to gather food, Kanikiya stayed in the camp. She wove baskets from the reeds the other children collected. Day followed day in a mournful blur. She couldn't eat. She wouldn't smile. The heaviness in her heart grew, and because of that she became weaker. As she worked, she listened to the happy calls of the brolgas and imagined herself dancing with them, twirling, dipping, and free. At night she danced with the birds in her dreams.

8 If only I could dance with them again, she'd think each morning upon waking, then I would find rest for my soul. Soon the call of the brolgas became too strong for Kanikiya to deny. One morning before dawn she heard them calling her. Slipping out of the camp, she rushed down to the riverbank to dance with the cranes.

9 Just this one time, she thought as she whirled, her scarlet ribbon floating behind her. Just this once, then peace will visit me again. Later that morning, she was not found at her weaving. Her mother looked for her throughout the camp and, not finding her there, searched near the river.

10 As Kanikiya's mother neared the water, she found dozens of wild brolgas dancing and dipping to the sound of the wind in the trees. Fearful of their savage dance, she turned to go. But before she started up the path, she noticed one graceful crane in the center of the flock, a scarlet ribbon tied around her neck, dipping her head in greeting.

1. Which detail from paragraph 1 best supports a theme of the story?

A. The folktale takes place long ago.

B. Kanikiya likes to wear a scarlet ribbon.

C. The brolgas are birds that live along the river.

D. Kanikiya has a talent that is recognized by others

2. Read this sentence from paragraph 6.

They understand my sorrow, Kanikiya thought, the knowledge warming her.

What does the phrase "the knowledge warming her" suggest?

A. a feeling of comfort

B. sadness and disappointment

C. a feeling of anger

D. wisdom and clear thinking

3. What does the word "mournful" mean as it is used in paragraph 7?

A. angry

B. bored

C. nervous

D. sad

4. Which sentence from the story best shows how a character's actions help to develop the story?

A. "You must not leave the camp until the brolgas have left:' (paragraph 6)

B. "She wove baskets from the reeds the other children collected:'(paragraph 7)

C. "Slipping out of the camp, she rushed down to the riverbank to dance with the cranes:' (paragraph 8)

D. "Her mother looked for her throughout the camp and, not finding her there, searched near the river:' (paragraph 9)

5. Which statement best describes how Kanikiya changes from the beginning to the end of the story?

A. She realizes that she must leave her home to find happiness.

B. She learns that the most important thing is to obey the rules.

C. She discovers that the birds love her more than she loves them.

D. She is frightened by camp tales and then sees that they are untrue.

6. Which detail would be most important to include in a summary of the story?

A. Kanikiya is often seen near the river by others.

B. Kanikiya's mother tells her a story about a girl.

C. Kanikiya feels like she must dance.

D. Kanikiya weaves baskets.

Excerpt from *The Woolly-Puff Rescue*

by Sue Mozena

1 Wendy and Alex stared at the strange flower at their feet. Dozens of them bloomed in this remote corner of the field.

2 Wendy bent down for a closer look. "We shouldn't name them until we're sure we can keep them," she warned. "But I like Woolly-Puffs. They look just like fleecy rainbows."

3 As tempting as it was to pet the feathery yellow-orange-red-purple-blue petals, neither of them did. Instead, Wendy pulled protective gloves from her belt pack.

4 On the asteroid-based colony of New Harmony, even twelve-year-old pioneers knew the number one rule for living in outer space: don't touch or taste or sniff anything that hasn't been tested.

5 "Where do you think they came from?" Wendy asked. With a gentle tug, she freed a Woolly-Puff from the thin layer of soil, sealed it in a clear bag.

6 "They were probably in the compost shipment that brought these naggers," Alex muttered. He slapped at one of the whining insects that swarmed around him looking for exposed skin to bite.

7 New Harmony depended on shipments of rich compost from nearby planets to build up its soil. Usually the compost was treated before it arrived, but one shipment had been accidentally overlooked. The whining gnat-like insects the colonists called "naggers" had hatched from the compost. Without any natural enemies in this new world, the insects had multiplied, becoming a constant torment to the colonists.

8 After turning in their discovery, Wendy settled on a stone bench in front of the New Harmony laboratory. Alex paced, then sat. "Poor Woolly-Puff," Wendy said. "What if it's just a weedy flower?"

9 "Then one living plant and a packet of seeds will be sent to the Botany Preserve on Mars:' Alex answered, rubbing a hot-pink nagger welt just above his elbow.

10 Wendy gingerly held the extra bouquet she had picked, in case the Woolly-Puffs proved keepers. "And the rest of the plants-"

11 "The rest will be pulled up and destroyed to make room for 'useful' plants;' Alex said.

12 The colony of New Harmony did have flowers. It just didn't have a lot of room. Woolly-Puffs would have to be more than pretty if they wanted to grow here.

13 The two friends scrambled to attention as the lab door opened.

14 "Your Woolly-Puff isn't toxic;' Professor Raglin said. His smile faded as he went on. "The sap is thick and sticky, but we already have a good glue. The stems are too woody and the leaves too bristly to eat. And the petals, well, they smell funny. Not flowery at all. More like moldy lemons. I'm sorry, but I'll have to make my report to the council this afternoon. The good news is that they seem to grow only in the soil where you found them, so it won't be hard to get rid of them."

"At least they're not poison:' Wendy said after Professor Raglin had left. She hugged her colorful, fuzzy bouquet. She had to admit they did smell funny. "Mayor Murphy will probably send a reclaim crew out after the council meeting," she sighed. "I wish the council would let us adopt one, like a pet."

16 "Fat chance," Alex said. He blew at a pair of naggers trying to land on his knee. "Shoo! For harmless gnats, these bugs sure are pests."

17 "Yeah." Wendy reached up to scratch the end of her nose. Then she realized something. The end of her nose itched simply because that's what the ends of noses do sometimes. The naggers weren't biting her. They weren't even landing on her.

18 "We're going to the council meeting," she announced.

19 That afternoon, when the council members emerged from the community center, Alex and Wendy were waiting.

20 "What is the meaning of this?" Mayor Murphy demanded as Alex and Wendy presented each member of the council with a Woolly-Puff garland.

21 Glancing at Alex for courage, Wendy said, "Woolly-Puffs are bug chasers."

22 "Sorry," Mayor Murphy said firmly. "We have already made our decision."

23 "Just watch," Wendy pleaded. "Watch the naggers."

24 Then someone said, "What naggers? I don't see any."

25 "Where are the naggers?" asked Professor Raglin. "It's as if they' re avoiding us."

26 Wendy smiled. "They are. Naggers don't like Woolly-Puffs."

27 So the Woolly-Puffs stayed in the vases and flower boxes and gardens of New Harmony because, of course, they weren't just pretty. They smelled like moldy lemons. And luckily, naggers couldn't stand the smell of moldy lemons.

1. In paragraph 2, what does the sentence "They look just like fleecy rainbows" suggest about the flowers?

A. The flowers are colorful and fuzzy.

B. The flowers are wet and fluffy.

C. The flowers are striped and shaggy.

D. The flowers are transparent and puffy.

2. Read this sentence from paragraph 15.

"At least they're not poison;' Wendy said after Professor Raglin had left.

What does the sentence suggest about Wendy?

A. Wendy looks for the positive side of situations.

B. Wendy does not like people to give her bad news.

C. Wendy challenges people who do not agree with her.

D. Wendy encourages people to learn to love the flowers.

3. Which statement best states a theme of the story?

A. Friends should support each other in difficult situations.

B. Following the rules can sometimes get you in trouble.

C. It may take courage to speak up when you have a good idea.

D. The smallest things can cause big problems.

Excerpt from *The Brooklyn Bridge: New York Graceful Connection*

by Vicki Weiner

1 John Roehling was a native of Germany. After studying engineering at his country y's finest technical school, he came to the United States. It was 1831. Roehling was twenty- five years old. He wanted to put his skills and education to work. He and a group of fellow Germans purchased a large plot of land in Pennsylvania. The group-built houses, stores, and churches on the land. They called their new farming town Saxonburg.

2 Roehling found the farmer's life too quiet, though. He told his son, Washington, that he longed to "employ science to useful purpose:' In the early 1840s, Roehling got his first chance to do just that. He knew a new type of rope called wire cable was being used in Europe. It was made from iron wires. These wires were twisted together to form a long strand. Roehling made the first iron wire cable in the United States.

3 At first, people doubted that Roebling's cable could work better than rope. Once they tested it, though, they were amazed. The iron cable was thinner, stronger, and longer lasting than ordinary rope. Soon, delighted business owners were snatching up Roebling's iron cables. They used the cables to haul heavy loads over Pennsylvania's Allegheny Mountains.

4 Roebling's cable helped him create the modern suspension bridge. A suspension bridge spans a wide body of water. Ancient bridges were held up by rope made from hemp. Today's bridges are held up by thick metal cables. The cables are attached to two strong towers, made of stone, steel, or iron. These towers hold the bridge in place. The roadway is suspended, or held up, by the cable.

5 In 1861 the American Civil War began. John's son, Washington, served in the Union Army. He even fought in the battle at Gettysburg. As a colonel, he built temporary suspension bridges using his father's ideas. Washington soon became his father's chief engineer.

6 Together, father and son built many suspension bridges. One of their most famous works was built in Cincinnati, Ohio. The Cincinnati Bridge spanned the Ohio River. At the time, in 1872, it was the largest suspension bridge ever seen. It was a triumph of engineering skills. Yet both father and son knew that harder work lay ahead. John Roehling never rested. He was an ambitious, driven man. Once he got an idea for a new bridge, he never forgot it.

7 John Roehling first presented his plan for the Brooklyn Bridge in 1867. His idea pleased many. Others thought Roebling's bridge seemed unnecessary. New Yorkers didn't go frequently to Brooklyn. To them, the project was a waste of money. On the other hand, Brooklyn's residents were in favor of a bridge. Brooklyn was growing fast as a city. Its residents needed an easier way to travel to New York for work, school, shopping, and entertainment.

8 Public opinion was divided. However, the terrible winter of 1866-67 swayed many city leaders' minds. Icy conditions along the East River froze ferry service for days on end. This convinced Brooklyn's mayor that the city couldn't continue to grow without a bridge. Meanwhile, New Yorkers were warming to the idea, too. They knew that Brooklyn was booming. Still, it remained a cheaper and less crowded city than New York. It would be wonderful to have easy access to Brooklyn's charms. On April 16, 1867, New York's legislature created the New York Bridge Company. The company would be dedicated to Roebling's dream-constructing a bridge over the East River. John Roehling was asked to be the bridge's designer.

9 Excitement about the bridge swelled. It was going to be unlike any structure seen before. Its length would measure 1,596 feet (486 m) from tower to tower. This would make it one-and-a-half times longer than the Cincinnati Bridge. The Brooklyn Bridge's towers would feature 117-foot-high (35.7 m) Gothic arches. Horse and carriage riders would use outer lanes across the span. Trains would travel across the bridge's inner lanes. A special walkway, called a promenade, would be built above the roadways. Pedestrians, or people walking, would stroll across the promenade and be treated to magnificent views of the city.

10 Everyone knew the completed bridge would be beautiful. However, many worried it would not be safe. Roehling invited a group of experts to study his plans. These experts were impressed with Roebling's vision. Finally, in 1869, all their questions were answered. The two cities gave their final approvals.

1. Which sentence best describes a main idea of the article?

A. John Roehling and his son formed an uncomfortable working relationship.
B. John Roehling was an inspired engineer who designed modern bridges.

C. John Roehling came to the United States to build bridges.

D. John Roehling was a popular student and successful businessman.

2. Which sentence best describes how John Roebling influenced his son Washington?

A. Washington learned why it was important to use science to improve his military skills.

B. Washington applied what his father taught him about the different types of iron cables.

C. Washington learned the reasons suspension bridges needed to be improved.

D. Washington applied what his father taught him and built bridges when he was a soldier.

3. Which detail from the article would be most important to include in a summary?

A. John Roehling graduated from a technical school in Germany.

B. John Roehling bought a large plot of farmland in Pennsylvania.

C. John Roehling had a son who was promoted to colonel in the Civil War.

D. John Roehling made the first iron cable used in the United States.

Excerpt from *Young Ben Franklin*

by Julie Doyle Durway

1 Ben's early childhood was happy. He spent a lot of time playing, swimming, and fishing on the Charles River in Boston. Determined to swim faster, young Ben designed and made paddles for his hands and feet to help him move through the water more easily. Even as a child, Franklin had an inventive mind and a desire to improve himself.

2 "From a Child I was fond of Reading:' Ben wrote, "and all the little Money that came into my Hands was ever laid out in Books:' Although he went to school for only two years, Ben learned about many different subjects by reading books and talking to people who knew more than he did. He looked at the world in a practical way, trying to find solutions for everyday problems.

3 When Ben was 10, he left school and began working in his father's soap and candle shop. He spent his days "employed in cutting Wick for the Candles, filling the Dipping Mold ... attending the Shop, going on errands, etc." Although Ben did not enjoy this experience, it helped him learn the importance of hard work. He also spent time with his father watching other craftsmen at their work. He learned to appreciate good workmanship and creativity.

4 After several years, it became clear to Ben's father that his son wasn't happy in the soap and candle shop. Mr. Franklin sent Ben to work with his older brother James, who owned a print shop. Although James was often harsh with his younger brother, Ben enjoyed the printing business. "In a little time, I made great Proficiency in the Business, and became a useful Hand to my Brother:' he wrote later. Not only did Ben learn all the skills of printing, he also wrote poetry, essays, and articles for his brother's newspaper. Ben's natural ability as a writer developed quickly.

5 When Ben worked with his brother, he spent much of his free time reading. "Often I sat up in my Room reading the greatest part of the Night, when the Book was borrowed in the Evening to be returned early in the Morning:' He also used this time to improve his writing skills. Studying the work of other authors, Ben would try to rewrite their essays in his own words.

6 When he was 17, Ben left his brother's print shop. He moved to Philadelphia and found work as a printer and writer. Eventually, he opened his own print shop. Later, his accomplishments as a scientist and statesman made him one of the most powerful and important men in America. But Ben Franklin never forgot the lessons he learned during his boyhood years.

1. In paragraphs 1 and 2 of "Excerpt from Young Ben Franklin," how does the author support the idea that Franklin had a curious mind? Use two details from the article to support your response.

KEY: 4th Grade Comprehension Passage I

"Around the World"

	Item Type	Correct Answer		Standard
1	Multiple Choice	B	1	RI 4.4
2	Multiple Choice	B	1	RI 4.3
3	Multiple Choice	A	1	RI 4.5
4	Multiple Choice	A	1	RI 4.4
5	Multiple Choice	C	1	RI 4.7
6	Multiple Choice	D	1	RI 4.2

KEY: 4th Grade Comprehension Passage 2

"Mouse Deer and the Tigers"

	Item Type	Correct Answer		Standard
1	Multiple Choice	D	1	L 4.4
2	Multiple Choice	B	1	RL 4.6
3	Multiple Choice	B	1	RL 4.2
4	Multiple Choice	B	1	RL 4.4
5	Multiple Choice	C	1	RL 4.3
6	Multiple Choice	A	1	RL 4.3

KEY: 4th Grade Comprehension Passage 3

"Saving Snow Leopards"

	Item Type	Correct Answer		Standard
1	Multiple Choice	D	1	RI 4.4
2	Multiple Choice	A	1	RI 4.3
3	Multiple Choice	B	1	RI 4.3
4	Multiple Choice	B	1	RI 4.2
5	Multiple Choice	D	1	RI 4.5
6	Multiple Choice	A	1	RI 4.7

KEY: 4th Grade Comprehension Passage 4

"The Scarlet Ribbon"

	Item Type	Correct Answer		Standard
1	Multiple Choice	D	1	RL 4.2
2	Multiple Choice	A	1	RL 4.4
3	Multiple Choice	D	1	L 4.4
4	Multiple Choice	C	1	RL 4.3
5	Multiple Choice	A	1	RL 4.3
6	Multiple Choice	C	1	RL 4.2

KEY: 4th Grade Comprehension Passage 5

"The Wooly Puff Rescue"

	Item Type	Correct Answer		Standard
1	Multiple Choice	A	1	RL 4.4
2	Multiple Choice	A	1	RL 4.3
3	Multiple Choice	C	1	RL 4.2

KEY: 4th Grade Comprehension Passage 6

"Brooklyn Bridge"

	Item Type	Correct Answer		Standard
1	Multiple Choice	B	1	RI 4.2
2	Multiple Choice	D	1	RI 4.3
3	Multiple Choice	D	1	RI 4.2

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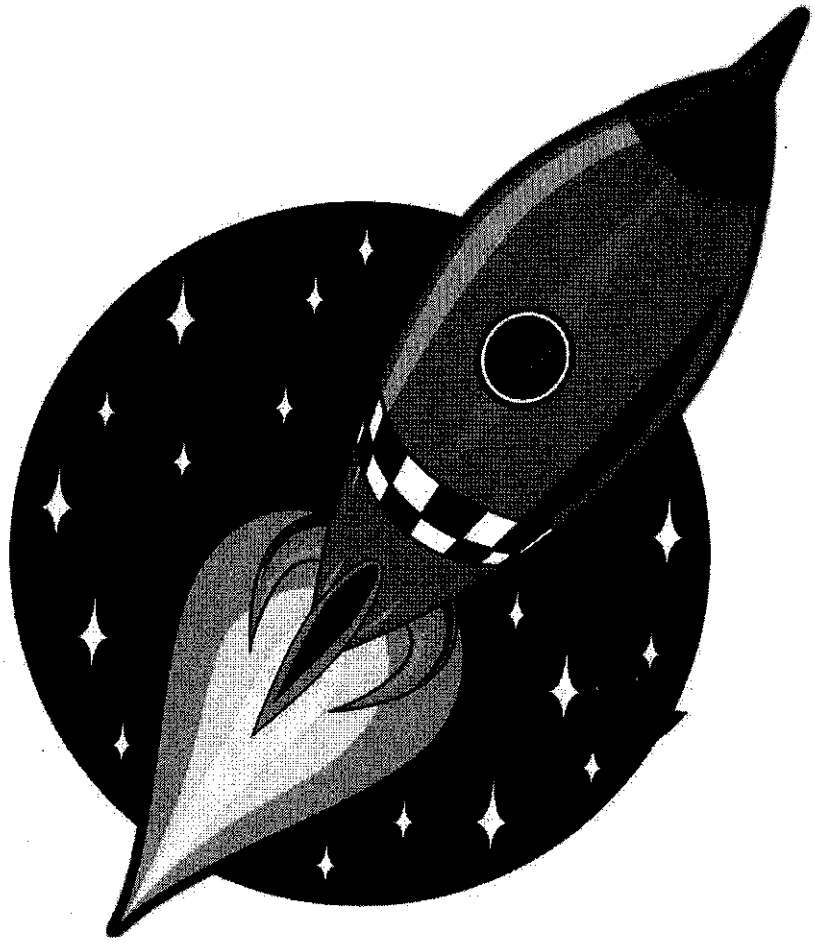
4th Grade Math



To Proficiency and Beyond!

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- **IXL**
  - https://www.ixl.com/inspiration/family-learning
  - **Math practice on each and every math skill.**

- **Khan Academy**
  - https://www.khanacademy.org/signup?isparent=1
  - **Math practice and interactive videos to help your child learn math.**

- **Eureka Math**
  - https://gm.greatminds.org/en-us/knowledgeonthego
  - **Content videos and student practice on math skills.**

- **Learn Zillion**
  - https://learnzillion.com/resources/73932
  - Interactive learning videos for math!

- **Education.Com**
  - **www.education.com**
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- **Fun Brain**
  - **www.funbrain.com**
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- **Cool Math**
  - https://www.coolmathgames.com/
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- **Splash Learn**
  - **https://www.splashlearn.com/**
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- **Cool Math 4 Kids**
  - https://www.coolmath4kids.com/
  - Math games with learning.

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4th Grade Tutorial Packet Contents

MDE Testlet Practice Items

1

1. **Michelle brings three liters of sweet tea to share with her friends at a birthday party. At the end of the party, 860 milliliters of sweet tea remain.**

Which statement explains how to find the number of milliliters of sweet tea that Michelle and her friends drank at the party?

A. **Convert 3 liters to milliliters by multiplying 3 by 1,000. Then add the number of milliliters that remain to the number of milliliters Michelle brought.**

B. **Convert 3 liters to milliliters by multiplying 3 by 100. Then subtract the number of milliliters that remain from the number of milliliters Michelle brought.**

C. **Convert 3 liters to milliliters by multiplying 3 by 100. Then add the number of milliliters that remain to the number of milliliters Michelle brought.**

D. **Convert 3 liters to milliliters by multiplying 3 by 1,000. Then subtract the number of milliliters that remain from the number of milliliters Michelle brought.**

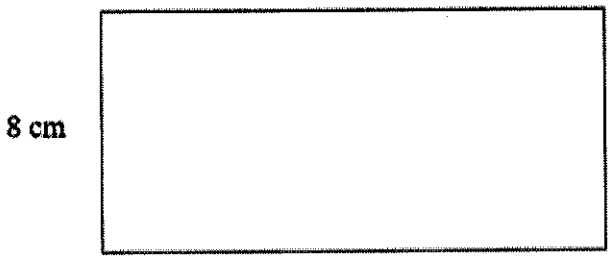
2

Directions: The tables below include the area, perimeter, and dimensions of four different rectangles. Match the area and perimeters of each rectangle to their dimensions.

Row	Area and Perimeter
A.	Area = 36 square units
B.	Area = 24 square units
C.	Perimeter = 36 units
D.	Perimeter = 24 units
E.	Area = 40 square units

Row	Dimensions
1.	Length = 4 units, Width = 9 units
2.	Length = 5 units, Width = 8 units
3.	Length = 2 units, Width = 12 units
4.	Length = 8 units, Width = 4 units
5.	Length = 9 units, Width = 9 units

3 **The area of the rectangle below is 424 square centimeters. What is the perimeter of the rectangle?**



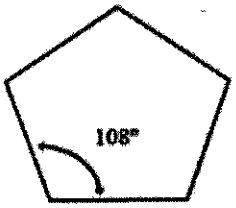
A. 53 cm

B. 61 cm

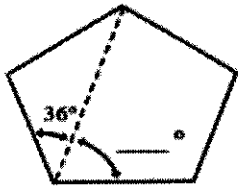
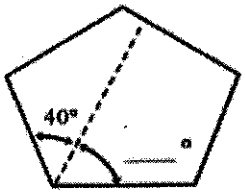
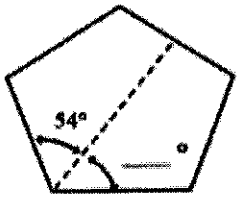
C. 106 cm

D. 122 cm

4 Kylie's family owns a farm. Her father built a five-sided fence for their animals. The corners of the fence form an 108° angle as shown below.



Kylie's father needs to split up the pen to make smaller sections for the different animals on their farm. Kylie created the three different drawings below to show how he could create the smaller sections. Each dotted line on her drawings represents a new fence.

Drawing A	Drawing B	Drawing C
		

What is the measure of the missing angle formed by the new fence in each drawing?

Drawing A _____ Drawing B_____ Drawing C _____

5 Aidan and his sister Jovana want to sell lemonade at the next community picnic. They have a large, 12-gallon container to hold the lemonade and they need to put eight gallons of water inside the container. Their mother gave Aidan a one-quart pitcher to use for putting water in the container.

Part A

How many times will Aidan need to use the pitcher his mother gave him in order to fill the container with eight gallons of water?

A. 2 times

B. 4 times

C. 32 times

D. 34 times

Part B

Jovana is in charge of adding lemon juice to the water. She has smaller containers that each hold one pint of lemon juice. The lemonade recipe requires them to add four quarts of lemon juice to the water. How many pints of lemon juice will Jovana need to add so that she has four quarts in all?

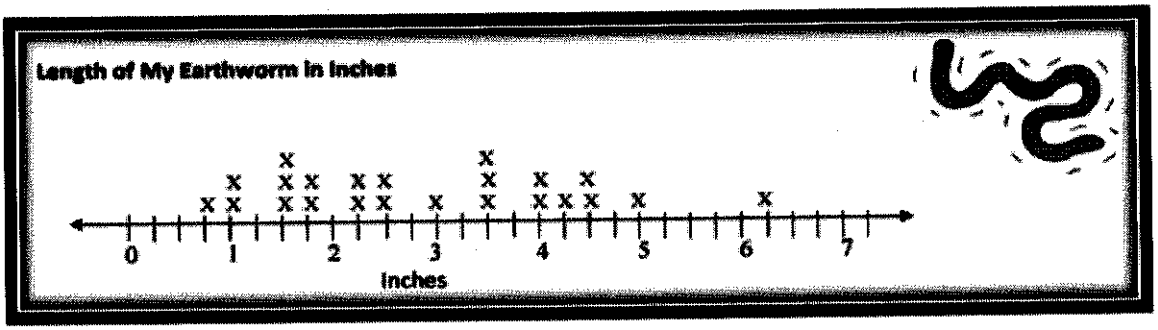
A. 2 pints

B. 4 pints

C. 6 pints

D. 8 pints

6 Mrs. Davis' science class raised earthworms as part of their lesson on the food chain. They decided to measure each earthworm and record the data on the line plot below.



Directions: Match each question on the left to the correct answer on the right.

Row	Questions
A.	How long is the shortest worm?
B.	How long is the longest worm?
C.	What is the difference between the longest worm and the shortest worm?
D.	How long will the longest worm and shortest worm be if you laid them end to end?

Row	Answers
1.	$6\frac{1}{4}$ inches
2.	7 inches
3.	$5\frac{2}{4}$ inches
4.	$\frac{3}{4}$ inches

Questar Practice Items

7 Which table shows the correct conversions for pounds and ounces?

Ⓐ

Pounds	Ounces
1	16
2	17
3	18

Ⓑ

Pounds	Ounces
1	10
2	20
3	30

Ⓒ

Pounds	Ounces
2	18
4	20
6	22

Ⓓ

Pounds	Ounces
2	32
4	64
6	96

8 A jug holds 4 liters of water. How many milliliters of water does the jug hold?

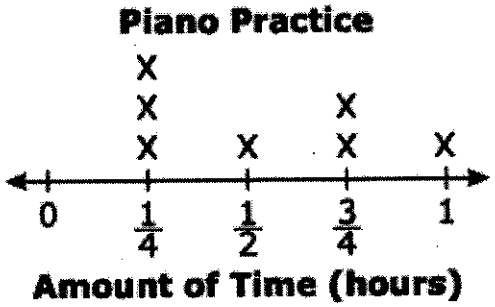
Ⓐ 40 milliliters

Ⓑ 400 milliliters

Ⓒ 4,000 milliliters

Ⓓ 40,000 milliliters

9 The line plot shows the amount of time Jasmine practiced the piano each day. What is the total amount of time Jasmine practiced?



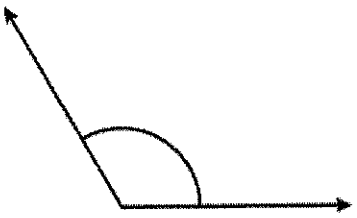
Ⓐ $2\frac{1}{2}$ hours

Ⓑ $2\frac{3}{4}$ hours

Ⓒ $3\frac{1}{2}$ hours

Ⓓ $3\frac{3}{4}$ hours

10 What is the measurement of the angle shown?



Ⓐ 118 degrees

Ⓑ 120 degrees

Ⓒ 122 degrees

Ⓓ 124 degrees

11 **Makayla wants to put new carpet in her rectangular-shaped room. The length of the room is 9 feet, and the area of the room is 108 square feet.**

Which statement is true about the room?

Ⓐ **The perimeter of the room is 21 feet.**

Ⓑ **The perimeter of the room is 22 feet.**

Ⓒ **The perimeter of the room is 41 feet.**

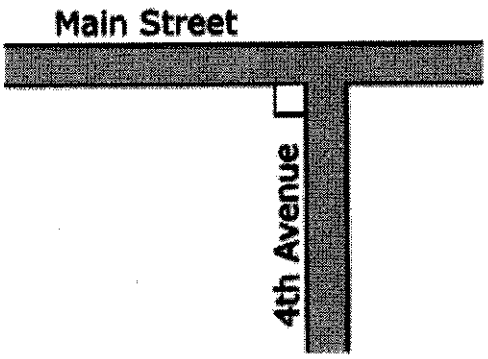
Ⓓ **The perimeter of the room is 42 feet.**

12 **A piece of wood is 4 feet long. How many inches long is the piece of wood?**

Write the answer in the box.

_____ inches

13 How many one-degree angles are represented in the angle between Main Street and 4th Avenue?



Ⓐ 45

Ⓑ 90

Ⓒ 180

Ⓓ 360

14 A rectangle has an area of 30 square feet. The length of the rectangle is 6 feet. What is the perimeter of the rectangle?

Write the answer in the box.

[ ] feet

North Carolina Practice Items

15 Sue has 10 gallons of water. How many quarts of water does she have?

A 10

B 20

C 30

D 40

16

The lengths and widths of four rectangles are shown below. Which rectangle has a perimeter of 20 ft?

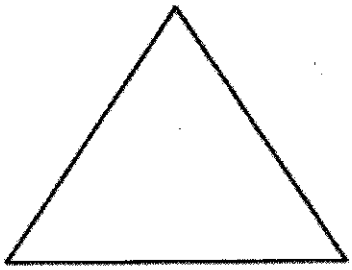
A length = 10 ft, width = 10 ft

B length = 9 ft, width = 1 ft

C length = 7 ft, width = 2 ft

D length = 5 ft, width = 2 ft

17 **The sum of the measures of the three angles in a triangle is 180°.**



What is the measure of one angle in an equilateral triangle?

A **30°**

B **60°**

C **90°**

D **120°**

18 Addie got to the park at 7:45. While she was there, she walked her dog for 35 minutes and played for 15 minutes. At what time did Addie leave the park?

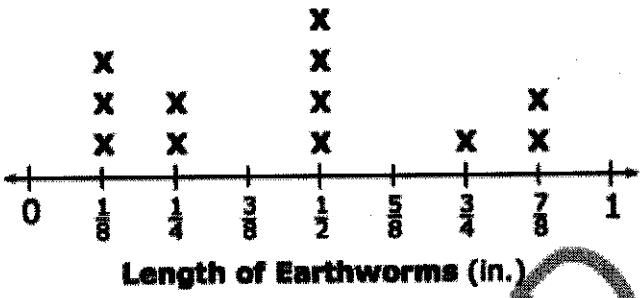
A 8:00

B 8:20

C 8:30

D 8:35

19 Using the figure below, what is the difference in the length between the longest earthworm and shortest earthworm?



A $\frac{1}{4}$ in.

B $\frac{1}{2}$ in.

C $\frac{6}{8}$ in.

D 1 in.

20 A security camera rotates 30° every 10 seconds. How long does it take the camera to rotate 360°?

A 1 minute

B 2 minutes

C 5 minutes

D 12 minutes

Answer Key

1. D
2. A1, B3, C5, D4, E2
3. D
4. DRAWING A: 72°, DRAWING B: 68°, DRAWING C: 54°
5. PART A: C; PART B: D
6. A4, B1, C3, D2
7. D
8. C
9. D
10. B
11. D
12. 48
13. B
14. 22
15. D
16. B
17. B
18. D
19. C
20. B
21. A

MDE Testlet Practice Items

1

A group of students from Isable Elementary School are riding the bus to the Jackson City Zoo for their annual 4th grade field trip.

$\frac{2}{6}$ **of the children are wearing tan pants.**

$\frac{6}{10}$ **of the children are wearing tennis shoes.**

$\frac{5}{12}$ **of the children are wearing a red shirt.**

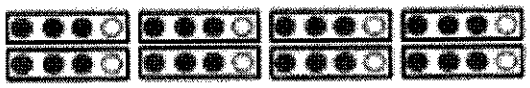
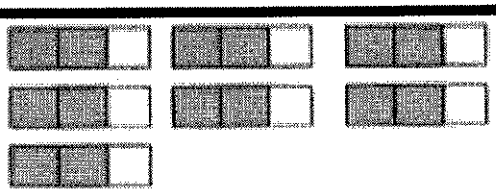
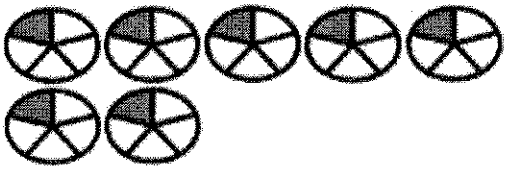
$\frac{2}{3}$ **of the children are wearing a hat.**

Directions: Determine if **more than half** or if **less than half** of the children are wearing each type of clothing. Select a bubble in each row.

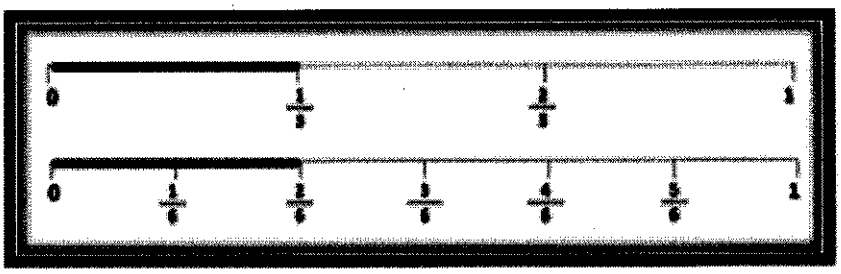
Clothing	More than half	Less than half
Tan pants	O	O
Tennis shoes	O	O
Red shirt	O	O
Hat	O	O

2 **Directions: Review the three events and fraction models below. Draw a line between the event that can be modeled by each fraction model.**

Row	Event
A	Jean makes $\frac{1}{5}$ pound of pasta for each person at her dinner party. If 7 people attend the party, how many pounds of pasta will be needed for her guests?
B	Kim is making punch. The punch uses $\frac{3}{4}$ cup of orange juice for one serving. If she makes 8 servings, how many cups of orange juice does she need?
C	Trecina runs $\frac{2}{3}$ mile every day. How far does she run in one week?

Row	Fraction Model
1	
2	
3	

3 **Study the number lines below.**



Which number sentence can be used to justify that the two fractions shown on the number line above are equivalent?

A. $\frac{1x2}{3x2} = \frac{2}{6}$

B. $\frac{2x2}{6x3} = \frac{1}{3}$

C. $\frac{2x2}{6x2} = \frac{1}{3}$

D. $\frac{1x2}{3x3} = \frac{2}{6}$

4 **Directions: Review each equation below. Draw a line to the missing number that makes each equation true.**

Row	Equation
A.	$\frac{3}{100} + ? = \frac{23}{100}$
B.	$\frac{17}{100} + \frac{8}{10} = ?$
C.	$? = \frac{8}{100} + \frac{32}{100}$
D.	$\frac{4}{10} + ? = \frac{64}{100}$

Row	Missing Number
1.	$\frac{97}{100}$
2.	$\frac{4}{10}$
3.	$\frac{24}{100}$
4.	$\frac{2}{10}$

5 Neil walks $\frac{2}{10}$ of a mile to school. Tyra walks $\frac{7}{10}$ of a mile to school. Which statement below correctly explains how to find how much farther Tyra has to walk than Neil?

A. Subtract the numerator of Neil's distance from the numerator of Tyra's distance and keep the denominators the same.

B. Subtract the numerator of Neil's distance from the numerator of Tyra's distance. Then subtract the denominators.

C. Add the numerator of Neil's distance to the numerator of Tyra's distance and keep the denominators the same.

D. Add the numerator of Neil's distance to the numerator of Tyra's. Then add the denominators.

6 Each statement below and determine which statements are true. Select all that apply.

A. 0.4 meter > 0.04 meter

B. 0.5 meter < 0.65 meter

C. 4.61 meters < 4.06 meters

D. 1 and 43 hundredths of a meter is larger than 1 and 4 tenths of a meter

E. 1 and 34 hundredths of a meter is larger than 1 and 4 tenths of a meter

7

Read the equations below and select the equations that represent a true statement.

A. $\frac{4}{10} = 0.04$

B. $\frac{17}{100} = 0.17$

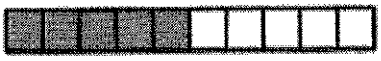
C. $\frac{9}{10} = 0.9$

D. $\frac{6}{100} = 0.60$

E. $\frac{3}{100} = 0.30$

8

Directions: Match each fraction model to the correct expression.

Row	Fraction Model
A.	
B.	
C.	
D.	

Row	Expression
1.	$\frac{1}{10}+\frac{1}{10}+\frac{1}{10}+\frac{1}{10}+\frac{1}{10}+\frac{1}{10}+\frac{1}{10}$
2.	$\frac{1}{8}+\frac{1}{8}+\frac{1}{8}+\frac{1}{8}+\frac{1}{8}+\frac{1}{8}+\frac{1}{8}$
3.	$\frac{1}{12}+\frac{1}{12}+\frac{1}{12}$
4.	$\frac{1}{10}+\frac{1}{10}+\frac{1}{10}+\frac{1}{10}+\frac{1}{10}$

Questar Practice Items

9

Find the difference.

$3\frac{2}{8} - 1\frac{3}{8}$

Ⓐ $1\frac{7}{8}$

Ⓑ $2\frac{1}{8}$

Ⓒ $3\frac{7}{8}$

Ⓓ $4\frac{5}{8}$

10

Tony bought a pizza that was cut into 4 slices. He ate 1 slice of the pizza. Which expression generates a fraction that is equivalent to the amount of pizza Tony ate?

Ⓐ $\frac{(1 \times 1)}{(4 \times 4)}$

Ⓑ $\frac{(1 \times 2)}{(4 \times 8)}$

Ⓒ $\frac{(1 \times 3)}{(4 \times 3)}$

Ⓓ $\frac{(1 \times 4)}{(4 \times 1)}$

11 **Select the correct symbol that makes each comparison statement true.**

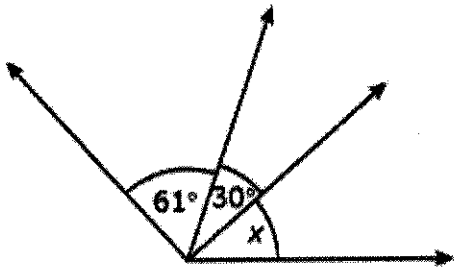
$\frac{4}{5}$ ○ $\frac{9}{10}$

○ >
○ <
○ =

$\frac{3}{4}$ ○ $\frac{5}{12}$

○ >
○ <
○ =

12 **If the total measurement of the angle shown is 132°, what is the measurement of the missing angle?**



Ⓐ 41°

Ⓑ 91°

Ⓒ 102°

Ⓓ 223°

13

Jaylen read $\frac{3}{8}$ of his book on Monday. He read $\frac{2}{8}$ of his book on Tuesday. What fraction of the book has Jaylen read?

Ⓐ $\frac{1}{8}$

Ⓑ $\frac{5}{8}$

Ⓒ $\frac{5}{16}$

Ⓓ $\frac{6}{16}$

14

If $\frac{3}{4}$ cup of water is needed to make a cake, how much water is needed to make 6 cakes?

Ⓐ $\frac{9}{4}$ cups

Ⓑ $\frac{18}{4}$ cups

Ⓒ $\frac{21}{4}$ cups

Ⓓ $\frac{27}{4}$ cups

15

Select the box in each row to identify the equivalent fraction.

	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{3}{4}$
$\frac{6}{12}$	○	○	○
$\frac{75}{100}$	○	○	○
$\frac{4}{12}$	○	○	○
$\frac{5}{10}$	○	○	○

16

Charlie baked 9 batches of cookies. Each batch used $\frac{1}{4}$ cup of flour. How much flour did Charlie use?

Select <u>two</u> answer choices.

- Ⓐ $\frac{9}{4}$ cups
- Ⓑ $\frac{10}{4}$ cups
- Ⓒ $2\frac{1}{4}$ cups
- Ⓓ $2\frac{2}{4}$ cups
- Ⓔ $9\frac{1}{4}$ cups

17

Amy and Michael work together to complete a puzzle. Amy completes $\frac{9}{100}$ of the puzzle and Michael completes $\frac{3}{10}$ of the puzzle. What fraction of the puzzle has been completed?

Ⓐ $\frac{11}{110}$

Ⓑ $\frac{12}{110}$

Ⓒ $\frac{39}{100}$

Ⓓ $\frac{93}{100}$

18

Ryan found the product, p, of 3 and $\frac{2}{5}$. Which equation is equivalent to $3 \times \frac{2}{5} = p$?

Ⓐ $\frac{1}{15} + \frac{1}{15} + \frac{1}{15} = p$

Ⓑ $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} = p$

Ⓒ $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} = p$

Ⓓ $\frac{1}{15} + \frac{1}{15} + \frac{1}{15} + \frac{1}{15} + \frac{1}{15} + \frac{1}{15} = p$

19 **Which number makes the comparison true?**

5.4 < _____

Ⓐ **5.50**

Ⓑ **5.15**

Ⓒ **5.29**

Ⓓ **5.40**

20 **Samantha bought $4\frac{3}{4}$ inches of white ribbon and $6\frac{2}{4}$ inches of blue ribbon. How many total inches of ribbon did Samantha buy?**

Ⓐ $10\frac{1}{4}$ inches

Ⓑ $10\frac{5}{8}$ inches

Ⓒ $11\frac{1}{4}$ inches

Ⓓ $11\frac{3}{8}$ inches

North Carolina Practice Items

21

A stadium can hold 20,000 people when it is full. The table below shows the number of people that attended concerts at the stadium over a 3-day period.

Day	Number of People
Friday	17,563
Saturday	18,126
Sunday	16,618

If the stadium had been full for each of the concerts, how many more people would have attended the concerts over the same 3-day period?

A 7,693

B 7,692

C 7,593

D 7,592

22

Daniel has a set of red, green, and blue marbles.

- The red marbles make up exactly $\frac{1}{2}$ of the set.
- The set has 2 blue marbles.
- The number of green marbles is twice the number of blue marbles.

How many marbles are in Daniel's set?

A 4

B 6

C 8

D 12

23

Ben had 2 boxes of blocks.

- Each box had 100 blocks.
- He built a tower with $\frac{1}{5}$ of the blocks out of each of the boxes.

How many blocks did Ben use to build the tower?

A 50

B 40

C 30

D 20

24

Kim had 120 cards in a box. She gave $\frac{6}{10}$ of the cards to Maddy. How many cards did Kim have left in the box?

A 12

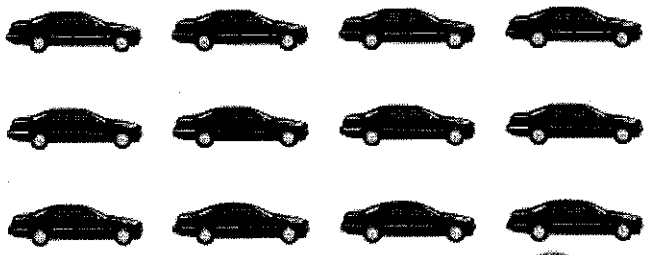
B 20

C 48

D 60

25

Lisa had a set of 12 toy cars.



Then she gave her sister 3 cars. What fraction of Lisa's set did Lisa give to her sister?

A $\frac{3}{4}$

B $\frac{1}{4}$

C $\frac{2}{3}$

D $\frac{1}{3}$

26

Julie used $12\frac{3}{4}$ gallons of water on her garden on Monday. She used $15\frac{1}{4}$ gallons of water on Tuesday. What is the total amount of water Julie used to water her garden on Monday and Tuesday?

A 27 gallons

B $27\frac{1}{2}$ gallons

C 28 gallons

D $28\frac{1}{4}$ gallons

27

At the supermarket, Jalen bought three kinds of meat. He purchased $\frac{1}{4}$ pound of roast beef, $\frac{3}{4}$ pound of ham, and $\frac{3}{4}$ pound of turkey. Which choice describes the total weight of the meats?

A less than 1 pound

B between 1 and $1\frac{1}{2}$ pounds

C between $1\frac{1}{2}$ and 2 pounds

D more than 2 pounds

28

What is the value of *N* in the equation below?

$$4 \times \frac{3}{4} = N$$

A $\frac{12}{16}$

B $\frac{7}{4}$

C 3

D 4

29

Vicky poured $\frac{50}{100}$ liter of water into a bowl. Susan poured $\frac{3}{10}$ liter of water into the same bowl. What was the total amount of water the girls poured into the bowl?

A $\frac{8}{10}$ liter

B $\frac{8}{100}$ liter

C $\frac{53}{10}$ liters

D $\frac{53}{100}$ liter

30

Which fraction is equivalent to $\frac{75}{100}$?

A $\frac{3}{4}$

B $\frac{3}{6}$

C $\frac{1}{3}$

D $\frac{1}{4}$

31

Marcie and Alexis went running. The distance Alexis ran was farther than the distance Marcie ran. Marcie ran $\frac{5}{8}$ of a mile. Which could be the distance Alexis ran?

A $\frac{2}{3}$ mile

B $\frac{10}{16}$ mile

C $\frac{1}{2}$ mile

D $\frac{3}{8}$ mile

32

Which choice is equal to 2.5?

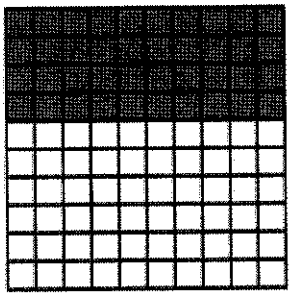
A $\frac{2}{5}$

B $2\frac{1}{5}$

C $2\frac{4}{10}$

D $\frac{5}{2}$

33 **Which decimal is less than the fraction shaded in the grid below?**



A 0.46

B 0.50

C 0.36

D 0.40

Answer Key

1. A2, B1, C2, D1
2. A3, B1, C2
3. A
4. A4, B1, C2, D3
5. A
6. A, B, D
7. B, C
8. A3, B4, C2, D1
9. A
10. C
11. 2, 1
12. B
13. B
14. B
15. 1B, 2C, 3A, 4B
16. A, C
17. C
18. C
19. A
20. C
21. A
22. D
23. B
24. C
25. B
26. C
27. C
28. C
29. A
30. A
31. A
32. D
33. C

MDE Testlet Practice Items

1

Directions: Determine whether each expression is true or false. Select one bubble in each row.

Expression	True	False
6 hundreds + 5 tens > 60 + 500	O	O
635 < 60 + 300 + 5	O	O
60 tens + 30 ones = 630	O	O

2

Select the statement below that explains how the numbers 310 and 3100 are different in terms of their place value.

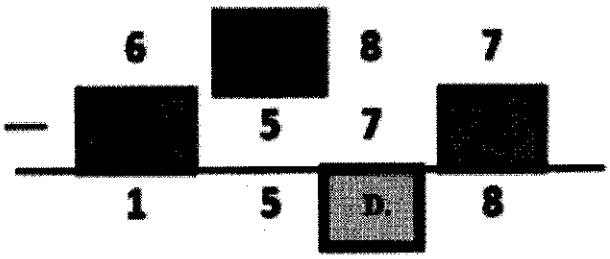
A. 3100 is 1000 times as large as 310.

B. 3100 is 100 times as large as 310.

C. 3100 is 10 times as large as 310.

D. 3100 is 1 times as large as 310.

3 **Directions: Determine what number is missing in each rectangle in the subtraction problem below.**



4 . **Which numbers listed below can be rounded to 4,500?**

A. 4,590

B. 4,472

C. 4,548

D. 4,427

E. 4,456

Questar Practice Items

5

. **Directions: Determine whether each statement is True or False.**

Statement	True	False
The product of 4 and 10 has 0 ones.	O	O
The product of 40 and 10 has 2 zeros.	O	O
The product of 44 and 10 has 4 hundreds and 4 tens.	O	O
The product of 44 and 100 has 3 zeros.	O	O

6

Which number below makes the equation below true?

$47 \times 86 = 3{,}200 + \square + 560 + 42$

A. 240

B. 280

C. 320

D. 360

7

The value of the digit 6 in the number 64,953 is 10 times the value of the digit 6 in which number below?

A. 56,831

B. 269,834

C. 634,908

D. 510,600

8

Which numbers round to 16,000? Select <u>two</u> answer choices.

Ⓐ 15,378

Ⓑ 15,469

Ⓒ 15,899

Ⓓ 16,168

Ⓔ 16,678

9 **Find the product.**

421 × 7

Ⓐ **2,847**

Ⓑ **2,947**

Ⓒ **28,147**

Ⓓ **29,147**

10 **Find the quotient.**

614 ÷ 3

Ⓐ **204 R2**

Ⓑ **205 R1**

Ⓒ **240 R2**

Ⓓ **250 R1**

11

Select the options that correctly complete the sentence.

In the number 388,652, the digit 8 in the ten thousands place is

○ 10		○ less than
○ 100	times	○ greater than
○ 1,000		

the digit 8 in the thousands place.

12

Find the quotient.

4,070 ÷ 6

Ⓐ **678 R2**

Ⓑ **678 R8**

Ⓒ **878 R2**

Ⓓ **878 R8**

13 **Find the difference.**

30,364 − 9,829 =

Ⓐ **20,535**

Ⓑ **21,535**

Ⓒ **30,535**

Ⓓ **31,535**

14 **What is the product of 76 × 36?**

Ⓐ **654**

Ⓑ **684**

Ⓒ **2,636**

Ⓓ **2,736**

15 **Find the difference.**

370,046 − 95,817

Ⓐ **274,129**

Ⓑ **274,229**

Ⓒ **275,229**

Ⓓ **275,231**

16 **Alexis finds the product, *p*, of 45 and 23. Which equation justifies her answer?**

Ⓐ $(40 + 2) \times (40 + 3) \times (5 + 20) \times (5 + 3) = p$

Ⓑ $(40 \times 2) + (40 \times 3) + (5 \times 20) + (5 \times 3) = p$

Ⓒ $(40 + 20) \times (40 + 3) \times (5 + 20) \times (5 + 3) = p$

Ⓓ $(40 \times 20) + (40 \times 3) + (5 \times 20) + (5 \times 3) = p$

17

The following question has two parts. First, answer Part A. Then, answer Part B.

Part A

What is 400,000 + 2,000 + 300 + 90 written in standard form?

Write the answer in the box.

Part B

Compare the two numbers using >, <, or =.

Write the answer in the box.

40,239 ☐ 400,000 + 2,000 + 300 + 90

18

Which expression is the expanded form of the number 341,652?

Ⓐ 300,000 + 4,000 + 600 + 50 + 2

Ⓑ 300,000 + 41, 000 + 600 + 50 + 2

Ⓒ 30, 000 + 40,000 + 1,000 + 600 + 50 +2

Ⓓ 300,000 + 40,000 + 1,000 + 600 + 50 + 2

North Carolina Practice Items

19

A stadium can hold 20,000 people when it is full. The table below shows the number of people that attended concerts at the stadium over a 3-day period.

Day	Number of People
Friday	17,563
Saturday	18,126
Sunday	16,618

If the stadium had been full for each of the concerts, how many more people would have attended the concerts over the same 3-day period?

A 7,693

B 7,692

C 7,593

D 7,592

20

A store sold 336 DVD players last year.

- The store sold 8 different brands of DVD players.
- The store sold the same number of each brand of DVD player.

How many of each brand of DVD player did the store sell?

A 40

B 42

C 44

D 48

21 **The math team went to the aquarium to do research. Each team member paid $12 for the trip. There were 25 team members on the trip. What was the total amount the team members paid?**

A **$290**

B **$291**

C **$300**

D **$390**

22 **The planet Mercury measures 4,879 kilometers from one side to the other. Earth measures 12,756 kilometers from one side to the other. What is the difference between the two measures?**

A 7,877 kilometers

B 8,137 kilometers

C 12,123 kilometers

D 17,635 kilometers

23

There were 4,536 people at the carnival. Each person bought 8 tickets. How many tickets were bought at the carnival?

A 562

B 567

C 32,046

D 36,288

24

There are 638 students at a museum. All the students will tour the museum in groups of up to 6 students. What is the smallest number of tour groups that can be used?

A 16

B 17

C 106

D 107

25

One number has 4 thousands, 12 hundreds, and 0 tens. Another number has 4 thousands, 6 hundreds, and 5 tens. Which choice correctly compares the two numbers?

A 4,120 < 4,650

B 4,200 < 4,650

C 5,200 > 4,065

D 5,200 > 4,650

26

During the first year, a bakery sold 37,580 bags of cookies. During the second year, the bakery sold 5,000 more bags than were sold the first year. What is the total number of bags of cookies sold during the first two years, rounded to the nearest 1,000?

A 43,000

B 44,000

C 80,000

D 82,000

27 Which choice has a total of 4,520?

A 45 hundreds and 52 tens

B 45 hundreds and 20 tens

C 40 hundreds and 62 tens

D 38 hundreds and 72 tens ✓

28

A school is collecting books for a book sale.

- The goal is to collect 800 books.
- On Monday, students brought 20 boxes of 18 books each.
- On Tuesday, students brought 10 boxes of 13 books each.

Which is ***closest*** to the number of books the school still needs to collect to meet its goal?

A 200

B 300

C 400

D 700

29

Sabrina rounded the size of a park to the nearest thousand acres. Her estimate was 276,000 acres. What number could be the exact number of acres?

A 276,543

B 276,479

C 275,424

D 275,289

Answer Key

1. A1, B2, C1
2. C
3. A. BLUE=0; B. ORANGE=4; C. GREEN=9; D. YELLOW=0
4. B, C, E
5. A1, B1, C1, D2
6. A
7. A
8. C, D
9. B
10. A
11. 1, 2
12. A
13. A
14. D
15. B
16. D
17. 402, 390, <
18. D
19. A
20. B
21. C
22. A
23. D
24. D
25. D
26. C
27. D
28. B
29. B

4th Grade

MAAP Tested Area

Performance Tasks

The Geometry of Letters - Task 1

Letters can be thought of as geometric figures.

A B C D E F G
H I J K L M N
O P Q R S T U
V W X Y Z

A. How many line segments are needed to make the letter A? How many angles are there? Are they acute, obtuse, or right angles? Are any of the line segments perpendicular? Are any of the line segments parallel?

B. We can build all of these letters from line segments and arcs of circles. Build all of the capital letters with the smallest number of "pieces", where each piece is either a line segment or an arc of a circle.

C. Which letters have perpendicular line segments?

D. Which letters have parallel line segments?

E. Which letters have no line segments?

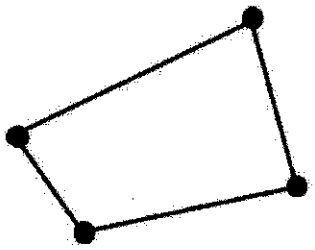
F. Do any letters contain both parallel and perpendicular lines?

G. What makes the lower case letters "i" and "j" different than all of the capital letters?

What's the Point? - Task 2

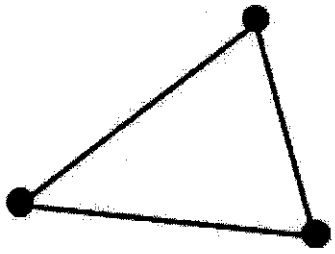
The students in Ms. Sun's class were drawing geometric figures. First, she asked them to draw some points, and then she asked them to draw all the line segments they could that join two of their points.

A. Joni drew 4 points and then drew 4 line segments between them:



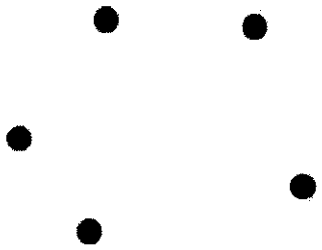
Are there other line segments that Joni could have drawn?

B. Tony drew 3 points and then drew 3 line segments between them:



Are there other line segments that Tony could have drawn?

C. Here are 5 points. Draw all the line segments you can connecting pairs of them.



D. Starting with just two points, how many line segments can you draw between them?

E. Tony decided that he could actually draw two line segments between two points, and maybe even more. The is what he drew:

What do you think of Tony's idea? Discuss it with a partner.

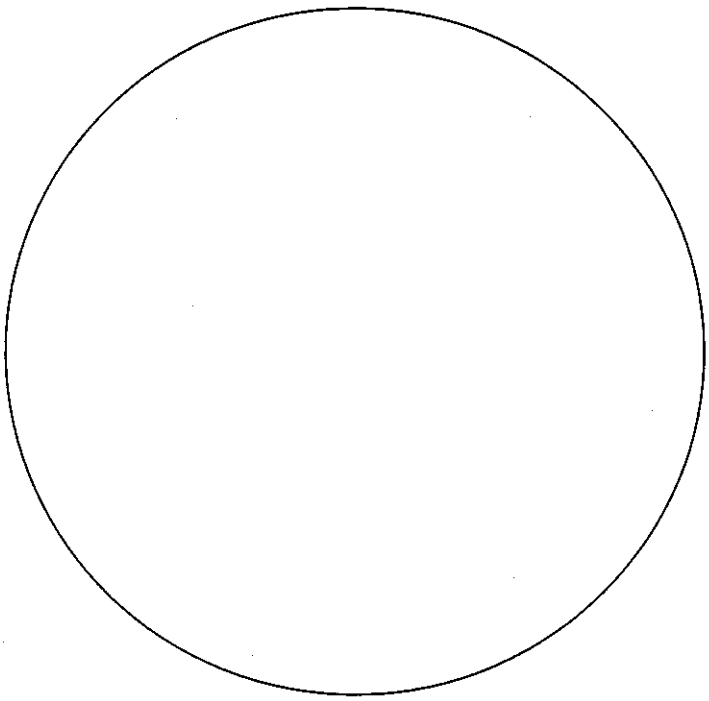
Intersecting Roads - Task 3

Circle-town is shaped like a circle. All of the roads start in the center of the town and extend from the center like rays.

Part 1:

On the map draw the following roads and label the measure of each angle.

a) Smith Street extends completely horizontal to the right of the center of town.
b) Smith Street and Main Street form a 45-degree angle.
c) Thompson Street forms a 30-degree angle with Main Street.
d) Young Avenue forms a 90-degree angle with Thompson Street.
e) Turnberry forms a 120-degree angle with Young Avenue.



Part 2:

Write an explanation about how you know your answers are correct in Part 1.

Going Different Directions- Task 4

Pairs of students worked together to explore the idea of creating an angle. Each student represents a point and each walk represents a ray. Draw the angle each situation below creates.

Part 1:

Draw each angle when:

a) Students stood back to back and walked away from each other.

b) One student faced forward while the other student turned 30 degrees and both students walked forward.

c) One student faced forward while the other student turned 90 degrees and both students walked forward.

d) One student faced forward while the other student turned 120 degrees and both students walked forward.

Making Shapes- Task 5

Part 1:
On the geoboard make the following shapes. Below, draw the shape and write the measurement of each angle.

a) A rectangle

b) A trapezoid

c) A parallelogram that is not a rectangle

d) A right triangle

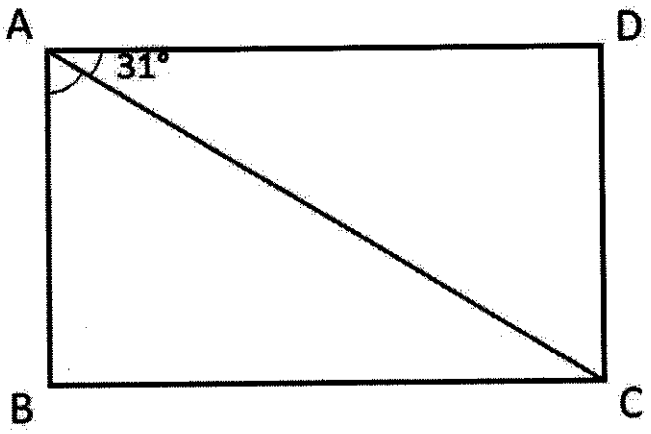
e) An isosceles triangle

f) An obtuse triangle

Part 2:
Write an explanation describing how you measured each of the angles in the isosceles triangle.

Finding an Unknown Angle- Task 6

In the figure, *ABCD* is a rectangle and $\angle CAD = 31°$. Find $\angle BAC$.



Adding Up Angles- Task 7

A 90-degree angle is divided into two smaller angles.

Part 1:
What type of angles are both of the smaller angles? How do you know?

Part 2:
Give 3 possible combinations for the measurements of both angles. For each, draw the angles and write the angle measure.

How Can We Split Angles? - Task 8

Part 1:
Use a protractor to split a 135-degree angle the following ways:

A) A right angle, a 35-degree angle and another acute angle. What is the measure of the other angle?

B) A right angle and another angle. What is the measure of the other angle?

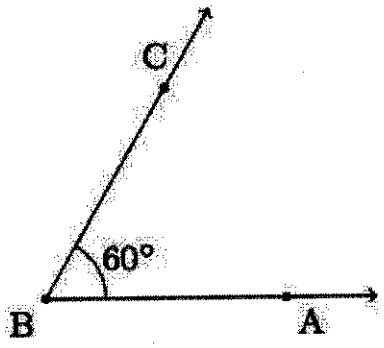
C) A 120-degree angle and another angle. What is the measure of the other angle?

D) 3 angles that are the same size. What is the measure of each of the angles?

E) A 15-degree angle and 2 angles that are the same size. What is the measure of the other angles?

Measuring Angles - Task 9

A. Draw an angle that measures 60 degrees like the one shown here:



B. Draw another angle that measures 25 degrees. It should have the same vertex and share side *BA*.

C. How many angles are there in the figure you drew? What are their measures?

D. Make a copy of your 60-degree angle. Draw a different angle that measures 25-degrees and has the same vertex and also shares side *BA*.

E. How many angles are there in the figure you drew? What are their measures?

Answer Key

Task 1: The Geometry of Letters

A. 3 line segments; form 5 angles; 3 acute, 2 obtuse; no perpendicular or parallel lines
B. Students should build all of the capital letters, as instructed, to better understand the concepts.
C. B, D, E, F, H, L, P, R, T
D. B, D, E, F, H, M, N, R, U, Z
E. C, O, S, and, depending on the font/handwriting, Q may or may not contain a line segment
F. B, D, E, F, H, R
G. They are disconnected----made out of pieces that don't touch

Task 2: What's the Point?

A. Yes; 2 diagonal lines
B. No
C. You can draw 10 line segments connecting 2 points
D. 1
E. It appears there are 2 line segments joining two points; however, since points have location but no length or width, Tony is actually connecting the two circles he drew to REPRESENT points.

Task 3: Intersecting Roads

- Limited Performance:
  - ✓ The student is unable to use strategies to find correct answers to any aspect of the task.
- Not Yet Proficient:
  - ✓ The student has between 1 and 2 errors.
- Proficient in Performance:
  - ✓ The answers are correct.
    - Part 1: Roads are drawn correctly and angles are correctly labeled.
    - Part 2: The explanation is clear and accurate.

State-tested Performance Task Standards

Task 4: Going Different Directions

- Limited Performance:
  - ✓ The student is unable to use strategies to find correct answers to any aspect of the task.
- Not Yet Proficient:
  - ✓ The student has between 1 and 2 errors.
- Proficient in Performance:
  - ✓ The answers are correct.
    - o Part 1: Angles are drawn correctly; A is a 180 degree/straight angle

Task 5: Making Shapes

- Limited Performance:
  - ✓ The student is unable to use strategies to find correct answers to any aspect of the task.
- Not Yet Proficient:
  - ✓ The student has between 1 and 2 errors.
- Proficient:
  - ✓ The answers are correct.
    - o Part 1: Shapes are drawn correctly; angle measures are correctly labeled
    - o Part 2: The explanation is clear and accurate.

Task 6: Finding an Unknown Angle

$\angle BAC = 59°$

State-tested Performance Task Standards

Task 7: Adding Up Angles

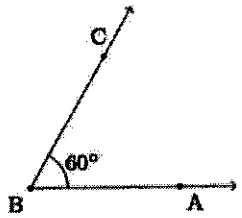
- Limited Performance:
  - ✓ The student makes more than 2 errors **OR** the drawings are not close to the angle measure
- Not Yet Proficient:
  - ✓ The student makes 1 - 2 errors **OR** the drawings are not close to the angle measure
- Proficient:
  - ✓ The answers are correct.
    - o Part 1: Both angles have to be acute angles since the sum of both is 90 degrees.
    - o Part 2: The sum of both angles has to be 90 degrees for all 3 answers **AND** the drawings are close to the angle measure.

Task 8: How Can We Split Angles?

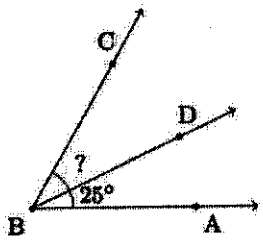
- Limited Performance:
  - ✓ The student makes more than 2 errors
- Not Yet Proficient:
  - ✓ The student makes 1 - 2 errors.
- Proficient:
  - ✓ The answers are correct.
    - o Part 1: A) The other angle is 10 degrees.
      B) The other angle is 45 degrees.
      C) The other angle is 15 degrees.
      D) Each angle is 45 degrees.
      E) The other angles are each 60 degrees.

Task 9: Measuring Angles

A.

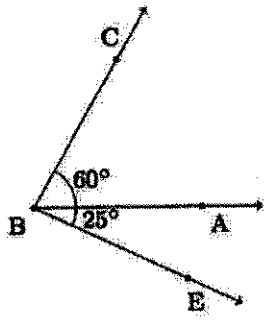


B.



C. 3 Angles: $\angle ABC$ (60°), $\angle ABD$ (25°), $\angle CBD$ (35°)

D.



E. 3 Angles: $\angle ABC$ (60°), $\angle ABE$ (25°), $\angle CBE$ (85°)