



SAMPLES OF STANDARDS STUDENTS ARE LEARNING THIS NINE WEEKS:

8TH GRADE ELA

STANDARDS: **RL.8.2, RL.8.4, RI.8.1, RI.8.2, RI.8.4, RI.8.9, W.8.1**

Excerpt from *One-Eyed Cat*

by Paula Fox

Ned loved snow, the whisper when he walked through it, a sound like candles being blown out, the coming indoors out of it into the warmth, and standing on the register in the big hall through which the dusty, metal-smelling heat blew up, and the going back out again, shivering, cold, stooping and scooping up a handful to make a snowball, packing it hard with wet mittens, hefting it, tossing it as far as he could, and the runners of his sled whispering across it as he sleighed down the slopes which were smooth and glittering and hard, like great jewels.

On the first of December, there was a heavy snowfall. When Ned looked out of his window the next morning, the river glowed like a snake made out of light as it wound among the snow-covered mountains.

10 He ate breakfast hastily, too preoccupied to read the story on the cereal box. Mrs. Scallop was broody this morning and left him alone, her glance passing over him as it passed over the kitchen chairs.

On the porch, he paused to take deep breaths of air which tasted, he imagined, like water from the center of the ocean, then he waded into the snow, passing the Packard, its windows white and hidden, the crabapple tree with its weighted branches, down the long hill trying to guess if he was anywhere near the buried driveway. By the time he reached Mr. Scully's house, his galoshes were topped with snow and his feet were wet. Mr. Scully's shades were drawn; the house had a pinched look as though it felt the cold.

Ned went around to the back until he could see the shed. There were boot tracks in the snow leading to it and returning to the back door. He guessed the old man had taken in the cat's bowl; it was nowhere to be seen. You couldn't leave anything out in this weather, it would freeze. Mr. Scully had told him that finding water in the winter was a big problem for animals. Licking the snow or ice could make them sick.

Ned stared hard at the shed. Perhaps the cat was inside, squeezed in behind logs in a tight space where its own breath would keep it warm. He was going to be late to school if he didn't get a move on, but he kept looking hard all over the yard as though he could make the cat appear out of snow and gray sky. Twice, his glance passed over the icebox. The third time, he saw that

the motionless mound on top of it was not only the quilt but the cat, joined into one shape by a dusting of snow.

30 Ned held his breath for a moment, then put his own feet in Mr. Scully's tracks and went toward the shed. The tracks had frozen and they crunched under Ned's weight, but the cat didn't raise its head. Ned halted a few feet away from it—but of course, he realized, it wouldn't hear him because of its deaf ear. He could have gone closer to it than he'd ever been but he had a sudden vision of the cat exploding into fear when it finally did hear him.

35 When he got back to the front of the house, he saw fresh footsteps on the road. He could tell it was the road because of the deep ditches which fell away to either side. He guessed they were Billy's tracks. It was odd to think that Billy, huffing and puffing, had gone past Mr. Scully's place, thinking his own thoughts, while he, Ned, only a few yards away, had been searching for the cat. He found Evelyn's tracks, too, and later on, Janet's, the smallest of all. He felt ghostly as if he'd been left alone on a white, silent globe.

40 Somewhere in the evergreen woods, snow must have slid off a bough, for he heard the loud plop, then the fainter sound of the bough springing up, relieved of the weight. He thought about the cat, visualizing how it had looked on the quilt. How still it had been! Why hadn't he gone right up to it, looked at it close, touched its fur? Why had it been so motionless—still as death, still as a dead mole he'd seen last summer in the grass near the well? He came to the snow-covered blacktop road upon
45 which a few cars had left their ridged tire tracks. He had a strong impulse to turn back, to play hooky for the first time in his life. Mr. Scully, with his poor eyesight, might not spot the cat on top of the icebox, might not, then, set food out for it. Fretting and shivering, his feet numb, Ned went on to school. He tried very hard to concentrate on his lessons, to watch Miss Jefferson's plump, even handwriting on the blackboard as she wrote out the lines from a poem by Thomas Gray that the
50 class was to memorize that week, but try as he might, the image of the unmoving animal on the ragged old quilt persisted. Last week, on a rainy afternoon, the cat had looked at Ned, had cocked its head as though to see him better. Its one eye, narrowed, had reminded him of a grain of wheat.

“The curfew tolls the knell of parting day,

The lowing herd wind slowly o'er the lea . . .”

55 Ned read the lines several times before copying them down in his copybook. The words made no sense to him. It was this that had made his hours in school so hard ever since he and Mr. Scully had seen the cat last autumn, this drawing away of his attention from everything that was going on around him. He was either relieved because the cat was where he could see it or fearful because he didn't know where it was.

1. Read these words from lines 18 and 19.

Mr. Scully's shades were drawn; the house had a pinched look as though it felt the cold.

The use of the words "pinched look" contributes to the tone of the story by making the house seem

A tense

B angry

C uncertain

D disappointed

RL.8.4.

Rationale: Answer A is correct. In the sentence from the passage above, pinched means the same as tense.

2. Which quotation **best** supports a central theme of the story?

A "He ate breakfast hastily, too preoccupied to read the story on the cereal box." (line 10)

B "Twice, his glance passed over the icebox." (line 26)

C "... but try as he might, the image of the unmoving animal on the ragged old quilt persisted." (lines 50 and 51)

D "Ned read the lines several times before copying them down in his copybook." (line 55)

RL.8.2.

Rationale: Answer C is correct. Throughout the entire passage, Ned is fixated on the cat being out in the cold and the snow.

Clash of the Condiments: Wasabi vs. the Chili Pepper

by Mary Beth Cox

Most condiments are peaceable enough. The sauces, spreads, and pickles of the world add flavor to our foods without kicking up much of a fuss. This is not true of the pungent or “hot” condiments. They are more aggressive. They get our attention by purposely causing us pain. These strong-armed seasonings are often the source of friendly competitions. Loyal fans will contend that their favorite pungent condiment is the one that packs the most powerful punch. Ladies and gentlemen, you are cordially welcomed to just such a contest. Here it is, the Match of the Moment: Wasabi vs. the Chili Pepper.

IN YOUR CORNERS

Introducing in the Green Corner, hailing from the island nation of Japan, sushi’s inseparable sidekick: Wasabi! *Wasabia japonica* grows wild on the cool, damp banks of Japan’s many mountain streams. The chill of its habitat is quite ironic since wasabi is famous for bringing the heat. The plant is a botanical relative of mustard and horseradish. Pungency runs in the family. Traditionally, wasabi is prepared by grating its rootstock on the abrasive skin of an angel shark. Authentic wasabi is relatively rare and difficult to come by. The emerald condiment that is served outside of Japan is almost always horseradish pulp dyed with green food coloring. Whether the wasabi is real or whether it’s the more common substitute, a whopping snootful will make you cry for your momma!

And in the red corner, originating from the Central and South Americas, now an international culinary superstar: the Chili Pepper. Chili peppers are fruits of the plants of the botanical genus *Capsicum*. They are related to the tomato and the eggplant. They’re the renegades in an otherwise mild-mannered botanical family. Chili peppers include but are not limited to the poblano, the cayenne, the jalapeño, the tabasco, the habanero, and the serrano. One of these culprits sometimes goes by the alias “chipotle.” A chipotle (pronounced chee-POHT-lay) is none other than a dried smoked jalapeño. Chilies were introduced to the non-American world by Christopher Columbus, who mistakenly identified them as variants of black pepper. Chilies have since taken the culinary world by storm. They appear alongside dishes served around the globe, from the Basque provinces to North Africa and the Middle East, to India and Southeast Asia. A potent chili pepper in the kisser will make you rue the day you were born!

POWERFUL PUNCHES

Both wasabi and chilies are condiments of world-class pungency. But how do they match up head to head? Each has its own unique tactical move. Each has its own special point of attack. The active ingredient of the wasabi plant is stored stealthily in its cells. Under normal growing conditions, this ingredient is completely harmless. It’s not until the plant’s cells are ruptured (as by the grating action of angel shark skin) that the trouble begins. *Enzymes* convert the ingredient into molecules of allyl isothiocyanate. It’s the chemical characteristics of these irritating molecules that are the secret to wasabi’s pungency. Allyl isothiocyanate molecules are lightweight. They are *volatile*. They are also soluble in water. As a consequence, the consumption of wasabi launches an airborne assault on the consumer’s

sinuses. Allyl isothiocyanate molecules waft up the nose and back of the throat. They dissolve in the watery fluids they find there. They intercept nerve endings in the nasal passages. Specifically, these molecules target pain receptors of the type known as TRPA₁. TRPA₁ receptors respond to the attack by sending emergency signals to the brain: “Yikes . . . we’ve gotten hold of something painfully hot!”

Chili peppers conduct operations of a different sort. Their active ingredient is a substance called capsaicin. It’s found in the spongy inner tissue of peppers, but it can leak onto the seed and inner wall of the fruit. Capsaicin molecules are heavier than the molecules of wasabi’s allyl isothiocyanate. They are not volatile. They prefer to dissolve in oils, so they aren’t as easily dissolved in water. Capsaicin molecules instigate an incendiary assault upon contact with exposed vulnerable surfaces. They cling to the tender tissues of the lips, mouth, and throat. They burn eyes that are rubbed with capsaicin-laced fingers. Capsaicin molecules interact with pain receptors of the type TRPV. Again an alert is expedited to the brain: “Mayday! Mayday! Let’s not eat any more of that, please!”

WHERE’S THE REFEREE?

So which of these condiments causes the most pain? To settle any contest, a scoring system is required. There is a way to compare the relative heat intensities of the various chili peppers. It’s called the *Scoville scale*. Scoville ratings are determined by brave human test subjects who willingly sip extracts of chili pepper juice. Extracted juices are diluted again and again until their heat can no longer be detected. A high rating on the Scoville scale means that a lot of dilutions are necessary to eliminate the pain caused by a particular pepper. Unfortunately, Scoville ratings are not applicable to wasabi. The method is specifically designed to extract capsaicin from chili peppers. It doesn’t work for allyl isothiocyanate, or anything else.

POWERFUL PUNCHES

Pepper pungencies are also compared by using chromatography. *Chromatography* is an analytical technique that separates the chemical components of a mixture. After separation, the amounts of each component are quantified. Chromatography can determine how much capsaicin is in a pepper. It can also determine how much allyl isothiocyanate is in wasabi. If two chili peppers have the same amount of capsaicin, it can be assumed that those peppers are equally “hot.” But the same assumption cannot be made when comparing chili peppers to wasabi. There’s no way to know if equal amounts of capsaicin and allyl isothiocyanate cause equal degrees of pain. So chromatography cannot definitively judge this contest.

It isn’t even possible to directly measure and compare nerve responses, since two different types of pain receptors are involved. Wasabi and chili peppers are like pungent apples and oranges. There’s no objective way to declare one more potent than the other. This friendly competition won’t be settled anytime soon. Everyone is free to chime in with an opinion. You just have to try both of these pungent powerhouses, then root for your own favorite flavor of pain.

1. Read this sentence from the article.

As a consequence, the consumption of wasabi launches an airborne assault on the consumer's sinuses.

What does the phrase "airborne assault" add to the author's description?

A It explains the effect of experiencing the molecules in wasabi.

B It suggests a painful experience that makes wasabi undesirable.

C It warns that direct contact with wasabi causes injury.

D It cautions that wasabi causes an intense repeated attack occurring over time.

RI.8.4

Rationale: Answer A is correct. Since the molecules are lightweight, they can become airborne and be brought into a consumer's sinuses.

2. The Scoville scale determines the strength of the heat in chili peppers by

A counting the number of sips of chili pepper juice a human subject can consume

B recording the amount of capsaicin present in specific amounts of chili pepper juice

C measuring how much chili pepper juice must be weakened for it to no longer cause pain

D comparing descriptions of the heat a human subject feels while drinking chili pepper juice

RI.8.1

Rationale: Answer C is correct. Read these sentences from the text.

It's called the *Scoville scale*. Scoville ratings are determined by brave human test subjects who willingly sip extracts of chili pepper juice. Extracted juices are diluted again and again until their heat can no longer be detected.

Excerpt from *Humans With Amazing Senses*

Fourteen-year-old Ben Underwood of Sacramento, Calif., is one of the few people known to use echolocation as a primary means of navigating the world on land. There's not even a hint of light reaching his brain. His eyes are artificial, but his brain has adapted to allow him to appraise his environment. He makes a "clicking" sound to communicate with objects and people around him.

Scientists have discovered that in the brains of the blind, the visual cortex has not become useless, as they once believed. When blind people use another sense—touch or hearing, for example—to substitute for sight, the brain's visual cortex becomes active, even though no images reach it from the optic nerve. Echolocation creates its own images.

"I can hear that wall behind you over there. I can hear right there—the radio, and the fan," Ben says. Ben says every object in his life talks to him in ways that no one else can hear or understand.

Forty-year-old Daniel Kish of Long Beach, Calif., also uses echolocation, and has become an expert on it, founding the World Access for the Blind, an organization that teaches others how to echolocate. Kish leads other blind people on mountain biking tours and hikes in the wilderness, visualizing and describing the picturesque sights around him through echolocating.

Clicking to Do Anything

If you listen closely to Ben or Kish, you can hear how they find their way. Ben says he can distinguish where the curbs are as he cruises his neighborhood streets. He can find the pole and the backboard on a basketball goal, and tell which is which by the distinctive echo each makes. Even though he can't see the goal he's aiming for, he can sink a basket. Ben doesn't remember how or when he began clicking, but he's developed his abilities to such an extent that aside from echolocation, he can rapidly discriminate the sounds in video games.

Ben lost his sight when he was 2. He was diagnosed with cancer in both eyes, and when chemotherapy failed, his mother, Aquanetta Gordon, was left with one option: For her son to live, both his eyes had to be surgically removed. Gordon remembers her son after the operation. "He woke up and he said, 'Mom, I can't see anymore, I can't see anymore.' And I took his hands and I put them on my face and I said, 'Baby, yes, you can see.' I said, 'You can see with your hands.' And then I put my hand on his nose and I said, 'You smell me? You can see with your nose and your ears. . . . You can't use your eyes anymore, but you have your hands and your nose and your ears.' "

In a house already filled with three other children, Ben's mother decided not to treat his blindness as a handicap. In school, Ben recognizes his classmates by their voices. With the help of Braille books and a talking laptop computer, Ben attends the same classes as sighted students.

Rich Mental Images, Without Visual Elements

Like Ben, Kish also lost his eyesight to cancer at age 1. He was raised to believe he could do pretty much anything, and he discovered clicking by accident as a child.

"I have mental images that are very rich, very complex. They simply do not possess the visual element," Kish says.

In retrieving those pictures, Kish varies the pace and volume of his clicks as he walks along; and what he can tell you about an object's qualities is sometimes 50 astonishingly thorough.

If bats can distinguish prey as small as mosquitoes with echolocation, and some dolphins can detect small targets a hundred yards away, what are the ultimate capabilities of human beings like Ben and Kish?

Peter Scheifele, who studies hearing and sound production in animals and people at The University of Connecticut, analyzed samples of the clicks that Ben and Kish make. "Ben clicks, looks to me like once every half second, whereas a dolphin is actually making 900 clicks per second. And the bat is even faster than that," Scheifele says.

The bottom line: Human beings send out sounds at much slower rates and lower frequencies, so the objects people can picture with echolocation must be much larger than 60 the ones bats and dolphins can find.

1. Which statement expresses a central idea of the article?

A Very few people use echolocation in their daily lives.

B Echolocation is a technique that can be utilized by humans.

C Echolocation has been studied by scientists for many years.

D Some animals are known for using echolocation to find food.

RI.8.2

Rationale: Answer B is correct. The entire passage discusses echolocation and how it can be taught to those that are blind. Several examples were given in the passage of blind people who have learned to use echolocation.

RI.8.9 - Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

DIRECTIONS:

The two texts below were both written about the same incident, and printed in competing newspapers.

Read the two texts. Then answer the questions.

Power Outage Startles Main Street

A piece of metal broke loose from a power line 30 miles northwest of Bristol City, temporarily taking out the power to an entire block of Main Street yesterday afternoon. The outage caused the King's Hill bank to close, and inconvenienced hundreds of people attending a convention at the Savoy Hotel when the backup generator failed to come on. Several people were trapped in stalled elevators, and the Savoy Café, which attracts customers from all over town, was forced to close. It took most of the afternoon to fully restore electricity. Representatives from BrisCo, the power company responsible for the faulty equipment, blamed isolated high winds for the incident. Representatives are investigating the incident, which they called "a total fluke."

Explosion Ruled "A Total Fluke"

Widespread power outages affected the south side of town, including most of Main Street yesterday afternoon - all because of an explosion at an electrical station, officials said. Many of the outages were brief, but some, like at the King's Hill bank and the Savoy Hotel were longer, and required emergency evacuations and the attention of first responders. About 20 residential and commercial customers were affected in Bristol City proper, while about 2,000 lost power in the more rural northwest area where the explosion took place. BrisCo officials reported that all power was restored by midnight. Area first responders cited a transformer explosion at an electrical transfer station about 35 miles northeast of Bristol City, Bristol City Electric Cooperative (BrisCo). No one was injured, the utility said.

Text #1 Facts

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Text #2 Facts

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Do the texts disagree on matters of fact or interpretation? _____

W.8.1 - Write arguments to support claims with clear reasons and relevant evidence.

Future President

Some day, you and your classmates will be the adults in charge of running the world. Is that thought exciting or terrifying? Which of your classmates would make the best president of the United States? Write an editorial announcing a presidential bid by a classmate of yours (or yourself). Tell why the person would make an excellent president, provide the person's qualifications, and urge readers to vote for the candidate.

