

Name:

Fiction: Reading Comprehension – Q1:1

Date:

*As you answer this week's questions, highlight your evidence in the text.*

## The Boy Who Wanted the Moon

### *an African Folktale*

Once upon a time, a powerful king in Africa had a son. He celebrated having an heir for his kingdom by giving the boy anything that the child wanted. He even made the prince king of the children.

"Everything that you can see belongs to us," said the king, showing his son the land from a high mountain.

"I own everything I can see," the prince told the other children.

"Do you even own the moon?" said a girl. "You can't own the moon!"

The prince was **adamant**. "I own everything I can see. My father, the king, told me it is so!"

"You really think your father can give you the moon? That's ridiculous," the same girl argued. All the children laughed.

He ran weeping to his father and told him, "Give me the moon. Now. Or did you lie to me?"

"I did not lie to you, son. But I admit I was thinking about the land, not the sky," the king said.

The spoiled prince refused to eat until his father gave him the moon. Like a full moon, he began to get thinner as every day passed.

"My son will die because he is so stubborn," the king told his subjects. "I must get him the moon. We shall build a tower up to the moon, and I will get it down for him."

Even a foolish king had absolute power, and the people of the country began to cut down trees and build a tower. Higher and higher the prince's tower to the moon rose.

The prince climbed up the tower with his father, but he still couldn't touch the moon. He could see the whole continent of Africa.

"Look at all the land we can see!" said the prince. "Look how much we own now!"

"Isn't that enough, son?" the king asked. It was a long, long way down from the tower. People looked as small as ants below them.

"I want the moon," said the prince. "You said I owned everything I can see, and I see the moon."

The king sighed and ordered the tower to be built even higher.

At last, the tower was so high that the king could touch the bright white moon. But as he tried to wrestle it from the sky, he bumped into it and made the big craters that **mar** its face.

"You cannot have the moon," boomed a voice from the sky. "Foolish, foolish king!" The king fell back to earth and was caught in a high tree.

At that moment, the king, the prince, and all the subjects began to grow brown fur all over their bodies. They sprouted long tails, and they became the animals now called monkeys. They no longer owned anything, and they lived high in the trees. They could never reach the moon again. In frustration, they chatter in the branches, wishing they were human. The tower the king built rotted into nothing but mulch.

When the moon is full, you can still see the black spots on its face where the king bumped into it, long, long ago.



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Name:

Nonfiction: Cite Textual Evidence – Q1:2

Date:

*As you answer this week's questions, highlight your evidence in the text.*

## The Five-Second Rule

According to the “5-second rule,” food that is dropped on the floor is okay to eat so long as it’s picked up within 5 seconds. But should fallen food really be going into the trash instead of into our mouths? Scientific research has put the 5-second rule to the test, and the answer is...it depends.

The length of time food spends on the floor isn’t the only determining factor when it comes to food safety. Researchers at Rutgers University tested four different types of flooring (stainless steel, ceramic tile, wood, and carpet) and four different foods (watermelon, plain white bread, buttered bread, and gummy bears). They coated the surface of each flooring with bacteria. Then, they dropped each food sample on each type of flooring and left it there for four different time increments: less than one second, five seconds, 30 seconds, and 300 seconds. With all the varying factors, there were 128 possible combinations. On top of that, the



researchers repeated each combination 20 times, which means they conducted a total of 2,560 experiments. That might seem excessive, but the more times an experiment is replicated, the more accurate the results. When compared to multiple experiments, **anomalies** (irregular results) stick out and can be discounted when evaluating the data.

When the researchers analyzed each dropped food sample, they found that, indeed, the longer food spent on the floor, the more contaminated with bacteria it became. However, even food that was in contact with the floor for less than a second still had some degree of bacterial contamination. There is no 5-second grace period before which bacteria get on food. Bacteria transfer occurs instantly.

Make a quick prediction as to which food type you think would pick up the most bacteria: watermelon, gummy bears, bread, or buttered bread?

The food that showed the highest amount of bacterial contamination was...watermelon, followed by buttered bread, bread, with gummy bears having the least. Researchers concluded that a food’s moisture content affects how much bacteria it picks up. The wetter the food, the greater the bacteria transfer. Bacteria get soaked up by the moisture in the food. That’s why the food with the most water content, watermelon, had the greatest bacterial contamination.

Which flooring type do you hypothesize led to the least amount of bacteria transfer: carpet, wood, stainless steel, or ceramic tile?

Nonfiction: Cite Textual Evidence – Q1:2

*As you answer this week's questions, highlight your evidence in the text.*

The answer is...carpet. Stainless steel and ceramic tile consistently yielded the greatest bacterial contamination. The results from wood were **inconsistent**, showing varying levels of contamination. Stainless steel and ceramic tile are non-absorbent surfaces, while carpet is porous. A porous surface absorbs moisture, while non-porous surfaces, like stainless steel and ceramic tile, do not. On the carpet, the food became less wet because the carpet absorbed the moisture of the food. And as previously stated, the dryer the food, the fewer bacteria it picks up.

Also, more of the food comes into contact with smooth surfaces than rough surfaces, like carpet. When food is on carpet, there are gaps between the individual fibers. The parts of the food over the gaps make no contact, and so can't pick up bacteria. In a similar study conducted by Clemson University, less than 1% of the bacteria on carpet transferred to the fallen food. When the food was on tile, 48% - 70% of bacteria transferred.

Unlike the floors in these experiments, most floors aren't intentionally coated with bacteria right before we drop food on them. High school senior, Jillian Clarke, tested typical flooring for bacteria as part of her six-week internship in the food and science department at the University of Illinois. She swabbed the floors around the college to see how bacteria-laden they really were. She collected samples from hallways, dorm rooms, science labs and the cafeteria. Surprisingly, her swabbed samples showed very little bacteria. She tested the floors again and got the same results.

Meredith Agle, the graduate student who supervised the experiment, offered the following explanation, "I think the floors because floors are dry, and most [bacteria] can't survive without moisture."

Does that mean dry floors are safe to eat off of? Not necessarily. Odds are low that dropped food will land on a dangerous strain of bacteria, but there's always the chance it might. With severe strains of E. coli bacteria, just ten cells or less can make you seriously ill.

However, according to one survey, 87% of people admitted that they would eat food off the floor. Yet 87% of the population isn't rushing to the hospital with food poisoning.

One thing is for certain...evaluating the risk-level of eating food off the floor is more complicated than counting to five.

Name:

Fiction: Cite Textual Evidence – Q1:3

Date:

As you answer this week's questions, highlight your evidence in the text.

## UnCommon Cents

*Diamond Dynasty 2* was coming out next Friday. Caitlyn checked her savings twice, hoping by some miracle she was wrong. She was ten dollars short.

"Hey Dad," she said at the dinner table that evening. "Have any chores I could do for money? I'll clean the barbecue grill."

"It's clean," Dad said.

"I can cut the lawn?" Caitlyn offered.

"No mowing this time of year. Grass doesn't grow when it's cold. It's **dormant**," Dad said.

"Ugh! I need to earn ten more dollars to buy the new *Diamond Dynasty* video game."

"I have a task you could help me with," said Grandpa Joe. He was temporarily living with them while he recovered from a broken wrist. Caitlyn secretly hoped he would stay forever, even once his cast was off. "With my left hand **out of commission**, I could sure use an assistant numismatist."

"A what? Is that like a magician's assistant?" Caitlyn asked.

"**Numismatist** is a fancy word for someone who collects coins," explained Dad.

"You come from a long line of numismatists," said Grandpa. "Your great-great grandma started the Foster Family penny collection. She passed down the tradition to my dad, who then passed it down to me. Never have been able to interest your dad in it, though."

"Unfortunately, Pops, I didn't inherit your eagle eye for detail," Dad said, pushing up his thick glasses. "But, I did pick up your box of rolled pennies from the bank today. They're on the den coffee table."

"What about you Caitlyn?" asked Grandpa. "Think you have an eye for sorting pennies?"

"My eyesight's 20/20," bragged Caitlyn. "And I usually win when I play I-Spy."

"You're hired," said Grandpa.

After dinner, Caitlyn followed Grandpa Joe into the den.

"As for your wages, I'll pay you a dollar for every three rolls we sort, plus you can keep any good pennies you find." Grandpa Joe opened the box.

"You can keep the pennies, Grandpa. It's not like the olden days when a penny could actually buy something." It would take 1,000 pennies to add up to \$10. Caitlyn wasn't about to count out that many pennies on the check-out counter of the video game store, let alone lug a heavy sack of them all the way there.



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"You might be surprised." Grandpa handed a roll of pennies to Caitlyn to peel off the paper. "Some pennies can be worth quite a lot."

"Really? So, what am I looking for? Super old ones?" Caitlyn spread the pennies out on the coffee table. Some pennies were gleaming copper, while others had dulled to a shineless brown.

"Age can be a factor, but not all old pennies are valuable. What I like to look for are mistakes," said Grandpa. "If a penny looks funny in any way, show it to me."

"Mistakes are good?" asked Caitlyn, surprised.

"Very good," said Grandpa. "I have one 1992 penny where the A and the M in the word AMERICA are practically touching at the bottom. It's my most valuable coin, worth around five-hundred dollars."

"Wow!" That would buy a lot of video games, Caitlyn thought.

Caitlyn continued opening rolls for both of them. For a while, they sorted in silence, except for the clacking of pennies against the table. Then Caitlyn found a penny that was very different looking.

"Look at this one, Grandpa," said Caitlyn. "Lincoln's not even on it. That's a mistake, right?"

Grandpa held the penny close and looked at it carefully. "Well, it's not a mistake. But it is very old. You found what we call an Indian Head penny. Dated 1883, yet barely worn at all. Worth at least ten dollars. So, I guess you're done," Grandpa sighed.

"Done? Why would I be done?" said Caitlyn.

"You have enough to buy your video game." Grandpa dropped the penny on her palm.

Caitlyn closed her fingers around Grandpa's good hand. "I'm not going to sell it for ten dollars, Grandpa. It's worth much more than that."

"Sorry, kiddo. As I explained, just because it's old doesn't mean it's worth more."

"I know that, Grandpa." Caitlyn squeezed her Grandpa's hand. "It's not valuable because of its age. It's priceless because it's the first special penny I found with you."

It might take longer to earn enough to buy the video game she wanted, but to Caitlyn, it was worth it.

Name:

Nonfiction: Context Clues – Q1:4

Date:

*As you answer this week's questions, highlight your evidence in the text.*

## The Many Moons of Our Solar System

Until four hundred years ago, people thought Earth was the only planet with a moon. In 1610, Italian astronomer, Galileo, used the newly-invented telescope to discover not one, but four, moons orbiting Jupiter. As telescopes became more powerful, more and more moons were discovered. Unmanned space probes have gathered additional information about our Solar System's moons.

Moons are distinctly different from planets, asteroids and **dwarf planets** (similar to planets but smaller in size, and don't fit the technical definition of a planet). Planets, dwarf planets, and asteroids orbit (circle around) the Sun. Moons orbit around objects that orbit the Sun. Even dwarf planets and asteroids can have moons. Of the eight planets in our Solar System, only Mercury and Venus have no moon.

While Earth's Moon is round, not all moons are. The two moons of Mars, Phobos and Deimos, are shaped more like lumpy potatoes. Phobos has a giant crater that gives it the appearance of a potato with a bite taken out of it. Compared to the size of Earth's moon (2,159 miles in diameter), Phobos (14 miles in diameter) and Deimos (8 miles in diameter) are tiny. Unless a moon is at least 250 – 400 miles in diameter, its gravity isn't strong enough to pull its mass evenly towards the center to form a sphere. That's why smaller moons are irregularly shaped rather than round.



*Phobos's irregular shape resembles a potato.*

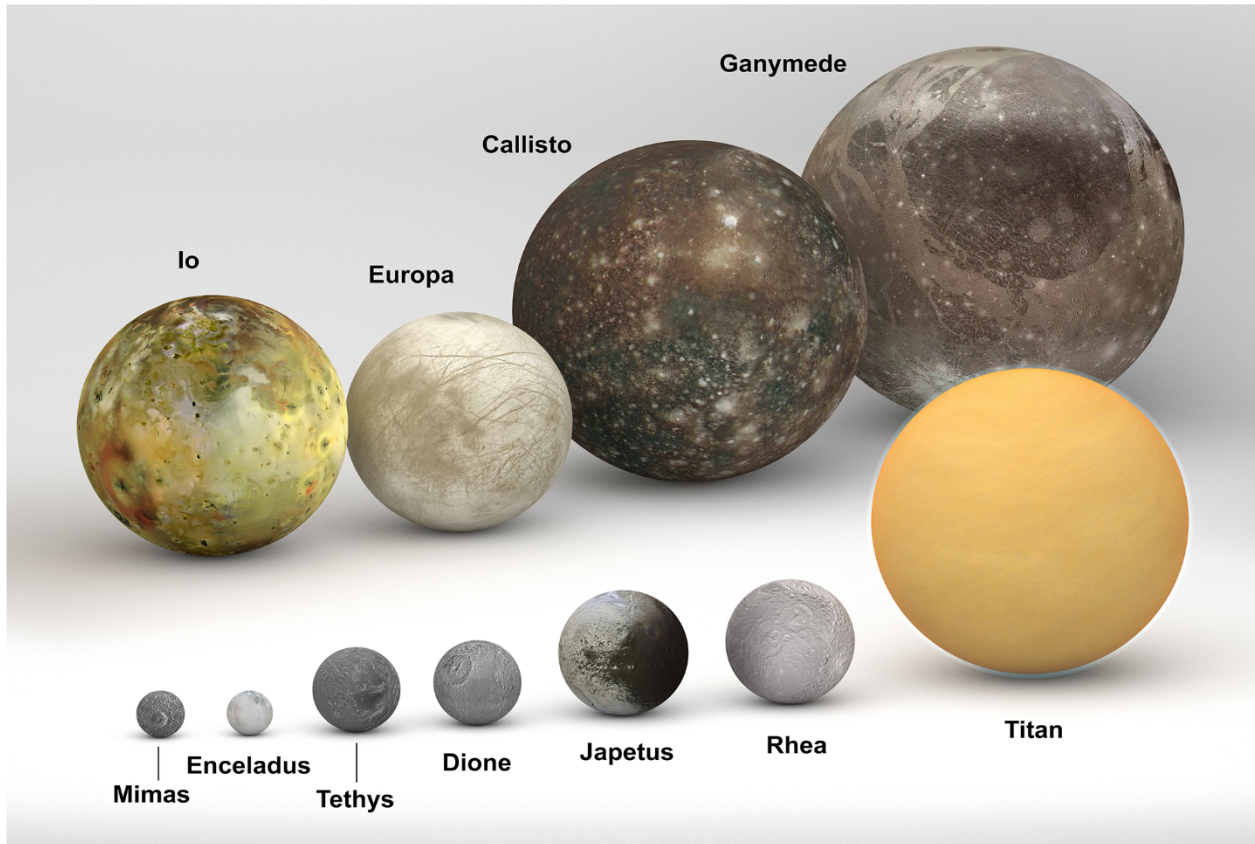
Beyond Mars, is the Asteroid Belt—a wide strip of space rocks that orbit around the Sun. The first discovery of an asteroid with a moon was made possible by the unmanned space probe, Galileo. The primary mission of Galileo was to study Jupiter and its moons, but it also traveled through the Asteroid Belt and took pictures. NASA (National Aeronautics and Space Administration) astronomer, Ann Harch, was reviewing the images Galileo sent back to Earth when she saw that the 9-mile wide asteroid, Ida, had a small moon, less a mile in diameter, orbiting around it. An estimated 2% of the asteroids in the Asteroid Belt have moons. Some asteroids even have two of them.

The space probe Galileo spent 14 years in space (1989 – 2003), most of it studying Jupiter, the largest planet in our Solar System, and its moons. Jupiter has over 50 moons. The four largest moons (those discovered by the astronomer Galileo) are Io, Europa, Callisto and Ganymede. Io has more than four hundred active volcanoes, which give Io its **mottled** appearance of yellow, orange, red, white and black splotches. Scientists believe Europa, Callisto, and Ganymede may have subterranean water beneath their icy crusts. Ganymede is the largest moon in our Solar System—with twice as much mass as Earth's Moon. According to NASA researchers, there may be more **subsurface** water on Ganymede than there is in all of Earth's oceans.

Like Jupiter, Saturn has over 50 moons. Some of these moons orbit within Saturn's rings. Six of these moons (Pan, Daphnis, Atlas, Prometheus, Pandora, and Aegaeon) are known as **shepherd moons**. Shepherd moons help the rings maintain their shape. The rings are made up of icy particles, dust, and rock. The shepherd moons are located on the inner or outer edge of Saturn's rings, or in the gaps between the rings. Just as shepherds herd their sheep to keep them from straying, the gravity of the shepherd moons keeps the ring particles from drifting off.

*As you answer this week's questions, highlight your evidence in the text.*

Saturn's moon Titan is the second-largest moon in the Solar System. Titan is the only place in the Solar System, other than Earth, that has liquid lakes and oceans on the surface. Titan's lakes and oceans aren't the kind you would want to dip your toe in. They're filled with liquid methane and ethane, not water. On Earth, methane and ethane are gasses. Titan's surface temperature of  $-180^{\circ}$  Celsius is well below the freezing point of water, but in Titan's frigid atmospheric conditions, ethane and methane condense to a liquid.



Size comparison between Jupiter's moons and Saturn's moons.  
*Top row: Jupiter's largest moons Bottom Row: Saturn's largest moons*

Uranus, the seventh planet out from the Sun, has 27 moons, and the eighth planet, Neptune, has 13 moons. Neptune's moon Triton is as large as the dwarf planet Pluto. Most moons orbit in the same direction as the spin of the planet. Triton, however, orbits in the opposite direction of Neptune's spin. This is referred to as a **retrograde orbit**.

Dwarf planet Pluto has five moons. Pluto and its largest moon, Charon, are almost the same size, and only 12,200 miles apart. By comparison, our Moon is twenty times farther away from Earth. Charon doesn't orbit around Pluto. Instead, both Pluto and Charon rotate around a point in space that falls between them. Pluto's four other moons orbit around Pluto and Charon as if they were a single celestial body.

Of the four other recognized dwarf planets near Pluto, one has one moon, another has two moons, and the other two dwarf planets have no moons. Scientists estimate that there may be as many as 200 other dwarf planets at the outer edge of our Solar System. As telescopes grow increasingly more powerful and space probes travel farther and farther, it's likely they will discover more moons, as well.

Name:

Fiction: Context Clues – Q1:5

Date:

*As you answer this week's questions, highlight your evidence in the text.*

## Fever in New Orleans!

Gabriel dipped his bucket into the rain barrel outside his family's small house, then paused to wipe the **sweat that coated his forehead like a second skin**.

It was July in New Orleans and as Gabriel's father would say, it was hot enough to make the devil sweat. Despite the **sweltering** temperature, Gabriel wore long sleeves. This was just one of the precautions health experts advised people to take to protect themselves from mosquito bites, which they said carried Yellow Fever. They also directed people to pour oil on top of any standing



water, like rain barrels, so mosquitos couldn't lay their eggs on the surface. The rain barrel at Gabriel's house was oil-free. Gabriel's parents, like many others, found it hard to believe that tiny mosquitos could cause such a deadly disease.

"Hey, Gabriel!" His best friend, Lucien, called to him over the fence that separated their backyards. "When are you coming back to school? It's **dull as dirt** there without you."

Gabriel shook his head. "I don't know, Lucien. Mama says **going out in public these days is an invitation to sickness**." He had not left his house in weeks, not even to go play at Lucien's.

"You could be bitten by a mosquito at home just as easily as anywhere else," Lucien protested.

"Tell that to my parents. It's 1905, but their thinking is stuck in the 1800s. They think the disease is caused by vapors in the air. They blame outsiders and immigrants for breathing Yellow Fever into our city. Like if you bump up against one of them, their foreign bacteria jump onto your skin and infect you," grumbled Gabriel.

"Well," Lucien said, as he poured a thin layer of oil over his family's water cistern. "It is spread by foreigners, but by foreign mosquitos, not people. Don't they read the newspaper? There was an article in there today about a doctor in Cuba who worked with our military to prove that it's carried by mosquitos. It came here on cargo ships."

"Mother only reads the obituary section. She says she's too busy taking caring of my baby sister, Sophie, to read beyond that. But she keeps up on who's died and sends out **condolence** letters when people she knows have lost loved ones. She sure has gone through a lot of stationery." Gabriel trickled some water from the bucket into his mouth. It was warm, but still, the wetness was soothing going down his dry throat. "She cried when she read that Archbishop Chapelle died."

"She knew the Archbishop?" gaped Lucien.

"No, but his obituary reminded her of how much she misses going to church," said Gabriel.

"What about your dad?" asked Lucien.

"Nah, I don't think he really misses church, too much," said Gabriel.

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"I meant, does he read the newspapers?" asked Lucien.

"Oh, my father doesn't trust newspapers. He says they'll print any old nonsense just to sell more copies. Says newspapers are only good for two things: fanning oneself in this heat and swatting bugs."

"At least he's killing mosquitos," Lucien pointed out.

"Yes, but it's not enough," sighed Gabriel. "My parents aren't following any of the city **ordinances**. My dad says we don't have the money to buy screens for the windows and mosquito netting for our beds, and that we're not going to waste oil by adding it to perfectly clean water."

"They know they could get fined, or worse, thrown in jail, for not doing this stuff, right?"

"He says the city's more focused on what to do with all those who've died, than keeping track of those who are still living," answered Gabriel. "There're more deaths than the local cemeteries can handle."

"I hear folks say that pretty soon, **people will have to start digging their own graves**," Lucien joked, but then changed to a somber expression. "I guess it's not really that funny, though."

"No, not really," said Gabriel. His mouth was a grim line.

"Tell you, what," said Lucien, brightly. "Give me five minutes and I'll come knocking on your door and invite you over. It will be harder for your parents to say 'no' to my face, right? Especially an incredibly handsome and charming face like mine." Lucien winked. "It'll be good for you to get out of the house."

Both boys carried their water buckets back into their house. Barely, a minute had passed when there was a tap, tap, tap, at Gabriel's door.

"I'll get it," called Gabriel. He rushed to the door before his parents could order him not to answer it out of fear that Yellow Fever was knocking. He threw open the door, saying "You're early. All the clocks broken in your house?"

But instead of Lucien, two uniformed police officers stood on their front steps. Despite the heat, a shiver ran down Gabriel's spine. They were dressed in blue, but Gabriel had a sinking feeling they were there on yellow business.

Name:

Fiction: Context Clues – Q1:6

Date:

*As you answer this week's questions, highlight your evidence in the text.*

## The Chatterbox Prince

Once upon a time, a Prince was born to a powerful land. His father King Elreth and his mother Queen Loria hosted a huge feast to celebrate Prince Arman's birth. It was to be the party of the century, and all the worthies of the realm were invited. The **well-to-do** and **upper crust** came bearing gifts. But not everyone arrived with good intentions.

The King's brother, Magni, who had been next in line to the throne before Arman's birth, gave the prince a beautiful silver cup with intricate carvings of monkeys. "This rare treasure **cost me an arm and leg**, but it's worth it to find a cup suitable for Prince Arman's first sips of water," Magni said.

The Queen filled the cup with water. Moments after the cup brushed against Prince Arman's lips, something strange occurred. The infant prince began speaking in complete sentences. **Like water over a waterfall, the words flowed out of him.**

"Alas," cried Magni, "Someone added an evil potion to the water." But Magni knew full well that the prince's endless chatter was the result of his cursed cup.

Poor Prince Arman quickly earned the nickname "the Chatterbox Prince." He spoke non-stop, pausing only to breathe, eat, and sleep. His words were unfiltered. Whatever popped into his head, popped out his mouth. This made him very unpopular among the worthies of the court, as he often peppered them with insulting questions.

"Is it true you're older than dirt?" he asked the Duchess of Gorm.

"Does it take special skill to grow eyebrows as bushy as hedges?" he asked the Earl of Wyg.

"Are you part walrus?" he asked Minister Viseer, the King's royal adviser, who had a very long mustache.

"Prince Arman should not attend when we entertain ambassadors," Minister Viseer told the King. "Not if we want to be at peace."

"Perhaps he'll fare better on the battlefield," said King Elreth.

"Doubtful," said Minister Viseer. "He will never have the element of surprise on his side. He'll tell his enemy exactly what he is going to do."

One day, a fierce dragon settled itself in the hills above the royal palace. The dragon caused quite a few fires and terrified the people.

"I shall go confront the dragon," said Prince Arman, who by now had grown into a young man, **hungry for adventure.**

"Yes," said Uncle Magni, imagining the crown on his head. "You are just the person to ask the dragon to leave."

"You mustn't," cried Queen Loria, "You'll be burned to a crisp!"

"Don't be a worrywart, mother," said Prince Arman. "I know what to do."

He had the royal blacksmiths craft him a fine suit of fireproof armor. It fit Prince Arman like a glove. However, his endless stream of words echoed so loudly within the steel-plated chamber, it gave the prince a terrible headache. He quickly shed the armor.

"That settles that," said King Elreth. "You're not going."

"Don't be such a stick-in-the-mud, father," said Prince Arman. "I know what to do."

He disappeared into the kitchen. Awhile later he emerged, covered in oven mitts. As Prince Arman rode off to meet the dragon, Magni waved good-bye with a smile on his face, and his eyes on the throne.

"Hey, Firegut. Yo, Lizard-breath," the Prince shouted at the dragon as he approached. "You and I need to talk."

"Name's Percy," said the dragon, "and I welcome the conversation." No one had spoken with the dragon in a thousand years. After such a long time without speaking, Percy had a lot to say. Prince Arman, as always, had a lot to say, too. They spoke simultaneously, for nearly a week. Of course, it was a heated discussion. Steam from Percy's breath went down Prince Arman's throat and eventually scalded his voice box. For the first time in his life, Prince Arman could not speak. Percy took this to mean that their conversation was over.

"Might you know the directions to Wales? I hear a charming green dragon lives there. I'd love to spark up a conversation with one of my own kind," said Percy.

Prince Arman pointed west. Percy bowed to the Prince and flew off. Prince Arman rode home.

"Is the dragon gone?" asked Queen Loria.

Prince Arman nodded, silently.

"Why aren't you gushing with words?" Magni seethed. "The merchant who sold me the cup told me the wordiness curse was lifelong!"

"You cursed my son?!" roared the King.

For his **treachery**, Magni was banished from the kingdom. Neither Percy nor Magni ever returned.

The Chatterbox Prince was now much loved. His vocal chords, however, never quite recovered. He could barely speak more than a few sentences at a time. In time, Prince Arman became King Arman, the Bold and Silent, a fitting end for the Chatterbox Prince.



Name:

Nonfiction: Central Idea & Summarizing – Q1:7

Date:

*As you answer this week's questions, highlight your evidence in the text.*

## Vampire Bats: Monster or Misunderstood?

Vampire bats are a staple of scary movies, haunted houses and Halloween decorations. They're portrayed as blood-sucking creatures that morph into vampires. Are vampire bats the monsters they're made out to be, or merely misunderstood?

Out of over 1,200 known species of bats, just three feed on blood. Known as vampire bats, blood is their only source of both food and water. Vampire bats don't suck blood. Their fangs don't act as straws; they pierce the victim's skin. As blood trickles out, the bat laps it up with its tongue. A substance in bats' saliva keeps the victim's blood from clotting until they have finished their meal.



Vampire bats are opportune feeders, but humans are not their preferred choice. The common vampire bat preys primarily on livestock, like cows, pigs, and horses, or on wild deer. Other vampire bat species seek out birds, like chickens, as prey. At most, they only drink about a tablespoon of blood. That's not enough blood to harm the animal, let alone drain a creature dry.

Vampire bats, like other bats, aren't blind. They can see well enough to get to and from their nesting and feeding sites. Because they hunt in the dark of night, bats rely on other senses to find prey. Using echolocation, they send out high-pitched sounds (too high-pitched for humans to hear). When the sound hits a prey animal, an echo is sent back to the bat. This echo tells the bat how big the animal is, whether it's moving, and where it is. Vampire bats are cautious hunters. They don't swoop in and land on their victims. They land on the ground nearby, then crawl up to them. Their heat-seeking noses help them locate warm veins to bite into. Vampire bats commonly bite their victims in the neck, but they have been known to latch onto other parts of the body, as well. A feeding lasts about 20 minutes, often while the victim is sleeping. When done, the bat flies away, and the prey may never know it was attacked.

Vampire bats rarely attack humans. However, if a human is bitten by a vampire bat, they could certainly survive the minimal blood loss. Anyone bitten by a vampire bat, or any bat, should get a rabies vaccine. Rabies is a disease that is transferred through the infected animal's saliva. Less than 1 percent of bats have rabies, so chances of contracting it from a bat are low. Still, it's better to be cautious, and always seek medical attention if bitten or scratched by a bat.

More than 2/3 of bat species eat insects. Others eat fruit, nectar and small prey animals. If only three bat species are vampire bats, why is the belief that bats suck your blood so widespread? Credit the popularity of Irish author, Bram Stoker's, 1897 horror novel, *Dracula*. Variations of vampire mythologies date back more than a thousand years, to ancient civilizations. In their ancient folklore, vampires were blood-drinking demons, but they had no association with bats. Bram Stoker's Count Dracula was the first vampire to be portrayed as a creature that could shape-shift into a huge bat. In reality, vampire bats are tiny. They have an eight-inch wingspan, weigh only about two ounces, and their body is about the size of a human thumb.

*Dracula* is set in Transylvania, Romania, a country in Europe. Interestingly, while 29 species of bats have been found dwelling in caves around Transylvania, none of them are vampire bats. Vampire bats live solely in Mexico, as well as Central and South America.

The idea that they can shape-shift into **supernatural** vampires is pure fiction. However, bats are the only mammals with wings. Though the bodies of some bat species might resemble a rat or mouse, bats are not part of the rodent family. They have a scientific grouping all their own, called "Chiroptera", which means "hand-wing".

Vampire bats are not evil monsters out to harm humans. In fact, they might play a role in human health. Researchers believe the anti-clotting substance in vampire bats' saliva could be used in medicine to reduce the risk of blood clots in humans. This substance could help in the fight against heart disease and stroke. In keeping with vampire lore, scientists have named the **anti-coagulant** in the vampire bat's saliva, draculin.



In 1931, the first *Dracula* film was released.

Name:

Nonfiction: Central Idea & Summarizing – Q1:8

Date:

*As you answer this week's questions, highlight your evidence in the text.*

## Ordinary Heroes of Hurricane Harvey

Most cities have several **organizations** that help plan for, prepare for, and respond to emergencies. These groups usually include a police department, a fire department, and an office of emergency management. As critical as these emergency departments are, they can't always assist everyone who needs help. Large-scale emergencies often require the cooperation of multiple agencies and even ordinary citizens.

In 2017, Hurricane Harvey damaged thousands of homes across Texas and dumped 30 inches of rain on the city of Houston. Firefighters, police officers, the US military, and National Guard units from several states all worked together to rescue people who were stranded by flooding. In addition to these officials, people who were not part of any official rescue group stepped up to help.

9-1-1 dispatchers and rescue workers worked as hard and as fast as they could. They operated for several days in a row without rest, but the disaster was far too great. They just couldn't help everyone who needed them. Many people who were stranded on rooftops and in flooded homes used their phones to contact friends or family. Those friends and family members then turned to social media such as Facebook and Twitter, desperate to find someone who could rescue their loved ones. Through those social media outlets, people who owned canoes, kayaks, motorboats, and other small watercraft received the addresses of people who needed rescue. They went to the addresses listed and took the stranded flood victims to safety. The Cajun Navy, a group of boat owners from Louisiana, loaded their boats onto trucks and raced to Texas when they heard about the flooding. They traveled the flooded streets of the Houston area, helping people get to shelters.

Boats were a huge help, but they certainly weren't the only way ordinary heroes made a difference. In one case, a Houston woman who was about to give birth needed assistance. She and her husband called for help. A fire truck made it through the flood waters, and several of her neighbors formed a human chain to help her get to the truck safely.

In Bay City, which is southwest of Houston, everyone needed help. The city had to be **evacuated**. Linda Leissner, who worked at the local high school, was helping at the city's emergency management office when she learned there weren't enough bus drivers to help people vacate the city. So, she did the logical thing: she called the high school's coaches, who were used to driving buses, and asked them to help. They assisted the city's residents to safety before getting out themselves.

After the flood was over, numerous people across the country banded together to help citizens in the damaged areas recover. Small groups from organizations of all kinds traveled to the area to help rebuild homes. Girl Scout and Boy Scout troops across Texas and the US worked to donate supplies and funds for relief efforts. A nationwide group of moms called Our Village collected donations of diapers, baby supplies, and gift cards from its members to deliver to families who needed them. These are just some of the groups of ordinary citizens who helped out.

In times of need, help comes from many places. We have emergency services and specially trained personnel who do outstanding work in the face of disaster. We also have ordinary citizens who do what they can to help when they are needed. Some heroes wear uniforms and others don't, but they all make a difference.