

Two Shots

Eleven . . . The high-pitched sound made by ten pairs of squeaking tennis shoes permeates the hush that has fallen over the enormous crowd. *Ten . . .* Four players simultaneously leap into the air, one releasing the basketball that was perfectly perched upon her steady fingertips. *Nine . . .* The piercing trill of the referee’s whistle resonates throughout the gymnasium.

“Foul, number twenty-one, white team,” shouts the referee. “Shooter is number thirty-two, red. Two shots.” What a thrilling game this has proven to be! The Eagles, the home team wearing white, are winning by one point. The Wildcats, the visiting team draped in red, desperately need a miracle. A bench full of hopeful girls and a gymnasium full of anxious people wonder whether I have any miracles to spare.

I, Callie Barton, am number thirty-two on the red team, the Wildcats. I am the player who was just fouled as she boldly attempted a game-winning jump shot. With nine seconds remaining, I have been allotted two free throws—the second of which could win the game and the conference championship for my team.

“Time-out, white,” calmly says the referee. This classic action in competitive sports is used when a player faces a high-pressure situation—a football kicker attempting a winning field goal or a basketball player attempting two free throws to win a game. In such situations, the opposing coach calls a time-out to give the player extra time to “think about it.” The Eagles obviously expect me to crack under pressure.

“Callie,” whispers my coach, Mr. Himes. I see excitement in his eyes as he says, “Your team needs you to concentrate. Take this opportunity to put those practice shots to good use.” When he mentions my “practice shots,” he is referring to my famous tradition. I have this rule that I cannot leave the basketball court without making two free throws in a row, or I will suffer bad basketball luck. This routine often keeps me on the court after my teammates have gone home. My teammate Fran and I share rides, so she must wait for me on those evenings when I struggle. Her saying, “Come on, Cal! Sink those free throws so we can go home!” has practically become part of the tradition itself.

Once again, the referee’s loud whistle sounds, signaling that the time-out has ended and play is to resume. Doubts begin parading through my mind as I approach the line. *If I miss the first attempt, I’m immediately a failure. Then, if I also miss the second shot, I am absolutely . . .*

“Call!” Fran’s enthusiastic voice startles me out of my own thoughts. As she claims her spot on the hash marks, she calmly assumes the rebounding position, smiles, and says, “Sink those free throws so we can go home!”

With those words, the simple truth of my situation is brought to light, and I finally recognize what Coach Himes and Fran have been suggesting with their words of encouragement. I can accomplish what I have to do right now simply because I accomplish it every day!

The referee flings the ball toward me, and I visualize myself on the free-throw line in my school’s gym. I think about what I think about every night at the end of practice: *I’ve got to make my free throws. I wonder what Mom is making for dinner. What homework do I have to do?*

Swish! My first attempt glides across the air and slips through the basket. The roar of my teammates and our fans is exhilarating. As long as we prevent the Eagles from scoring, I have given my team another shot at victory in overtime.

Now I feel confident.

Swish! The second shot mimics the first. The Wildcats have reclaimed the lead with only nine seconds remaining.

Eight! . . . The Eagles quickly inbound the ball. *Seven . . .* My teammate Jill guards the opponent dribbling down the court. *Five . . .* The Eagle near Fran clutches the basketball. *Four . . .* She rotates and hurls a desperation shot. *Three . . .* It smacks the rim and bounces back out. *Two . . .* Fran grabs the rebound and clasps the basketball in her arms. *One . . . BUZZ!*

The Wildcats win! Everyone charges me, and I am instantly on the ground beneath a mound of celebration. Even my friends from the bleachers come to congratulate me and the other Wildcats. Once the excitement subsides, Fran announces, “I take back every time I teased you about your weird rule. Now let’s go home—to celebrate!”

From Food to Fuel

You need energy to work, play, breathe, and even to read this sentence. Just like a car, your body must take in fuel and change it to energy so it can perform all its functions. That is where the digestive system comes in. The digestive system takes in fuel in the form of food, breaks it down, and sends it all around the body to be used as energy.

Sometimes when people think of digestion, they think only of the stomach. The stomach is one part of the system. But there are many parts and many steps to the process. Digestion starts with your teeth and your mouth. As you chew food, the saliva in your mouth immediately begins to break down the food. The saliva comes from special glands inside the head near the ear, tongue, and jaw. These glands are called salivary glands.

When you smell food cooking, the salivary glands start working. If you are hungry and catch a whiff of your favorite meal, before long your mouth may begin to water. As a matter of fact, you might even say digestion begins with the sense of smell!

Chewing breaks the food down into smaller and smaller pieces so it can be swallowed easily. The tongue also helps mash the food around in the mouth. Then the tongue pushes the food to the back of the throat and you swallow. When you swallow, the chewed-up food goes down a tube in the back of your throat called the esophagus. The windpipe, which receives the air you breathe in, also begins in the back of the throat. Your body has a special flap called the epiglottis that closes up the windpipe while you are swallowing and makes sure the food goes down the right tube. How does food then get down the esophagus? Muscles squeeze the walls of the esophagus, pushing the mashed food farther and farther down. After a few seconds, this squeezing motion has pushed the food down into the stomach.

The stomach is shaped like the letter *J*. It is sort of like a stretchy sack that expands when you eat a lot. Very strong stomach acids continue to digest the food even more. The food is churned in the stomach until it becomes a thick liquid. Now it is ready for the next step in the digestion process.

Next, the food enters another tube called the small intestine. It is very long and coiled around your insides below the stomach. If you stretched out an adult's small intestine, it would be around twenty feet long! The small intestine helps to break down food even more.

At this point, digestion gets help from some other organs in the body. The liver produces a substance called bile that helps break down fats so they can be absorbed into the bloodstream. Another organ, the pancreas, produces liquids that also help break down some nutrients. Food has now been reduced to microscopic pieces. It is a thin liquid by now, and as it travels through the walls of the small intestine, all those nutrients can be taken up by the bloodstream. The blood travels to every part of the body, supplying cells with these nutrients. But wait—there is more!

Next, the food that is not broken down and absorbed in the small intestine goes into the large intestine. The large intestine is not as long as the small intestine but still can stretch out to about five feet. That is as long as the average person is tall! The large intestine is filled with good bacteria that help break down food even more. The bacteria can be quite noisy when they are doing their job. Sometimes they bubble and make gas that your body releases as . . . well . . . gas. The large intestine also absorbs a lot of water while it holds the food your body does not use or need.

About eighteen to thirty hours after you eat something, the undigested food is ready to leave your body. The body has taken all the nutrients it can. Your food has been changed to fuel for riding your bike, playing soccer, or even doing your homework. The next morning, when you sit down to eat some cereal, the process of digestion begins once again.

Vocabulary

FOCUS Review the selection vocabulary words from “A Handful of Dirt.”

churning

debris

decay

emit

excrete

lubricated

ratio

ravenous

ruthless

succulents

supremacy

PRACTICE Complete each sentence with a selection vocabulary word. Each vocabulary word should be used once.

1. The waste that animals _____ from their bodies can be used to make the soil better.
2. The _____ from the strong windstorm could be found for miles.
3. You often find _____ in environments where it does not rain often, since they store water.
4. My brother is _____ when he plays games with me; he never lets me win.
5. The _____ of the runners will be determined in the upcoming championship race.
6. The dogs were _____ after playing and running outside for hours.

7. The strong winds were _____ the waves, which tossed the little boat on the sea.
8. The book to student _____ is ten to one, so there are ten books for every one student.
9. How long does it take an apple to _____ naturally on the ground?
10. When you blow a dog whistle, it will _____ a sound too high for the human ear to hear.
11. The _____ in the road will be repaired and sealed this week.
12. Jordan _____ the chains of the bicycle with oil before the bike ride.

APPLY Read each sentence. Answer each question by explaining the definition in your own words.

14. You are filling in the crevices in the patio with sand. What are you doing?

15. The rescued kittens were ravenous when they were found. What does that mean?

16. You lubricated the valves on your trumpet. What does that mean?

17. The ratio of students to tables is two to one. What does that mean?

18. The small flashlight will emit enough light to find the path. What is happening?

Choosing a King

Once upon a time, in a land far, far away, lived a prince named Frederick. His uncle was the King who had no children. The King would have to choose one of his nephews to follow him in ruling the kingdom. The King thought Frederick was too kind to be a good king. Frederick's brother Frank was known for his ruthlessness. Frank always boasted about his supremacy to all in the royal court. Frank did not seem to care what others thought of him, and the King admired that.

One night the King dreamed that his kingdom was decaying. All the plants were dying, and even the succulents in the area were without water! The people were ravenous because nothing would grow and there was so little to eat. He was not sure what he could do as King to help the people of his country. His dream showed that Frank was King, and he suddenly awoke.

The following day, the King's mind churned with thoughts of the dream, trying to understand its meaning. He tried to shake the bad feeling of the dream, but he could not. He thought it might be a warning that Frank would not make a good king, but he still felt Frederick was too gentle to be a good king. What could he do? Maybe Frederick needed to do some hard work. So, the King ordered Frederick to help the town folk clear out the debris from a recent storm. Frederick was glad to do his part to help the people.

Frederick worked hard, chopping up large trees that had fallen across the road. He worked from sunrise to sunset, developing calluses on his hands from all the hard work. Frederick liked the hard work, he liked working alongside the people, and he liked knowing that his work helped others. Frank saw how people liked Frederick, and soon he had a ruthless plan to keep Frederick from becoming king.

“Brother, you have been working so hard and your hands must be blistered and callused. You must try this ointment,” said Frank as he handed Frederick the small jar of cream. “Just use a ratio of one spoonful of ointment to three drops of oil for three days, and you will never have another callus again!”

“Thank you, Brother,” said Frederick, “It is kind of you to think of me.”

Frederick knew his brother was ruthless and not someone who thought of others first. So, he decided not to use the ointment Frank gave him, even though his hands were sore from all the work. Perhaps he would ask some of the people in town what they did.

When he asked the man chopping the tree next to him, the man emitted a loud laugh. Frederick was surprised at that response. The man said that his hands had been hard with calluses since he was a young boy. He explained that any lubricating cream would just make the hands soft and they would hurt longer. He just needed to let the skin harden, and it would not hurt.

Frederick thanked the man and got back to work chopping and breaking down the debris that littered the town. As he worked, he wondered what he should do with the jar of ointment. It obviously wasn't anything he would need, but what could he do with it? It might have something dangerous in it, like some sort of poison excreted from a frog, but it would be impossible to know for sure.

After a few weeks, the debris was clear from the town and the King ordered Frederick back to the royal court. He wanted to speak with both Frederick and Frank about the future of the kingdom. During the last few weeks, he thought about the qualities that made a good king, and he was starting to rethink which nephew would be the best king. Frederick proved tough, in addition to being kind, and Frank had continued to be ruthless and self-serving.

Frank and Frederick appeared before the king, giving their respects for his supremacy. The King surprised them by saying, "I have a bad blister on my hand. Would either of you have a healing ointment I could use?"

Frederick pulled out the jar of ointment that Frank had given him. Frank's eyes grew wide, recognizing it at once, and said, "No, brother! This is not for the King!"

"Why not?" asked the King, "Did you not give this ointment to your brother to heal his blisters?"

"I did, your majesty," started Frank, "however if you use it, all that you touch will decay."

The King knew at once the meaning of his dream and that Frederick would be the next king.

Cause and Effect

FOCUS

- A **cause** is the reason an event happens.
 - An **effect** is what happens as a result of a cause.
- The words *because*, *since*, *therefore*, and *so* show the reader that a cause-and-effect relationship has taken place.

PRACTICE Complete each cause-and-effect relationship below by providing the missing half.

1. The path was steep and slippery, so _____

2. Isaiah won the local spelling bee, so _____

3. Because the runner did not give up, _____

4. The family packed their belongings in boxes because _____

APPLY Read the sentences below, and identify the cause and effect in each one.

5. We have no school today because it is a holiday.

Effect: _____

Cause: _____

6. Because the baby was tired and hungry, he cried and cried.

Effect: _____

Cause: _____

7. I wanted to know more about butterflies, so I did some reading and research.

Effect: _____

Cause: _____

8. Jack cleaned his room because it was messy and he could not find his homework.

Effect: _____

Cause: _____

9. I do not like mushrooms in my salad, so I did not eat them.

Effect: _____

Cause: _____

10. I am going to the airport because my aunt's plane just landed.

Effect: _____

Cause: _____