READING, WRITING, & MATH

Complete one assignment for reading, writing, and math each day.

**Reading:** Read the selection and answer the questions. When you are finished, be sure to read a great book!

**Writing:** Read the prompt and respond in writing. This is a great opportunity to practice your best writing skills and good handwriting.

**Math:** Complete the standards practice page. Draw pictures or use objects to help you.
Hot Topics

Hot News About Calories

Many foods hold awesome amounts of energy.

What does a burning cheese curl have to do with energy? Ask Joe Cifelli. He’s a professor at St. Joseph’s University in Philadelphia. He also teaches fourth graders about nutrition—the science of food and diet. The first lesson is setting cheese curls on fire.

Cheese curls burn because they contain energy. "Food is energy," Cifelli explains. Fire consumes that energy when Cifelli burns a cheese curl. When you eat food, you are putting energy into your body. You use energy in many different ways—running on the playground, walking the dog, and brushing your teeth. Everything your body does requires energy, even breathing and thinking.

Energy is measured in units called calories. Scientists figure out how many calories are in a food by burning it, much as Cifelli does, but they use a device called a bomb calorimeter. That machine measures the heat given off by the burning food.

People on diets often worry about the calories they eat and count calories like wannabe scientists. But calories aren’t bad! In fact, most kids need between 1,600 and 2,500 calories per day to grow and be healthy.

If you eat more calories than you burn off, your body stores that energy. "It’s like gasoline," Cifelli says. "If you don’t burn it, your body will put it in a storage tank." Your body turns unused calories into fat for storage.

Having too much fat and being overweight can cause health problems. But you can work to stay at a healthy weight by listening to your body; be active and don’t eat unless you feel hungry. Healthy eating, Cifelli claims, is just a matter of understanding the energy that goes in and the energy that is burned off. "It’s about making choices," he says.

Big Kiss

Joe Cifelli says people are surprised by how much energy is in food. A Hershey Kiss has 26 calories, Cifelli says. That doesn't sound like much, but if a machine could turn all that energy into power, it could lift a car six feet off the ground! When you eat, your body uses most of that energy to digest your food and keep the trillions of cells in your body running smoothly.
Name: ___________________________________ Date: _______________

1. What is a calorie?
   A. a fire that burns slowly
   B. a device to measure heat
   C. a storage tank for energy
   D. a unit of heat energy

2. In this passage, how does the author describe food?
   A. Food is the energy your body needs to work properly.
   B. Eating a lot of fat helps the body to grow and be healthy.
   C. Because food is tasty, it is fine to eat more than you need.
   D. Most foods contain more calories than your body needs.

3. After reading the passage, what can you conclude about Joe Cifelli?
   A. He doesn't like teaching fourth graders.
   B. He likes to eat cheese curls and chocolate.
   C. He is very educated about nutrition.
   D. He is overweight and doesn't exercise.

4. Read this sentence from the passage:
   "Scientists figure out how many calories are in a food by burning it, much as Cifelli does, but they use a device called a bomb calorimeter."

   In this sentence, the word **device** means
   A. a scientific theory
   B. an idea or thought
   C. a tool for burning food
   D. a piece of equipment
5. The primary purpose of this passage is to describe
   A. how food is energy
   B. how learning about science is fun
   C. why kids should get more exercise
   D. why people should count calories

6. Why do cheese curls burn when set on fire?

7. Why does the author compare calories to gasoline?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.
   Eating too much fat ______ being overweight can lead to health problems.
   A. but
   B. and
   C. from
   D. for
Scientists and Artists Build Washington

Photography did not exist in George Washington's lifetime. So how do we know what he looked like? Recently, a team of experts led by scientist Jeffrey Schwartz used historical evidence, or clues, to build a statue of Washington at age 45. Here's how the team did it.

1. The team began by scanning a mold of Washington's face into a computer. A sculptor had made the mold of the 53-year-old Washington's face in 1785. Washington's dentures, or false teeth, showed the shape of his mouth.

2. Once the team had an idea of what Washington's face looked like at age 53, sculptors re-created the face to show what it would have looked like at age 45. The nose and ears continue to grow during adulthood, so those features were sculpted smaller.

3. Painters added color to the statue based on historical documents that depict Washington with pale skin and grayish blue eyes.

4. The statue was placed in an exhibit that shows Washington leading his troops during the long winter at Valley Forge, Pennsylvania, in 1777.
1. Which of the following tools was **not** necessary to complete the project?
   - A. camera
   - B. a 1785 mold of Washington's face
   - C. computer
   - D. historical documents

2. How are the paragraphs numbered 1-4 organized?
   - A. in order of sequence
   - B. in order of importance
   - C. in alphabetical order
   - D. in cause and effect order

3. Why did the author have to include the sentence, "photography did not exist in George Washington's lifetime?"
   - A. to explain the technology problems of Washington's lifetime
   - B. to show why historians do not know exactly what Washington looked like
   - C. to convince the reader of the importance of photography
   - D. to provide details about the historical time period 1777-1785

4. The definition of mold, as noted in the footnote, is a "mask made from the **imprint** of a person's face."

   As used in the passage, **imprint** most nearly means
   - A. imprint (**verb**): to fix into the mind of someone else
   - B. imprint (**noun**): any marketing name used by a company
   - C. imprint (**noun**): a figure impressed or printed on something
   - D. imprint (**verb**): to produce a mark
5. What is the author's purpose in "The Making of a President?"

A. to argue that artists should more constantly document important historical figures
B. to explain how a team of sculptors, scientists, and historians recreated Washington's face
C. to compare and contrast the art forms of photography and sculpture
D. to explore the effects of limited technology in the 1700s

6. List the steps the team of experts used to build a statue of George Washington at age 45.

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7. Explain why Washington's nose and ears were sculpted smaller on the sculpture of his face at age 45.

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8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

The team displayed patience and ingenuity in their project, and their hard work ____________ paid off with an accurate statue of George Washington.

A. however  
B. previously  
C. ultimately  
D. meanwhile
"I saw it first," Amy said, as she ripped the old leather wallet out of Charlie's hands.

Without saying a word, as if they both understood that this was a secret they didn't want to share with anyone, they slipped into the alleyway, where no one could see them look inside.

"There's got to be a million dollars here!" Charlie blurted out, when they saw the pile of hundred-dollar bills.

Amy, the more realistic of the two, did a quick estimate, thumbing through the wad of cash. "More like thousands," she said, her voice shaking.

They'd found the wallet in a flowerbed on the sidewalk, when Charlie dropped his cell phone while he was trying to talk and eat a slice of pepperoni pizza at the same time. Amy stuffed the wallet into her backpack and pulled Charlie along by his elbow toward her house. As they rushed toward Viceroy Avenue, they talked about what they could do with the money-download music, get new clothes, travel to the rainforest in Costa Rica, adopt a whale. It looked like all of their dreams could come true. For the last block, they didn't talk, each figuring that the other one was silently adding to the list of things they could buy.

They finally reached Amy's house, but instead of going inside, they walked around the house to the back porch. Then they both started talking at once. "I wonder who lost it." Their moods shifted, sinking from the high of being rich for fifteen minutes to worrying about what to do next. They opened the wallet and counted the money in piles of ten. The total was $2,400 - more money than either of them had ever seen. In a clear plastic compartment, there was a driver's license.
1. How much money did Amy and Charlie find?
   A. hundreds of dollars
   B. a hundred dollars
   C. more than a million dollars
   D. thousands of dollars

2. What is the effect of Amy and Charlie finding the wallet?
   A. They become angry at each other and argue about what to buy.
   B. They feel excited and later worry about what to do.
   C. They get scared that someone saw them pick up the wallet.
   D. They are happy that they can return the wallet to the owner.

3. Which of the following conclusions about the wallet is supported by the passage?
   A. Amy purposely hid a wallet in a flowerbed so that Charlie could find it.
   B. Charlie knew the person who lost the wallet but didn't want to tell Amy.
   C. The wallet was filled with counterfeit money that looked like real money.
   D. Amy and Charlie were originally planning to keep the wallet.

4. Read this sentence from the passage:

"Amy, the more realistic of the two, did a quick estimate, thumbing through the wad of cash."

In this sentence, the word **realistic** means
   A. seeing things as they really are
   B. having an adventurous spirit
   C. knowing how to hold a conversation
   D. older and having more experience
5. Which statement best describes the main idea of this passage?

A. Two friends find a wallet and try to decide what to do next.
B. A sister and brother talk about their dreams for the future.
C. Two people have a secret and don't want to share it with anyone.
D. Someone drops a wallet on the sidewalk and can't find it.

6. Where do Amy and Charlie go to count the money?

7. At the end of the story, Amy and Charlie start to wonder who lost the wallet, and their "moods shifted." How do you know what they might do next? Give an example from the text to support your answer.

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

_______ Amy saw all of the money, she did a quick estimate.

A. When
B. However
C. Neither
D. Whether
Before refrigerators were invented to keep our food fresh, people needed to find more creative ways.

Some people would construct their houses with basements, so food could be kept cool there. Others built sheds that were used to store dried and preserved foods all year round. But there were certain items that needed to be kept cold—not cool or dry, but cold. For this reason people would harvest ice.

During the wintertime in places like Pennsylvania, freshwater lakes and streams would freeze. A one-foot thick sheet of ice would form on top of the water. Then the ice-cutters would ride their horse-drawn sleds to the lakes and streams.

Using different hand tools, including saws, picks and hooks, the harvesters would cut long sheets of ice. Using their horses, they would drag the ice onto the river or lake banks, and begin to cut the sheet into blocks. It was long and patient work. Once all the blocks had been cut, the ice harvesters would pack up their sleds and ride back to town. There, they would store the large blocks in an ice house. The ice house was usually a large, insulated building that would allow ice to be stored year-round without it melting.

Ice deliverymen, known as icemen, would make their rounds, bringing the ice to homes, stores and restaurants. Individual homes might have an icebox to store food. This icebox could be made out of wood, and would have a place to put the block of ice to keep food cold. Underneath the icebox would be a pan or pot for collecting any water that would drip down as the ice melted.

A very interesting practice for storing food with lake and river ice involved digging a very large hole.
Buffalo hunters, after killing a buffalo during the winter months, would dig the hole and line it with blocks of ice. Once the hole was well lined, the meat would be lowered into it and covered up. Over the winter these cuts of meat would freeze solid and stay preserved well into the summer. During the height of the summer, the hunters would go back to these meat lockers and unearth some tender and well-preserved buffalo meat.

In the early 1900s there were many large businesses built around the harvesting, storage, and distribution of ice. There was a lot of money to be made by ice businessmen as cities grew larger and more people needed to keep food fresh in a single city block. But once the refrigerator was invented and became easier for more people to buy, there was little need for ice harvesting. Now in the United States large chunks of ice are only harvested to make sculptures and other large artistic structures.
Ice Harvest - Comprehension Questions

Name: ___________________________ Date: _______________

1. Why did ice used to be harvested?
   A. to catch dripping water
   B. to build refrigerators
   C. to keep food cold
   D. to make sculptures

2. What is the sequence of events in an ice harvest?
   A. the ice is stored, the ice is sold, ice forms, water freezes, the ice is cut
   B. the ice is cut, the ice is stored, the ice is sold, water freezes, ice forms
   C. water freezes, ice forms, the ice is cut, the ice is stored, the ice is sold
   D. ice forms, water freezes, the ice is cut, the ice is stored, the ice is sold

3. People eventually started using refrigerators instead of blocks of ice.
   What sentence from the passage supports this statement?
   A. "In the early 1900s there were many large businesses built around the harvesting, storage, and distribution of ice."
   B. "But once the refrigerator was invented and became easier for more people to buy, there was little need for ice harvesting."
   C. "A very interesting practice for storing food with lake and river ice involved digging a very large hole."
   D. "The ice house was usually a large, insulated building that would allow ice to be stored year-round without it melting."

4. How can ice harvesting be described?
   A. easy work that people of all ages could do with their hands
   B. work that required the use of buffalos, iceboxes, and sculptures
   C. long, hard work that was not very useful to anyone
   D. hard work that once allowed businessmen to make a lot of money
5. What is this passage mostly about?
   A. how and why ice used to be harvested
   B. wintertime in Pennsylvania
   C. the holes that buffalo hunters used to dig
   D. the invention of the refrigerator

6. Read the following sentence: "In the early 1900s there were many large businesses built around the harvesting, storage, and distribution of ice."

What does the word harvesting mean in the sentence above?
   A. melting
   B. collecting
   C. attacking
   D. traveling

7. Choose the answer that best completes the sentence below.

Many people used blocks of ice to keep their food fresh ______ they started using refrigerators.
   A. before
   B. after
   C. although
   D. primarily

8. What is an icebox?
9. Why did hunters put dead buffaloes into holes lined with ice?

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10. How are iceboxes and the holes hunters used to store dead buffaloes alike?

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Imagine an eleven-year-old boy named Paul. Now imagine Paul inside a wood cabin. He is shivering. It is cold outside, and inside the cabin it isn't much warmer. Paul can hear the rain beating down on the roof. Every few minutes there would be a loud boom, and thunder would shake the cabin walls. Paul is happy to be inside the cabin, safe and dry with his family. "Let's make this cabin warmer," says his father. "Paul, help me build a fire." Paul fetches the firewood and then watches as his father carefully stacks the logs in the shape of a pyramid. Paul's father puts several small sticks of kindling in the bottom of the pyramid. The kindling would catch on fire much more quickly than the big logs. Paul's father lights a match, and soon the logs crackle and burn in the fireplace, shooting off small sparks. The fire gives off some light, but it also gives off heat. Within 30 minutes the inside of the cabin is warm and toasty. Thanks to the radiation of heat from the fire, Paul isn't shivering any more.

Though all that Paul's father did was light a match to start the fire, there was a complex set of interactions that had to occur for the fire to ignite and grow. There are three components needed for a fire to successfully burn: fuel, oxygen and a heat source. The matches were the heat source and the logs were the fuel. The oxygen supply came from the air around the fireplace. That's why Paul's father had to pile up the logs as a pyramid, with space in between them. If the logs had been too close together, there wouldn't have been enough oxygen for the fire and it could have fizzled out. A wood fire can grow very quickly. That's why it's so important to be careful when lighting fires and to never leave them unsupervised. A wood fire, like the one in Paul's fireplace, can reach temperatures over 1,000 degrees Fahrenheit. The hottest part of the fire is often the red glowing embers that are left in the fireplace once the wood has burned through. These embers can be as hot as 1,200-1,500 degrees Fahrenheit. Though fire is a common heat source, heat can come from many different sources. Heat can also be transferred from one object to another in a variety of ways.

Scientists use the term "heat" to refer to the energy transferred when two objects or systems are at different temperatures. Heat naturally moves from warmer areas to cooler areas. Think of what happens if you leave a bowl of ice cream out in hot weather. At first, the ice cream is much cooler than the air around it. But if you
What Is Heat?

go back in an hour, the ice cream has melted, and it is roughly the same temperature as the surrounding air. The heat from the air has moved to the ice cream. In this example, the air is the heat source, the place where the higher temperature is found. The ice cream is the heat sink, or the place to which the heat moves. Whenever there is a temperature difference in a system or a group of objects, the heat will naturally move from the heat source to the heat sink.

How does heat transfer from one object to another?

Heat transfers in three different ways: conduction, convection, and radiation. Conduction is the transfer of heat between two surfaces that are directly in contact with one another. When you burn yourself on a hot pan while making scrambled eggs, that's an example of conduction. The heat is transferring from a very hot surface (the frying pan) to a cooler surface (your hand). Heat transfers through some materials better than others. Metals are especially good thermal conductors; that's why pots and pans are made out of metal. Materials that are very slow to transfer heat are called thermal insulators. Some examples of materials that are thermal insulators include rubber and cork. Typically materials that are good thermal conductors - like gold, silver and copper - are also good conductors of electricity.

The second way that heat can transfer is through convection. Convection is the transfer of heat through the movement of large amounts of a liquid or gas. An example of this is the storm outside Paul's cabin. Thunder and lightning are caused when a large mass of hot air meets a large mass of cool air. Warm air tends to rise, and cool air tends to fall. The movement of these air masses and the transfer of energy that occurs are called convection.

The third way heat transfer can occur is through a process called radiation. Radiation is when there is no material transferring the heat. Instead, the energy is carried by electromagnetic waves. Electromagnetic waves come in a wide variety of types: they can be infrared, visible light, UV, or radio waves. The hotter that the object is, the more infrared radiation (and heat) it gives off. The fire that Paul is looking at is radiating heat into the rest of the cabin.

Another example of heat radiation is the sun. At the sun's core the temperature is at least 10 million Kelvin, and on the surface of the sun, the temperature is about 6,000 Kelvin. Kelvin is a form of measurement of heat that scientists use, instead of measuring degrees in Fahrenheit or Celsius. What does 10 million Kelvin actually feel like? It's about 30,000 times as hot as boiling water. All of that heat travels from the sun to the earth on electromagnetic waves. To reach the earth's surface, the waves must travel through 93 million miles of our solar system. When the radiation arrives from the sun to the earth, it causes the ground to heat up. An object that is especially good at radiating heat is called a blackbody. The sun is a perfect example of a blackbody.

The earth is also a blackbody - it doesn't just absorb heat from the sun's electromagnetic waves; the earth also radiates heat out into space. Some of the heat that the earth radiates is the same energy from the sun. Around 30% of the electromagnetic waves that arrive from the sun are bounced back into outer space by the earth. The rest of the electromagnetic energy is either absorbed by the earth's atmosphere or heats the surface and oceans of the earth.
1. What do Paul and his father build in the cabin?
   A. a radio
   B. a clock
   C. an engine
   D. a fire

2. What does this text explain?
   A. This text explains what a wood cabin is and how to build one.
   B. This text explains what heat is and how it moves from one object to another.
   C. This text explains what UV radiation is and why it can be harmful to people.
   D. This text explains what oxygen is and how the human body uses it to survive.

3. Heat moves from warmer areas to cooler areas.
   What evidence from the text supports this statement?
   A. Heat moves from the hot fire Paul and his father build to the cold air of the cabin.
   B. A wood fire can reach temperatures of more than 1,000 degrees Fahrenheit.
   C. After Paul fetches firewood, his father carefully stacks it in the shape of a pyramid.
   D. Ten million Kelvin is a temperature about 30,000 times as hot as boiling water.

4. What is an example of a heat source?
   A. rubber
   B. oxygen
   C. thunder
   D. the sun

5. What is this text mainly about?
   A. a wood cabin
   B. convection
   C. heat
   D. the relationship between a boy and his father
6. Read this sentence from the text.

Heat can also be **transferred** from one object to another in a variety of ways.

What does the word "**transferred**" mean?

A. broken  
B. trapped  
C. moved  
D. planned

7. Choose the answer that best completes the sentence below.

Heat is transferred in three different ways, ________ conduction, convection, and radiation.

A. instead  
B. namely  
C. in conclusion  
D. meanwhile

8. What is radiation?
9. What are two examples of radiation mentioned in the text?

10. Using information from the text, explain how a fire makes someone warmer.
Name:

You wake up tomorrow with a silly superpower that makes you famous. What is that silly power? Tell the story of how you became a superstar?
Name:

Think of a good friend you have or have had in the past. Write about the qualities that made your friendship so memorable. Provide details to support your reasoning.
Name:

Which season is your favorite? Explain why the season is your favorite. Give lots of details that paint a picture in your reader’s mind.

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Everyone likes a certain kind of music. Some people like hip hop and some prefer country. Write about your favorite kind of music. Include some of your favorite lyrics.
Write about a time someone in your family embarrassed you. Tell about what happened. How did you feel? What did you do?

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Solve the following problems. Draw a model to justify your thinking.

Claudia is twice as old as her sister, Randi who is 5 years old. Connie is 3 years older than Claudia. Jessica is 5 years older than Randi. Draw a model to find the age for each sister.

Carla walks her dog 29.4 miles each week. If she walks her dog the same amount every day, how many miles does she walk per day?

Terry rode her horse 32.48 miles. She stopped for water in equal increments. She stopped 8 times. Write an equation and draw a model to show how far she traveled between each stop.
Solve each equation.

x is 32.5 more than 56. Solve for x.

The sum of 5x and 2x is equal to 567.14. Solve for x.

The product of x and 14 is equal to 266

256.85 less than a number y is 678.3

The cost of a gallon of orange juice is $4.99. How many gallons can you buy for $26.

Circle the statement below that can be modeled by \(x + 9 = 22\)?

- Todd has 9 baseball cards. Together, Todd and Sean have 22 baseball cards.
- Jackie bought 9 lollipops. To buy enough for all of her friends, Jackie must buy 22 lollipops.
- Pablo has 5 pairs of shoes. Pablow and his brothers have 22 pairs of shoes.
Grade 6 Mathematics Homework • Integers

Write an integer to represent each situation.

A submarine is 54 feet below sea level. ___________

The Ravens lost five yards on their last play. ____________

I deposited $450 in my savings account. ________________

Write a situation for each integer.

-35

___________________________________________________________________________

95

___________________________________________________________________________

-340

___________________________________________________________________________
Grade 6 Mathematics Homework • Integers

Place the integers on the number line.

-9, 7, -2, 3

-4, 1, -6, 4

2, 6, -3, -7

Write a situation to reflect the integer that is plotted on each number line below.

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Grade 6 Mathematics Homework • Integers number lines and ordered pairs

Are the following statements correct or incorrect? Use a number line to justify your thinking.

-3 and 7 are both 5 units from 2

The distance between -2 and 14 is 12

-2 is greater than -7

Plot the following ordered pairs on the coordinate grid.

D (-2, 5)
E (4, -6)
N (-5, -5)
I (2, 0)
S (4, 6)
E (-4, 3)