

Student Learning Extension Opportunities

Grade 3-Grade 5

Week Four

Directions: These learning activities are provided for practice opportunities. Refreshing your memory of the concepts learned and keeping your mind engaged will help you maintain the skills you have learned. These learning activities are designed to provide practice over the course of the week, so spread out the work.

Support for all Clark County School District students is available via telephone. Please call **702-799-6644** to access the **Learning Line**. Educators will be available **Monday through Friday from 8:00 a.m. until 4:00 p.m.** to assist students in both English and Spanish during scheduled school days.

WEEK FOUR

Reading and Writing (Science and Social Studies Integration):

Week 4, Day 1

- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read the article, "Training prepares scientists for Antarctica's harsh, changeable climate."
- Complete the quiz and answer the comprehension questions.

Week 4, Day 2

- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read the passage, "Hermia's Shell."
- Complete the quiz and answer the comprehension questions.

Week 4, Day 3

- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read the article, "Big Questions: Why is money green?"
- Complete the quiz and answer the comprehension questions.

Week 4, Day 4

- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read the article, "Into the snowy woods: 10 years of camping adventures for dads and daughters."
- Complete the quiz and answer the comprehension questions.

Week 4, Day 5

- Read a book at your reading level for twenty minutes. Keep track of your daily reading on the reading log below.
- Read the passage, "Getting Organized" and answer the comprehension questions.

Student Learning Extension Opportunities

Grade 3-Grade 5

Week Four

Mathematics:

Week 4, Day 1

- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5*.

Week 4, Day 2

- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5*.

Week 4, Day 3

- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5*.

Week 4, Day 4

- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5*.

Week 4, Day 5

- Complete the appropriate grade-level worksheet(s) labeled *Grade 3, 4, or 5*.

Reading Log

Keep track of your daily reading.

Beginning Page	Ending Page	Title

Oportunidades de Continuación para Aprendizaje del Estudiante Del 3^{er} Grado al 5^o Grado Semana Cuatro

Instrucciones: Estas actividades de aprendizaje se ofrecen como oportunidades de práctica. Refrescar tu memoria de los conceptos aprendidos y mantener tu mente ocupada te ayudará a mantener las habilidades que has aprendido. Estas actividades de aprendizaje están diseñadas para proporcionar práctica en el transcurso de la semana, así que distribuye el trabajo.

El apoyo a todos los estudiantes del Distrito Escolar del Condado de Clark está disponible por teléfono. Por favor llama al **702-799-6644** para acceder a la **Línea de Aprendizaje**. Los educadores estarán disponibles de **lunes a viernes de 8:00 a.m. a 4:00 p.m.** para ayudar a los estudiantes tanto en inglés como en español durante los días de clases.

SEMANA CUATRO

Lectura y Escritura (Integración de las Ciencias y Estudios Sociales):

Semana 4, día 1

- Lee un libro a tu nivel de lectura durante veinte minutos. Lleva la cuenta de tu lectura diaria en el registro de la parte inferior.
- Lee el artículo, "Training prepares scientists for Antarctica's harsh, changeable climate".
- Completa el cuestionario y contesta las preguntas de comprensión.

Semana 4, día 2

- Lee un libro a tu nivel de lectura durante veinte minutos. Lleva la cuenta de tu lectura diaria en el registro de la parte inferior.
- Lee el texto, "Hermia's Shell".
- Completa el cuestionario y contesta las preguntas de comprensión.

Semana 4, día 3

- Lee un libro a tu nivel de lectura durante veinte minutos. Lleva la cuenta de tu lectura diaria en el registro de la parte inferior.
- Lee el artículo, "Big Questions: Why is money green?".
- Completa el cuestionario y contesta las preguntas de comprensión.

Semana 4, día 4

- Lee un libro a tu nivel de lectura durante veinte minutos. Lleva la cuenta de tu lectura diaria en el registro de la parte inferior.
- Lee el artículo, "Into the snowy woods: 10 years of camping adventures for dads and daughters".
- Completa el cuestionario y contesta las preguntas de comprensión.

Semana 4, día 5

- Lee un libro a tu nivel de lectura durante veinte minutos. Lleva la cuenta de tu lectura diaria en el registro de la parte inferior.
- Lee el texto, "Getting Organized" y contesta las preguntas de comprensión.

Oportunidades de Continuación para Aprendizaje del Estudiante Del 3^{er} Grado al 5^o Grado Semana Cuatro

Matemáticas:

Semana 4, día 1

- Completa la hoja(s) de trabajo apropiada al nivel de grado, marcada como 3^o, 4^o o 5^o Grado.

Semana 4, día 2

- Completa la hoja(s) de trabajo apropiada al nivel de grado, marcada como 3^o, 4^o o 5^o Grado.

Semana 4, día 3

- Completa la hoja(s) de trabajo apropiada al nivel de grado, marcada como 3^o, 4^o o 5^o Grado.

Semana 4, día 4

- Completa la hoja(s) de trabajo apropiada al nivel de grado, marcada como 3^o, 4^o o 5^o Grado.

Semana 4, día 5

- Completa la hoja(s) de trabajo apropiada al nivel de grado, marcada como 3^o, 4^o o 5^o Grado.

Registro de Lectura

Lleva un registro de tu lectura diaria.

Página inicial	Página final	Título

Training prepares scientists for Antarctica's harsh, changeable climate

By Washington Post, adapted by Newsela staff on 10.07.19

Word Count **662**

Level **700L**



Image 1. A group of U.S. Antarctic Program participants listen to safety instructions in January before heading into an area with crevasses, or cracks, that can be hundreds of feet deep. It's part of the training scientists receive when heading to Antarctica. Photo by: Brian Day/National Science Foundation

The United States gets cooler in fall. At the same time, Antarctica's summer is going strong. By November, the sun shines on the ice-covered continent day and night. When it sets in mid-February, Antarctica enters winter, and it is dark for six months.

Because of this, summer is Antarctica's busiest time. Thousands of scientists study this last unspoiled place on Earth.

Saving Antarctica For Science

The Antarctic Treaty was created in 1961. In it, more than 50 countries agreed to save Antarctica for science, exploration and other peaceful purposes. No one owns it, and no one can live there permanently.

Scientists who visit cover many subjects. One might be studying penguins the same day another looks through the South Pole Telescope. A scientist might be exploring an active volcano. Other scientists might be drilling into ancient ice.

However, even in summer, Antarctica is dangerous. It is the coldest environment on Earth, with an average temperature of minus-76 in winter and minus-18 in summer, says the Woods Hole Oceanographic Institution. The surface has so much ice that mountains are buried underneath it. It is also the driest place on Earth, with strong winds. Everyone who visits must have safety training. They learn about dangers such as frostbite and snow blindness. People must follow safety rules to survive.

Safety Training

Peter West works for the National Science Foundation. Safety training is done because Antarctica can be harsh, he said. It changes quickly, he said. It can go from a fairly calm situation to a very dangerous situation, he said.

More training may be needed. Michael Gooseff is a University of Colorado professor who studies how ecosystems respond to climate change.



With climate change, the Earth is heating up. This is called global warming. Scientists say people burn too much fossil fuels. Fossil fuels come from nature. These include fuel from wood, oil and coal.

Gooseff learned how to camp in the ice. He also learned how to work with helicopters, use the radio and rescue someone from a deep crack in the ice.

In 13 years, Gooseff has never had an accident. He said it is because of training and thinking ahead.

They spend time talking about what might go wrong, he said. "That mind-set really does help all of us to think about what we do before we do it," he said.

Strange Events

There are also rules to keep Antarctica the way it is. Nothing can be taken home as a souvenir. Everyone has to get rid of their trash. People are not allowed to be near wildlife. The rule is that if the animal notices you, you are too close.

Sometimes this can lead to strange events. Anna Bergstrom is a scientist at the University of Colorado. She studies glaciers of ice. She sometimes sees seals and penguins wandering through the valleys, far from shore.

Because of the treaty, they can't help the animals find their way, she said. "We just have to watch it, which is really sad," she said.

Bergstrom often sees dead seals in the valleys. The cold, dry environment preserves their bodies. Tests show that some of the mummies are thousands of years old.

Some animals were up on the glaciers, Bergstrom said. "We don't know how they got up there or why they got up there," she said.

Climate Change Is Melting The Ice

It is one of many mysteries in Antarctica. With climate change melting the ice, studying Antarctica is more important than ever. What happens in Antarctica affects the rest of the world.

It is a cold, windy place that does not welcome people, Gooseff said. Still, "there are these beautiful hidden treasures to try to find" through science, he said.

Quiz

1 Which detail shows that scientists in Antarctica have strict orders that they must follow?

- (A) Gooseff learned how to camp in the ice. He also learned how to work with helicopters, use the radio and rescue someone from a deep crack in the ice.
- (B) Nothing can be taken home as a souvenir. Everyone has to get rid of their trash. People are not allowed to be near wildlife.
- (C) It is one of many mysteries in Antarctica. With climate change melting the ice, studying Antarctica is more important than ever.
- (D) It is a cold, windy place that does not welcome people, Gooseff said. Still, "there are these beautiful hidden treasures to try to find" through science, he said.

2 Read the following selection from the introduction [paragraphs 1-2].

The United States gets cooler in fall. At the same time, Antarctica's summer is going strong. By November, the sun shines on the ice-covered continent day and night. When it sets in mid-February, Antarctica enters winter, and it is dark for six months.

Based on this sentence, choose the statement that is TRUE.

- (A) The United States and Antarctica have their seasons at different times.
- (B) The United States and Antarctica are both cool during the fall.
- (C) The United States and Antarctica experience about six months of winter.
- (D) The United States and Antarctica both have very short summers.

3 Select the sentence that summarizes the article.

- (A) Many scientists who visit Antarctica are able to avoid accidents because of their training.
- (B) Many scientists observe animals in Antarctica but are not allowed to get too close to them.
- (C) Many scientists are interested in learning about climate change while in Antarctica.
- (D) Many scientists study in Antarctica in the summer and must undergo training to visit there.

4 Read the paragraph below.

However, even in summer, Antarctica is dangerous. It is the coldest environment on Earth, with an average temperature of minus-76 in winter and minus-18 in summer, says the Woods Hole Oceanographic Institution. The surface has so much ice that mountains are buried underneath it. It is also the driest place on Earth, with strong winds. Everyone who visits must have safety training. They learn about dangers such as frostbite and snow blindness. People must follow safety rules to survive.

How does this paragraph support the MAIN idea of the article?

- (A) by explaining what scientists are studying in Antarctica
- (B) by explaining how countries have agreed to save Antarctica
- (C) by describing the harsh environment of Antarctica
- (D) by describing how climate change is affecting Antarctica

“Training prepares scientists for Antarctica's harsh, changeable climate”
Comprehension Questions

Answer the following questions.

1) What did you know about Antarctica before you read the text?

2) What did you learn about Antarctica from the text? Cite evidence from the text.

Write a paragraph detailing how Antarctica can be dangerous. Cite evidence from the text.

Hermia's Shell

By Bish Denham, Cricket Media on 03.26.20

Word Count **859**

Level **MAX**



There, being gently washed by the lapping waves, was a beautiful apple murex. Illustrations: Ponder Goembel

Hermia the hermit crab wanted a new shell. Her old black-and-white whelk was getting a bit tight.

"I want a special shell," she said to her friend Henry. "I want a shell that's pink inside and creamy outside with chocolate-brown stripes. When we get to the beach," Hermia added, "I'm not going to settle for just any old black-and-white whelk. I want a shell that says something about me."

Henry grunted as he rolled down the side of the hill.

When they arrived at the beach, thousands of hermit crabs were swapping news — and shells. Hermia passed up many shells that would have fit her just right.

"That one has a chip on the lip," she said to Henry. "And see how this one's been faded by the sun? Just look at that one, it's all worn along the bottom. I wouldn't live in it if it were the last shell on the beach!"

One by one, all the hermit crabs left the beach, returning to their homes high in the hills. Even Henry had long since said goodbye.

When she was about to give up, Hermia found it. There, being gently washed by the lapping waves, was a beautiful apple murex. It was pink inside and creamy outside with chocolate-brown stripes. When she tried it on, it was much too big. It flopped and wobbled so badly, she kept falling over onto her back. Then she had to wiggle her legs madly to right herself. Hermia knew she'd never make it back into the hills, so she decided to live by the beach.

It was a long, lonely year. By the time the hermit crabs returned the next summer, Hermia had finally grown into her new shell.

"See my new shell?" she said to every crab that came her way. "See my beautiful apple murex? It's pink inside and creamy outside with chocolate-brown stripes. I had to spend the whole year all by myself because it was too big. But now I've grown into it, so I can go back into the hills with you."

Hermia found Henry and traveled with him.

"I'm so excited about my new shell," she said. "I want to show it to everyone. Have you noticed its lovely ridges and how gracefully it spirals to a perfect, unbroken tip?"

Henry groaned as he fell into a hole and struggled to climb out.

All Hermia could talk about was her shell. The other hermit crabs started to avoid her and began to talk about her behind her shell.

Even Henry got tired of her. "Hermia," he said, "if you say one more thing about that shell, I'm going to find another hill to live on."

"But it's so unique!" she exclaimed. "I think you're jealous."

Henry shook his feelers and crawled away.

Hermia crawled off in the opposite direction. "I'll just find new friends who will appreciate me," she said.

When she met new hermit crabs, they soon got bored with her, too.

"They'd steal my shell if they could," she said to herself.

In time, Hermia began to feel her shell getting tight. At first, she ignored the pain where her soft abdomen curled into the tip of the murex. By the time of the summer migration, Hermia was moving very slowly. Still, when she got to the beach, all she could talk about was her shell.

None of the crabs wanted to hear it.

"You're all jealous!" Hermia replied, limping away angrily. "You're just waiting for me to swap it so you can fight over it!"

Hermia was in so much pain, she could barely move. She knew it was time to find a new home. But all she found was a black-and-white-striped whelk shell.



"How common," she thought. But she knew she had to make the move.

Hermia tried to get out of her shell. She pulled and pulled, but she was stuck. And oh! It hurt so much, she could hardly stand it. Finally, there was a little sucking noise and a pop! Hermia tumbled out of her beautiful apple murex.

The pink inside had turned a dull gray. The creamy outside with the chocolate-brown stripes had faded to white. The fine ridges and lip were chipped and cracked. The very tip of the spiral was broken off. The bottom was worn smooth.

In horror, Hermia realized she'd been dragging around and bragging about a very worn and battered shell.

Hermia slipped into the whelk. Its smooth mother-of-pearl interior was cool and soothing to her poor, pinched abdomen.

When she returned to the hills, no one recognized her. When they found out who she was, they were surprised. Even Henry began to talk to her again, because now they could have real conversations about things that mattered.

"Henry, I've made a decision," said Hermia. "Next summer I'm going to help the younger crabs find good homes."

"I can hear it already," Henry said. "'If the shell fits, wear it!'"

Hermia laughed. It felt good.



Quiz

- 1 Which sentence from the story helps the reader to understand that Hermia wants to find a special shell?
- (A) When we get to the beach," Hermia added, "I'm not going to settle for just any old black-and-white whelk."
 - (B) "But now I've grown into it, so I can go back into the hills with you."
 - (C) "Hermia," he said, "if you say one more thing about that shell, I'm going to find another hill to live on."
 - (D) "Next summer I'm going to help the younger crabs find good homes."

- 2 Read the following selection from the story.

"In time, Hermia began to feel her shell getting tight. At first, she ignored the pain where her soft abdomen curled into the tip of the murex. By the time of the summer migration, Hermia was moving very slowly."

Based on this selection, choose the statement that is TRUE.

- (A) None of the shells on the beach were large enough for Hermia.
 - (B) Hermit crabs are stuck with the shells they have to begin with.
 - (C) The other crabs were jealous of Hermia's new shell.
 - (D) A poorly fitting shell will not be comfortable for a crab.
- 3 How does the perspective of Hermia affect Henry's actions?
- (A) Hermia is very worried about finding a pretty shell. Henry wants to help, so he finds Hermia a new shell.
 - (B) Hermia thinks that shells should be beautiful, so Henry finds a beautiful shell for himself.
 - (C) Hermia believes that her new shell is very important. Henry gets tired of hearing about Hermia's shell and warns her to stop talking about it.
 - (D) Hermia feels it is necessary to find a new shell. Henry stops talking to Hermia because he believes that crabs should keep their shells.
- 4 Is the story written in the first person or third person? How do you know?
- (A) The story is written in the third person because the narrator is not a character in the story.
 - (B) The story is written in the third person because Hermia is the main character in the story.
 - (C) The story is written in the first person because the reader knows what Hermia is thinking.
 - (D) The story is written in the first person because some characters in the story use the word "you."

“Hermia’s Shell” Comprehension Questions

Answer the following questions, citing evidence from the text.

1) What was Hermia’s problem at the beginning of the story?

2) How did Hermia solve her problem?

3) What lesson did Hermia learn at the end of the story?

Big Questions: Why is money green?

By Jonah Estess, The Conversation, adapted by Newsela staff on 03.26.20

Word Count **683**

Level **820L**



Image 1. Stacks of the U.S. one-dollar bill. Photo: Pixabay.

Why is money green? – Marek P., age 12, Dorchester, Massachusetts.

We use paper money all the time, but have you ever wondered about its color?

I am a student of the history of U.S. money. Understanding how people think about money is one subject I find interesting. Studying the history of money has helped me answer questions people have about its appearance.

So let's answer Marek's question, *Why is money green?* He is asking about the color of dollar bills in the United States. Travel the world and you'll find printed money comes in many different colors.

The answer requires us to explore American history.

When U.S. Money Was Different Colors

Printed money in the Americas was not always green. Before the American Revolution, different American colonies printed their own currency. It was initially tan with black or red ink.

During the American Revolution (1775–1783), the Continental Congress printed money for the new country. Called continental dollars, they were also a tan color. However, government printers used a specific kind of material only they could get. The paper was made of cloth, sometimes silk with something called isinglass. Isinglass is a partially see-through material made from the air bladders of fish.

Why the special materials? To prevent counterfeiting. Counterfeiting is when criminals make fake money and pass it off as real. Imagine what would happen if no one trusted whether money was real or fake. Doing business would become much more difficult. Money is all about trust that the *real* \$5 bill in your hand can be exchanged for \$5 worth of something else.

The United States won its independence in 1783. However, the government didn't print any paper money for a long time after the American Revolution. Congress believed that Americans would trust coins more than printed money.

In fact, many Americans *had* lost trust in printed money. Too many counterfeit bills had been produced during the Revolution. Besides, gold and silver coins seemed more trustworthy — they were made of valuable metals, after all.

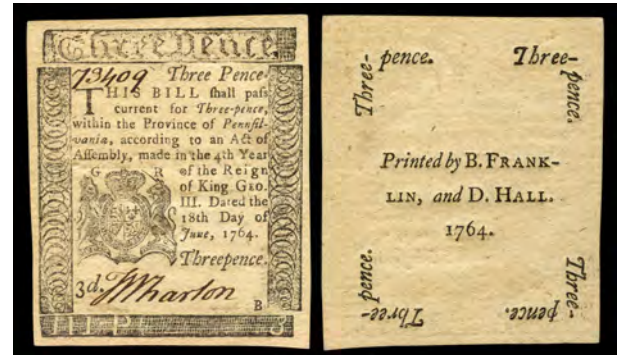
After The Revolution

In 1861, the U.S. Civil War began. It was fought between the northern states (the Union and the southern states (the Confederacy. The federal government in Washington, D.C., passed a law called the Legal Tender Act of 1862, allowing the federal government to print paper money for the first time. It was a way of helping pay for the war.

Both the Union and Confederacy printed their own money, and both sides used green ink partly because it made counterfeiting more difficult. Money printed by the Union came to be known as "greenbacks." One side was printed with green ink and the other was printed with black ink. The green ink was one of the strategies for preventing counterfeit money. The invention of photography had made counterfeiting easier than ever. Cameras could be used to create an exact copy of printed money. At the time, though, only black-and-white photos were possible. Cameras could not be used to reproduce green money.

Why Green?

The green we associate with printed money today, though, dates from 1929. The U.S. government chose green ink because it resisted chemical and physical changes. Also, the color was available in large quantities making money less expensive to produce.



The familiar green color of money came to serve another purpose: a symbol of trust. Green dollar bills were a sign that the cash in banks and people's wallets was backed by the wealth and power of the U.S. government.

More recently, printed money in the United States has been undergoing fresh upgrades. You may notice hints of purple, copper, red, yellow and blue in newer bills — everything above the \$1 bill.

They are the latest efforts by the U.S. government to defeat high-tech counterfeiting.

Jonah Estess is a PhD student at American University who is studying early U.S. political and economic history.



Quiz

- 1 What caused the Legal Tender Act of 1862 to be passed?
 - (A) The United States needed money to help pay for the Civil War.
 - (B) The Confederacy started to print its own paper money.
 - (C) People in the United States had lost trust in paper money.
 - (D) People no longer wanted to use coins to pay for things.
- 2 What effect did counterfeiting have on money?
 - (A) It caused the United States to switch from coins to paper money.
 - (B) It caused the United States to use rare material for money.
 - (C) It caused the Continental Congress to use green ink for money.
 - (D) It caused businesses to accept only paper money for sales.
- 3 If the section "When U.S. Money Was Different Colors" were organized as problem and solution, which paragraph would come FIRST?
 - (A) Printed money in the Americas was not always green. Before the American Revolution, different American colonies printed their own currency. It was initially tan with black or red ink.
 - (B) During the American Revolution (1775–1783), the Continental Congress printed money for the new country. Called continental dollars, they were also a tan color. However, government printers used a specific kind of material only they could get. The paper was made of cloth, sometimes silk with something called isinglass. Isinglass is a partially see-through material made from the air bladders of fish.
 - (C) Why the special materials? To prevent counterfeiting. Counterfeiting is when criminals make fake money and pass it off as real. Imagine what would happen if no one trusted whether money was real or fake. Doing business would become much more difficult. Money is all about trust that the real \$5 bill in your hand can be exchanged for \$5 worth of something else.
 - (D) The United States won its independence in 1783. However, the government didn't print any paper money for a long time after the American Revolution. Congress believed that Americans would trust coins more than printed money.

“Big Questions: Why is money green?” Comprehension Questions

Answer the following questions, citing evidence from the text.

1) How were continental dollars made?

2) Why was money printed using green ink?

3) Draw an image of a dollar bill you would design. Explain why you would design it that way.

Into the snowy woods: 10 years of camping adventures for dads and daughters

By Duluth News Tribune, adapted by Newsela staff on 04.10.18

Word Count **716**

Level **790L**



Image 1. Isabelle "Izzy" Schomberg (left) of Lakewood Township looks at a map with her dad, Jesse Schomberg, during a winter camping trip on Daniels Lake in the Boundary Waters Canoe Area Wilderness of Minnesota. Looking on is Katherine Skwira-Brown of Duluth. Photo by Sam Cook/Duluth News Tribune/TNS.

On a bright March afternoon, some winter travelers moved across the crusted snow atop Bearskin Lake. There were three dads, four daughters and Gimli, an aging Labrador.

The girls, 16 to 18 years old, chatted and laughed while marching. They leaned into their traces as they pulled sleds loaded with winter camping gear. Their three dads also towed gear behind them.

Three Families, 10 Years

For 10 years now, these dads and daughters from the Duluth area have been making this camping trip each winter, and they always go to the Boundary Waters Canoe Area Wilderness off the Gunflint Trail in Minnesota. There are three families: the Skwira-Browns — Kevin and daughters Katherine, 18, and Rachel, 16; the Schombergs — Jesse and daughter Isabelle, 18; and the Feyens — Bob and daughter Hannah, 17.

"Kevin and I had done this before," Jesse Schomberg said. "We were talking about it and said the girls could come. They'd have fun — they could bring a friend." It evolved into a tradition.

"This is probably one of my favorite weekends of the entire year," Hannah Feyen said.

On this 32-degree March afternoon, the gang was headed for Daniels Lake. The group would camp there for three days. They all piled into the Schombergs' tent, which is warmed at night by a propane heater.

Pitching Tents And Pitching In

Even when they were young, the girls did their share of work.

"The rules, from the beginning, were that everyone has to pull a sled," Kevin Skwira-Brown said. "So, in the early years, they had these little tiny sleds with a couple of sleeping bags."

Now, the girls pull full-size sleds that are loaded down with stuff. Along a shore near a 100-foot cliff on Daniels Lake, the group went about making camp. Each took a job, and it was obvious they had all done this before.



Reeling Off Stories

The girls like to reel off stories about adventures from previous trips.

"One time, we got lost," Hannah Feyen said.

"We were reading the map to see how to get back to our lake," Feyen said. "And we were behind a cliff, so it seemed like the sun was going down. I thought we were going to have to sleep out there." But that time, like all the others, they made a safe return to camp.

Figuring Things Out For Themselves

Rachel Skwira-Brown recalled an incident when she was much younger.

"We were walking across a bay one time, and it was slushy," she said. "I lost a boot in the slush."

"I was like, 'Dad! Come and help us!'" her sister Katherine said. "But he just yelled back, 'You can figure it out.'"

They did: "Izzy (Isabelle came and picked me up and ran me back to shore," Rachel said.

Lying in the tent, the girls broke out laughing at each of these memories.

They love these trips.

"I just like getting away from everything," Rachel said. "It gets me through the rest of the school year."

Their dads know the girls are learning important things.

"It's just to get them outside and get them comfortable with winter camping," Jesse Schomberg said. "I'm hoping they take away some confidence to do things that sound hard or risky or dangerous."

Saturday is always adventuring day.

"Let's go to Canada!" Katherine said.

They were so close to the Canadian border that it should have been no problem to hike but, as it turned out, deep snow blocked their way. The girls came snowshoeing back as the day's light was fading.



Learning From Challenges

For Kevin Skwira-Brown, having his daughter learn from challenges was always a goal.

"I was taking my kids to the father/daughter dance every February [when they were younger]" he said. "I thought, I want to celebrate more than they're beautiful, which they are. I wanted to celebrate that they're strong, they're smart and they're able to do things that are hard as well."

Quiz

- 1 Read the section "Three Families, 10 Years."
- Select the paragraph from the section that shows how long the camping trip was scheduled to last.
- (A) For 10 years now, these dads and daughters from the Duluth area have been making this camping trip each winter, and they always go to the Boundary Waters Canoe Area Wilderness off the Gunflint Trail in Minnesota. There are three families: the Skwira-Browns — Kevin and daughters Katherine, 18, and Rachel, 16; the Schombergs — Jesse and daughter Isabelle, 18; and the Feyens — Bob and daughter Hannah, 17.
 - (B) "Kevin and I had done this before," Jesse Schomberg said. "We were talking about it and said the girls could come. They'd have fun — they could bring a friend." It evolved into a tradition.
 - (C) On this 32-degree March afternoon, the gang was headed for Daniels Lake. The group would camp there for three days. They all piled into the Schombergs' tent, which is warmed at night by a propane heater.
 - (D) "We were reading the map to see how to get back to our lake," Feyen said. "And we were behind a cliff, so it seemed like the sun was going down. I thought we were going to have to sleep out there." But that time, like all the others, they made a safe return to camp.
- 2 Read the section "Figuring Things Out For Themselves."
- Which sentence from the section shows what happened to Rachel on a previous camping trip?
- (A) Rachel Skwira-Brown recalled an incident when she was much younger.
 - (B) "I lost a boot in the slush."
 - (C) "But he just yelled back, 'You can figure it out.'"
 - (D) The girls came snowshoeing back as the day's light was fading.
- 3 If this article was organized using chronological order, which section would come FIRST?
- (A) Introduction [paragraphs 1-2]
 - (B) "Reeling Off Stories"
 - (C) "Figuring Things Out For Themselves"
 - (D) "Learning From Challenges"
- 4 This article is organized using an informative approach.
- How would the article be different if it were organized using compare and contrast?
- (A) It might tell the story of one camping trip from beginning to end.
 - (B) It might describe the effects the camping trips have had on the girls.
 - (C) It might discuss similarities and differences between camping trips.
 - (D) It might explain some of the problems the girls had on trips and how they solved them.

“Into the snowy woods: 10 years of camping adventures for dads and daughters”
Comprehension Questions

Answer the following questions, citing evidence from the text.

1) What is the main idea of the passage?

2) Would you like to participate in the ten-year tradition? Why or why not?

Write a paragraph summarizing the daily activities of the camping adventures.

Getting ORGANIZED



Mrs. Rodríguez asked her students to turn in their homework. Cora's stomach sank because she didn't have her homework. She remembered to do it, but she forgot to put it in her backpack. It was still sitting on the kitchen table.

"Cora," Mrs. Rodríguez said, "did you forget to do your homework again?"


"No," Cora looked down at her feet. "I did the homework, but I left it at home."

"I'm sorry to hear that, Cora," Mrs. Rodríguez said. "Bring it in tomorrow, but you will lose five points."

That night the phone rang. "Hello, Mrs. Rodríguez," Cora heard her mother answer. *This cannot be good*, Cora thought.

"Of course, I will talk to Cora."

"Cora," Mama said, "Mrs. Rodríguez says your missing and late assignments are going to affect your grade. That's a problem."



"I'm sorry," Cora said. "I'm always in such a rush in the morning. It's hard to remember everything."

"Cora, rather than being sorry," Mama said, "I want you to solve this problem. You're too smart to let a lack of organization get in the way of good grades."

"What can I do, Mama?" Cora asked.

"Let's think of some ways you can be more organized," Mama said.

Cora came up with three solutions to her problem:

1. Write down my assignments.
2. Get ready for school the night before.
3. Have Mama double-check my homework.

Three weeks later, Cora brought home her report card. Mama gave her a hug. Cora's solutions had worked!

Sleuth Work

Gather Evidence Cora has been disorganized for a while. Write two details from the story that let you know about this problem.

Ask Questions What questions might the teacher have asked Cora to help understand why Cora's homework wasn't turned in on time? Write two questions.

Make Your Case How do you think Cora's decision to change her habits changes what happens in the rest of story?

“Getting Organized” Comprehension Questions

Answer the following questions, citing evidence from the text.

- 1) Underline three details about Cora’s problem in the text on page eight. In another color, draw a box around the two details that are the most important. Write the details below.

- 2) Look back at the details you identified. How would changing one detail affect the outcome of the story?

Write about a time when you had a problem and how you were able to come up with a solution to resolve it.

Name: _____

Date: _____

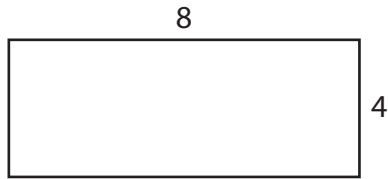
Measurement Learning Check



Part 1: Area

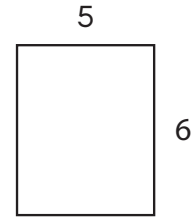
Directions: Find the area of the shapes below. Write your answer on the line.

1.



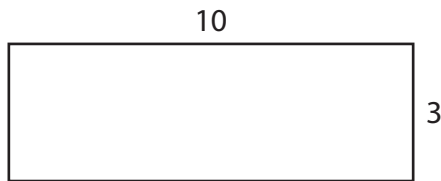
Area = _____ square units

2.



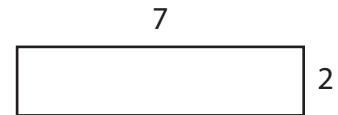
Area = _____ square units

3.



Area = _____ square units

4.

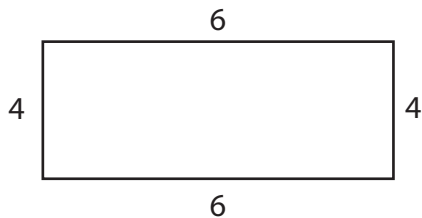


Area = _____ square units

Part 2: Perimeter

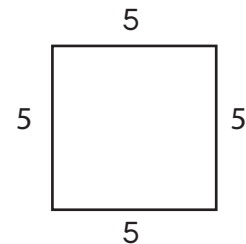
Directions: Find the perimeter of the shapes below. Write your answer on the line.

1.



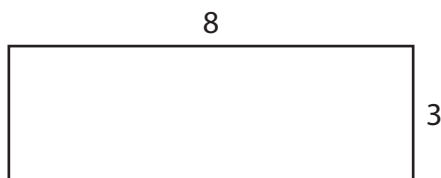
Perimeter = _____ units

2.



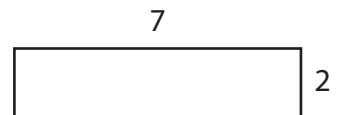
Perimeter = _____ units

3.



Perimeter = _____ units

4.



Perimeter = _____ units

Name: _____

Date: _____

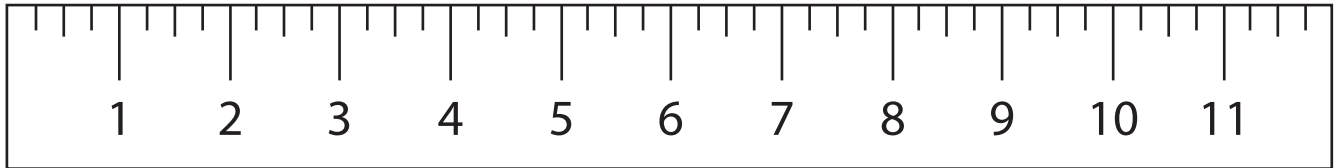
Measurement Learning Check



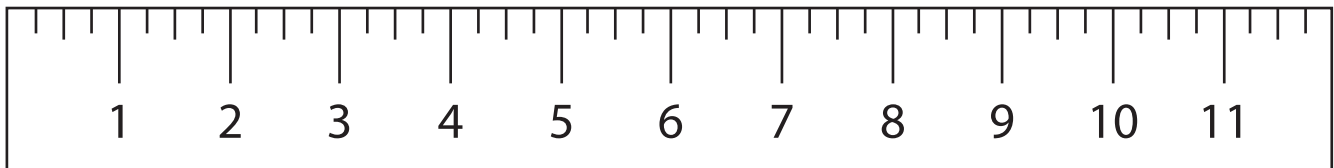
Part 3: Measurement

Directions: Measure the length of the lines below in inches. Record your answer in the space provided.

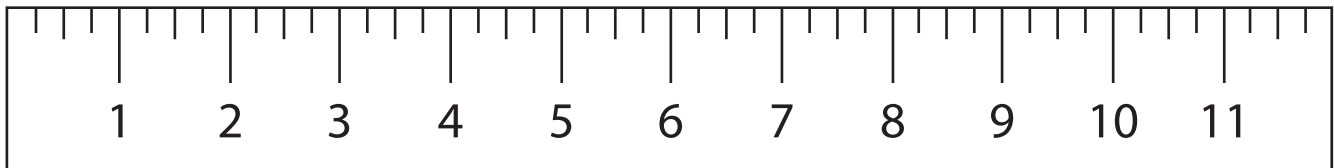
1. _____ inches



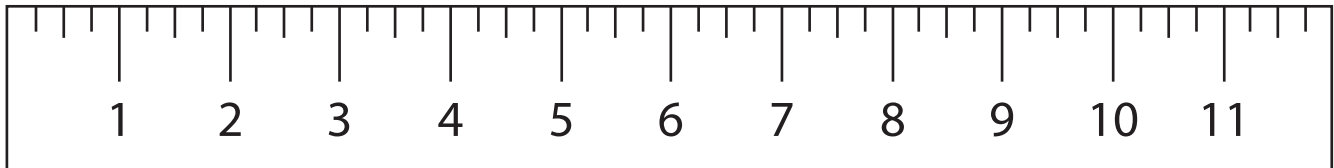
2. _____ inches



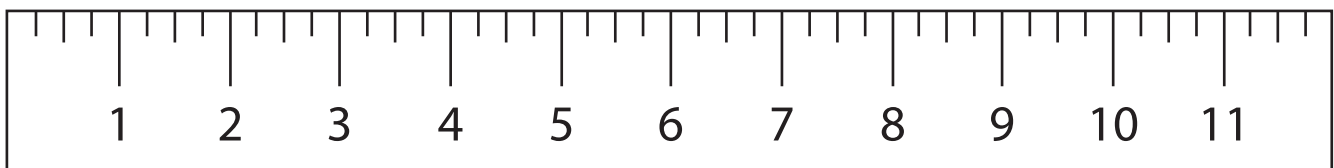
3. _____ inches



4. _____ inches



5. Draw a line with a length of $5 \frac{1}{4}$ inches.



Name: _____

Date: _____

Measurement Learning Check



Part 4: Time

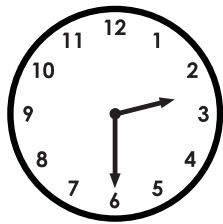
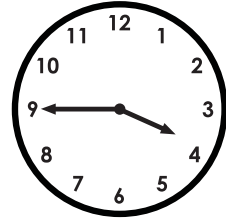
Directions: Solve the following word problems.

1. Recess began at 11:12am. It ended at 11:56am. How long was recess?
2. The assembly started at 2:02pm. It ended up at 2:45pm. How long was the assembly?
3. If the meeting started at 12:15pm and it took 55 minutes, what time did they finish?
4. If the cake went into the oven at 3:40pm and it needs to bake for 35 minutes, what time will the cake be fully baked?
5. The movie ended at 9:00pm. It was 95 minutes long. What time did we start the movie?
6. We arrived at the mall at 5:10pm. Since there was so much traffic, it took us 45 minutes to get there. What time did we start driving to the mall?

A Matter of Time

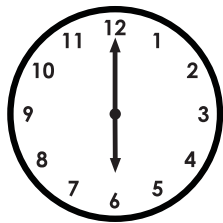
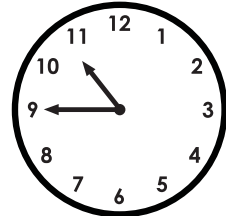
Answer the questions about time.

Janey went to the library at 3:45 p.m. and left at 7:45 p.m. How long was she at the library?



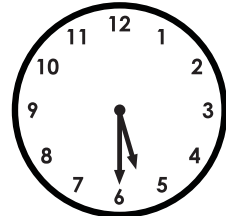
Nikki went to a concert that started at 2:30 p.m. It ended at 4:00 p.m. How long was the concert?

Joji went to the park at 10:45 a.m. and left at 12:00 p.m. How long was he at the park?



Mike went to see a movie at the theater that was 1 hour and 45 minutes long. It started 6:00 p.m. What time did it end?

It started snowing outside at 5:30 p.m. It stopped snowing at 6:45 p.m. How long did it snow?



Name: _____

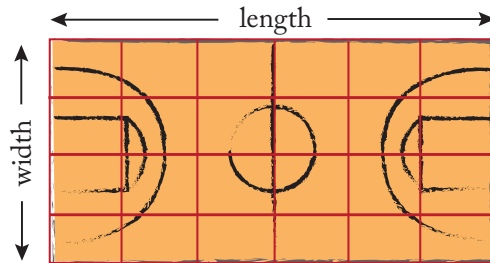
Date: _____

Math Madness: Finding Area 2

Area is the measurement of the square units inside a shape.

-Adding up the total number of squares within a figure is one way to find the area.
This is why we label the units as “square units.”

*There is a faster way to find the area of a shape. $\text{Area} = \text{Length} \times \text{Width}$



What is the length? _____

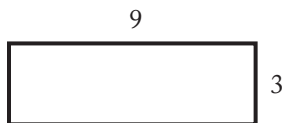
What is the width? _____

Multiply the length x width.

Area = _____ square units



Directions: Record the length and the width of each rectangle. Then use the equation to find the area of the basketball courts below.

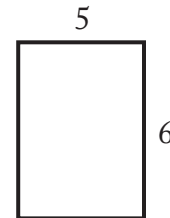


What is the length? _____

What is the width? _____

Multiply the length x width.

Area = _____ square units

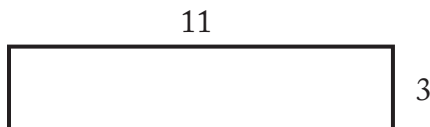


What is the length? _____

What is the width? _____

Multiply the length x width.

Area = _____ square units

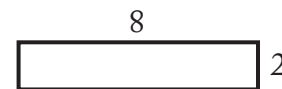


What is the length? _____

What is the width? _____

Multiply the length x width.

Area = _____ square units



What is the length? _____

What is the width? _____

Multiply the length x width.

Area = _____ square units



Draw a basketball court in the space below with a length of 6 units and a width of 3 units. Then, find the area.

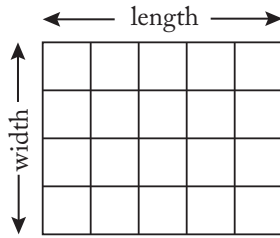
Area = _____ square units

Math Madness: It's the Same Area 1



Area is the measurement of the square units inside a shape.

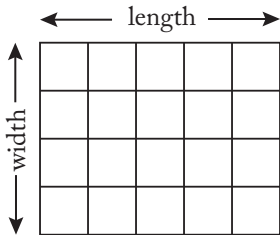
-Adding up the total number of squares within a figure is one way to find the area. This is why we label the units as "square units."



★ Add up the unit squares inside the shape.

Area = 20 square units

-Multiplying the length of the sides is another way to find the area. Area = Length x Width



What is the length? 5

What is the width? 4

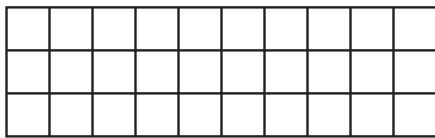
Multiply the length x width.

Area = 20 square units

Part 1

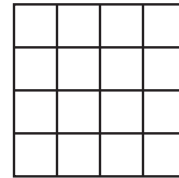
Directions: Add up the unit squares to find the area of the shapes.

1.



Area = _____ square units

2.

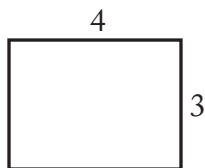


Area = _____ square units

Part 2

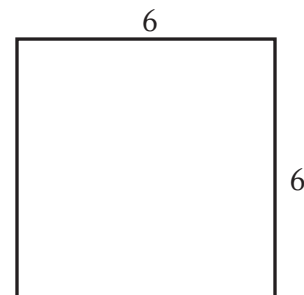
Directions: Multiply to find the area.

3.



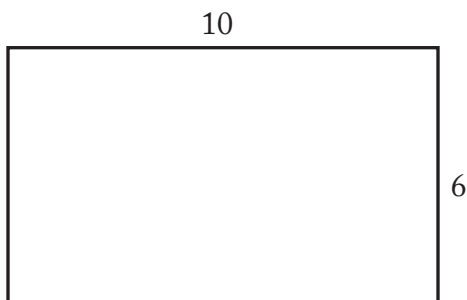
Area = _____ square units

4.



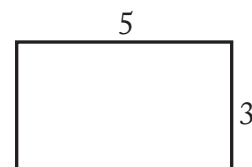
Area = _____ square units

5.



Area = _____ square units

6.

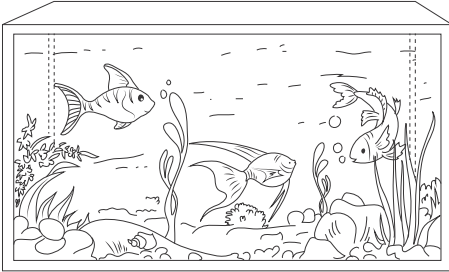


Area = _____ square units

Name _____

Fish Tales

Some people use a chart like the one shown to help them decide how many fish they can put in their fish tank. Use the chart to answer the following questions.



Length of Fish	Water needed for each fish
1 centimeter	2 liters
2 centimeters	4 liters
3 centimeters	6 liters
4 centimeters	8 liters

1. Marla has a 36-liter fish tank. How many 3-cm fish can she put in the tank?

2. Nicki wants to buy a fish tank and stock it with twenty 2-cm fish. What size tank should she buy?

3. Manuel wants to buy a fish tank and stock it with ten 1-cm fish, four 2-cm fish, and two 4-cm fish. What size tank should he buy?

4. Leonard has six 3-cm fish in his 68-liter fish tank. How many 4-cm fish can he add to the tank?

5. Mason has a 64-liter fish tank. Describe one possible way he could stock the tank with different sizes of fish.

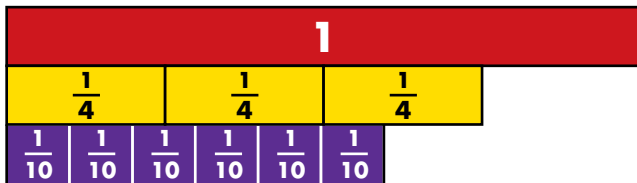
Another Example!

Compare $\frac{3}{4}$ and $\frac{6}{10}$.

Create an equivalent fraction for $\frac{3}{4}$ that has a numerator of 6.

$$\frac{3}{4} \times \frac{2}{2} = \frac{6}{8}$$

$\frac{6}{8} > \frac{6}{10}$ because 8 equal parts are each larger than one of the 10 equal parts of the same whole.



When two fractions have different denominators but the same numerators, the fraction with the greater denominator is less.



★ Guided Practice ★

Do You Understand?

1. **MP.3 Critique Reasoning** Mary says $\frac{1}{8}$ is greater than $\frac{1}{4}$ because 8 is greater than 4. Is Mary's reasoning correct? Explain.

Do You Know How?

For **2–5**, write $>$, $<$, or $=$.
Use number lines, fraction strips, or equivalent fractions.

2. $\frac{3}{4} \bigcirc \frac{6}{8}$

3. $\frac{1}{4} \bigcirc \frac{1}{10}$

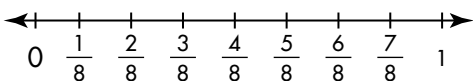
4. $\frac{3}{5} \bigcirc \frac{5}{10}$

5. $\frac{1}{2} \bigcirc \frac{4}{5}$

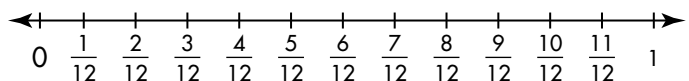
★ Independent Practice ★

Leveled Practice For **6–15**, find equivalent fractions to compare. Then write $>$, $<$, or $=$.

6. $\frac{7}{8} \bigcirc \frac{3}{4}$



7. $\frac{5}{6} \bigcirc \frac{10}{12}$



8. $\frac{7}{10} \bigcirc \frac{11}{12}$

9. $\frac{7}{12} \bigcirc \frac{4}{12}$

10. $\frac{5}{12} \bigcirc \frac{4}{5}$

11. $\frac{2}{6} \bigcirc \frac{3}{12}$

12. $\frac{6}{8} \bigcirc \frac{8}{10}$

13. $\frac{3}{5} \bigcirc \frac{3}{6}$

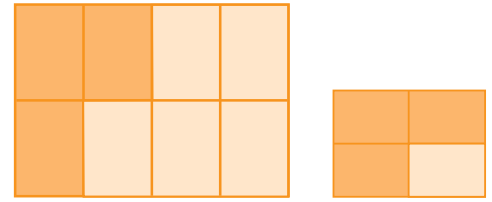
14. $\frac{2}{10} \bigcirc \frac{2}{12}$

15. $\frac{5}{6} \bigcirc \frac{4}{5}$

*For another example, see Set C on page 456.

Math Practices and Problem Solving

16. Felicia drew the pictures at the right to show $\frac{3}{8}$ is greater than $\frac{3}{4}$. What was Felicia's mistake?



17. **MP.3 Critique Reasoning** Jake said you can compare two fractions with the same denominator by only comparing the numerators. Is Jake correct? Explain.

18. Tina completed $\frac{2}{3}$ of her homework. George completed $\frac{7}{8}$ of his homework. Tina and George have the same amount of homework. Who completed a greater fraction of homework?

19. If $34 \times 2 = 68$, then what does 34×20 equal?

20. What can you conclude about $\frac{3}{5}$ and $\frac{60}{100}$ if you know $\frac{3}{5}$ is equivalent to $\frac{6}{10}$ and $\frac{6}{10}$ is equivalent to $\frac{60}{100}$?

21. Jackson played a video game for $\frac{1}{6}$ hour. Hailey played a video game for $\frac{1}{3}$ hour. Who played the video game for a greater amount of time? Explain.

22. **Higher Order Thinking** Four fourth-grade classes from an elementary school took a trip to the United States Capitol. There were 25 students in each class. At the capitol, a maximum of 40 students were allowed on a tour at one time. What was the least number of tours needed for all students to take the tour?

Common Core Assessment

23. Select all answer choices that show a correct comparison.

- ☐ $\frac{3}{8} > \frac{3}{6}$
☐ $\frac{5}{5} > \frac{5}{8}$
☐ $\frac{1}{5} < \frac{1}{2}$
☐ $\frac{2}{3} < \frac{2}{10}$
☐ $\frac{1}{6} > \frac{2}{6}$

24. Select all answer choices that show a correct comparison.

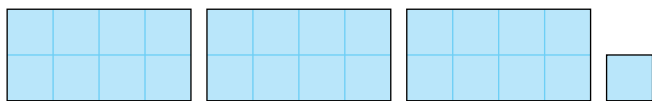
- ☐ $\frac{5}{6} > \frac{7}{12}$
☐ $\frac{1}{2} > \frac{10}{10}$
☐ $\frac{4}{10} > \frac{2}{6}$
☐ $\frac{1}{5} < \frac{2}{3}$
☐ $\frac{2}{3} > \frac{9}{12}$

Another Example!

How can you decompose $3\frac{1}{8}$?

$3\frac{1}{8}$ is 1 whole + 1 whole + 1 whole + $\frac{1}{8}$.

Each whole can also be shown as eight equal parts.



$$3\frac{1}{8} = 1 + 1 + 1 + \frac{1}{8}$$

$$3\frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$$

A **mixed number** has a whole number part and a fraction part.



☆ Guided Practice ☆

Do You Understand?

1. **MP.4 Model with Math** Draw a model to show one way to decompose $\frac{7}{8}$.
2. Paul said the sum of $\frac{1}{10} + \frac{7}{10} + \frac{4}{10}$ is the same as the sum of $\frac{5}{10} + \frac{5}{10} + \frac{2}{10}$. Is Paul correct? Explain.

Do You Know How?

For **3–4**, decompose each fraction or mixed number in two different ways. Use drawings or fraction strips as needed.

$$3. \frac{3}{5} = \frac{\square}{\square} + \frac{\square}{\square} \quad \frac{3}{5} = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square}$$

$$4. 1\frac{3}{4} = \frac{\square}{\square} + \frac{\square}{\square} \quad 1\frac{3}{4} = \frac{\square}{\square} + \frac{\square}{\square}$$

☆ Independent Practice ☆

Leveled Practice For **5–10**, decompose each fraction or mixed number in two different ways. Use drawings or fraction strips as needed.

$$5. \frac{4}{6} = \frac{\square}{\square} + \frac{\square}{\square} \quad \frac{4}{6} = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square}$$

$$6. \frac{7}{8} = \frac{\square}{\square} + \frac{\square}{\square} \quad \frac{7}{8} = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square}$$

$$7. 1\frac{3}{5} = \frac{\square}{\square} + \frac{\square}{\square} \quad 1\frac{3}{5} = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square}$$

$$8. 2\frac{1}{2} = \frac{\square}{\square} + \frac{\square}{\square} \quad 2\frac{1}{2} = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square}$$

$$9. \frac{9}{12} = \frac{\square}{\square} + \frac{\square}{\square} \quad \frac{9}{12} = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square}$$

$$10. 1\frac{1}{3} = \frac{\square}{\square} + \frac{\square}{\square} \quad 1\frac{1}{3} = \frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square}$$

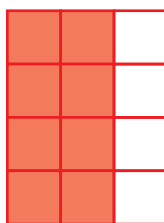
*For another example, see Set A on page 533.

Math Practices and Problem Solving

11. Jackie ate $\frac{1}{5}$ of a bag of popcorn. She shared the rest with Enrique. List three ways they could have shared the remaining popcorn.

12. © **MP.4 Model with Math** Draw an area model to show $\frac{4}{10} + \frac{3}{10} + \frac{2}{10} = \frac{9}{10}$.

13. In a class of 12 students, 8 students are boys. Write two equivalent fractions that tell which part of the class is boys.



The area model shows 12 sections. Each section is $\frac{1}{12}$ of the class.



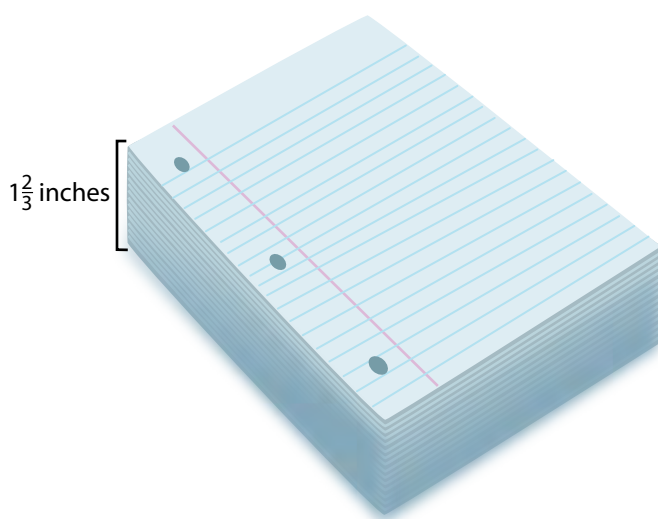
14. There were 45 girls and 67 boys at a sold-out performance. Each ticket to the performance costs \$9. How much were all the tickets to the performance?

15. **Higher Order Thinking** Jason wrote $1\frac{1}{3}$ as the sum of three fractions. None of the fractions had a denominator of 3. What fractions might Jason have used?

© Common Core Assessment

16. A teacher distributes a stack of paper to 3 groups. Each group receives a different amount of paper. Select all the ways the teacher can distribute the paper by decomposing $1\frac{2}{3}$ inches. Use fraction strips if needed.

- ☐ $1 + \frac{1}{3} + \frac{1}{3}$
- ☐ $\frac{2}{3} + \frac{1}{3} + \frac{1}{3}$
- ☐ $\frac{2}{3} + \frac{2}{3} + \frac{1}{3}$
- ☐ $\frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3}$
- ☐ $1 + \frac{2}{3}$

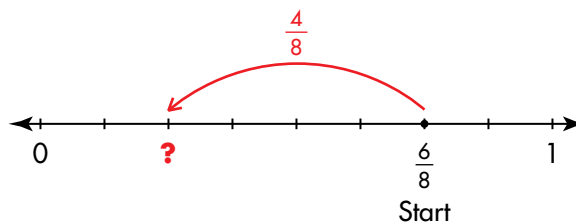


Another Example!

Find $\frac{6}{8} - \frac{4}{8}$.

Start at $\frac{6}{8}$. To subtract, move $\frac{4}{8}$ to the left.
The ending point is $\frac{2}{8}$.

So, $\frac{6}{8} - \frac{4}{8} = \frac{2}{8}$.



★ Guided Practice ★

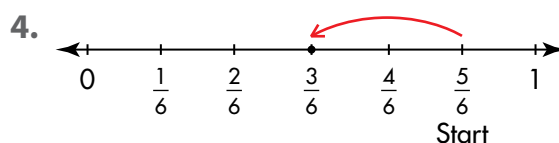
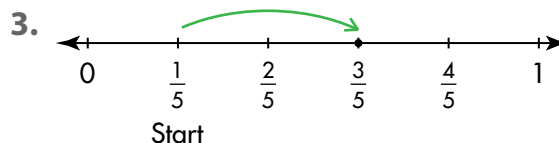
Do You Understand?

1. In the example above, how is the denominator illustrated on the number line?

2. **MP.4 Model with Math** Draw a number line to represent $\frac{3}{12} + \frac{5}{12}$.

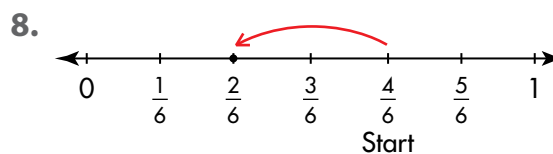
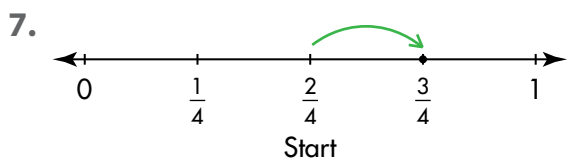
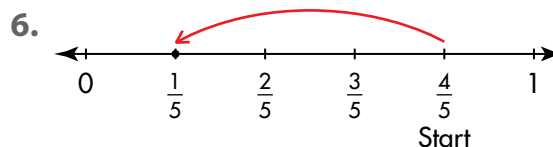
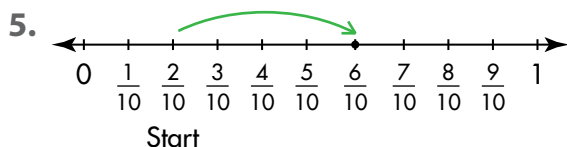
Do You Know How?

For **3–4**, write the equation shown by each number line.



★ Independent Practice ★

For **5–8**, write the equation shown by each number line.

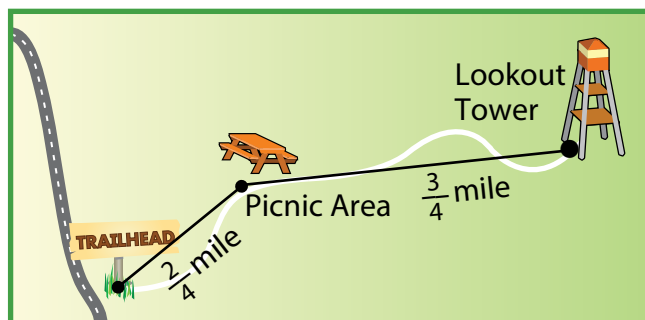


Math Practices and Problem Solving

9. **Number Sense** How do you know the quotient of $639 \div 6$ is greater than 100 before you actually divide?

10. **MP.2 Reasoning** Maria saved $\frac{1}{4}$ of her allowance. Tomas saved $\frac{1}{6}$ of his allowance. Who saved a greater part of his or her allowance? Explain your reasoning.

11. Isaac started his bike ride at the trailhead. He reached the picnic area and continued to the lookout tower. If Isaac rode his bike for a total of $\frac{10}{4}$ miles, how much farther did he ride beyond the lookout tower?



12. **MP.4 Model with Math** Ricky completely filled a bucket to wash his car. After he finished washing the car, $\frac{5}{8}$ of the water remained in the bucket. Write and solve an equation to show the fraction of the water Ricky used.

13. **Higher Order Thinking** Sarah and Jenny are running an hour long endurance race. Sarah ran $\frac{2}{6}$ hour before passing the baton to Jenny. Jenny ran $\frac{3}{6}$ hour, then passed the baton back to Sarah. What fraction of the hour does Sarah still need to run to complete the race?

Common Core Assessment

14. Choose numbers from the box to fill in the missing numbers in each equation. Use each number once.

a. $\frac{\square}{4} + \frac{2}{\square} = \frac{3}{4}$

b. $\frac{8}{12} - \frac{\square}{12} = \frac{2}{\square}$

c. $\frac{\square}{8} + \frac{2}{\square} = \frac{5}{8}$

1	3
4	6
8	12

15. Choose numbers from the box to fill in the missing numbers in each equation. Use each number once.

a. $\frac{3}{10} + \frac{\square}{10} = \frac{9}{\square}$

b. $\frac{9}{12} - \frac{6}{\square} = \frac{\square}{12}$

c. $\frac{1}{4} + \frac{\square}{4} = \frac{3}{\square}$

2	3
4	6
10	12

A-Z Vocabulary

1. According to the **Commutative Property of Addition**, you can add numbers in any order.

$$\frac{4}{6} + 2 = 2 + \underline{\hspace{2cm}}$$

2. According to the **Associative Property of Addition**, you can regroup addends.

$$\left(1 + \frac{4}{6}\right) + 2 = 1 + (\underline{\hspace{2cm}} + 2)$$

3. Use properties to add $1\frac{4}{6} + 2\frac{5}{6}$.

Add the fraction part.

$$\begin{array}{r} 1\frac{4}{6} \\ + 2\frac{5}{6} \\ \hline \end{array}$$

Add the whole numbers.

$$\begin{array}{r} 1\frac{4}{6} \\ + 2\frac{5}{6} \\ \hline \end{array}$$

4. Use equivalent fractions to add $1\frac{4}{6} + 2\frac{5}{6}$.

$$1\frac{4}{6} = \frac{6}{6} + \frac{4}{6} = \underline{\hspace{2cm}}$$

$$2\frac{5}{6} = \frac{6}{6} + \underline{\hspace{2cm}} + \frac{5}{6} = \underline{\hspace{2cm}}$$

$$1\frac{4}{6} + 2\frac{5}{6} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}} \text{ or } \underline{\hspace{2cm}}$$

5. Find $2\frac{1}{8} + 3\frac{2}{8}$ using properties.
6. Find $1\frac{1}{2} + 3\frac{1}{2}$ using equivalent fractions.

On the Back!

7. Use properties or equivalent fractions to find $1\frac{2}{5} + 3\frac{1}{5}$.

Name _____

Enrichment

9-10

Mixed Differences

Answer each question.

1. Jenna bought a spool of ribbon that was $5\frac{3}{4}$ meters long. She used $3\frac{1}{4}$ meters of ribbon for a craft project. How many meters of ribbon does Jenna have left?

2. Brandon has a male puppy with a mass of $3\frac{2}{4}$ kilograms and a female puppy with a mass of $2\frac{1}{4}$ kilograms. How much greater is the male puppy's mass than the female puppy's mass?

3. Jeff's sister drives 14 miles to her college. His brother only drives $5\frac{7}{10}$ miles to his college. How much farther does Jeff's sister drive than his brother?

4. Montel bought a spool of string that was $10\frac{10}{12}$ meters long. He used $6\frac{9}{12}$ meters of string to make kites. How many meters of string does Montel have left?

5. Janet grew a pumpkin that weighs $13\frac{2}{4}$ pounds and a melon that weighs $8\frac{1}{4}$ pounds. How much heavier is the pumpkin than the melon?

6. Aidan roller-skated $3\frac{9}{10}$ miles around the lake. Josh roller-skated $2\frac{1}{10}$ miles around the park. How much farther did Aidan roller-skate than Josh?

Name _____

Date _____

1. The following solids are made up of 1 cm cubes. Find the total volume of each figure, and write it in the chart below.

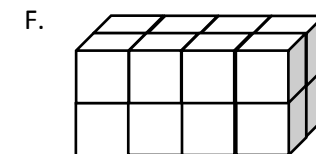
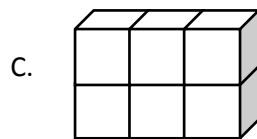
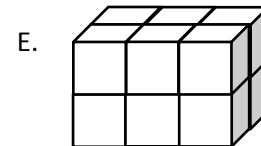
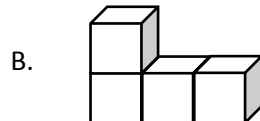
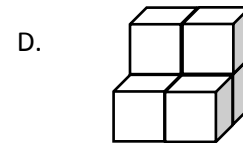
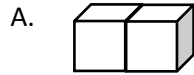
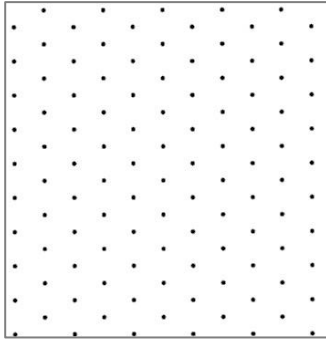


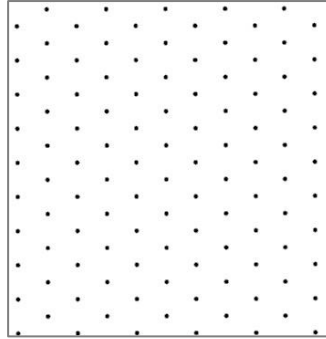
Figure	Volume	Explanation
A		
B		
C		
D		
E		
F		

2. Draw a figure with the given volume on the dot paper.

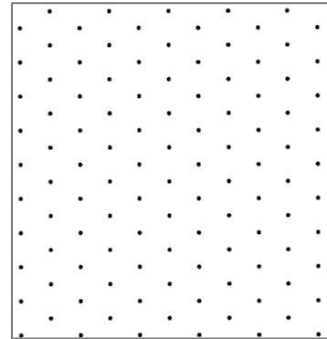
a. 3 cubic units



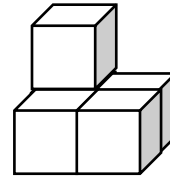
b. 6 cubic units



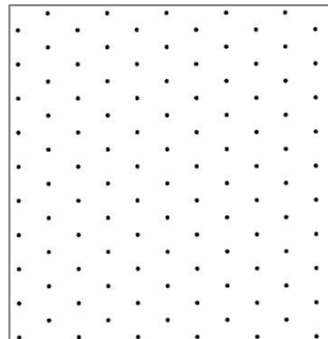
c. 12 cubic units



3. John built and drew a structure that has a volume of 5 cubic centimeters. His little brother tells him he made a mistake because he only drew 4 cubes. Help John explain to his brother why his drawing is accurate.



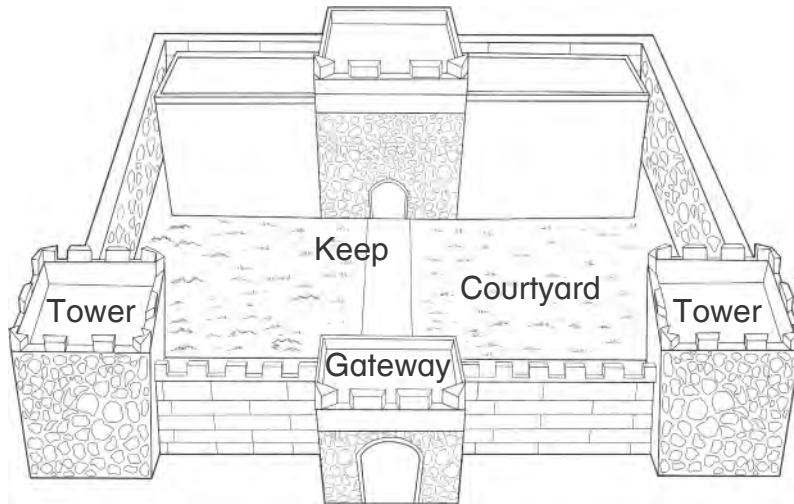
4. Draw another figure below that represents a structure with a volume of 5 cubic centimeters.



Castle Volume

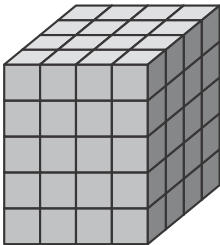
Castles were built in Europe from the 9th century to the end of the 15th century. They were built as defense and as the home of a king or lord. Castles often had a strong outer wall with guard towers and a gateway. The outer walls protected the keep, the strongest structure of the castle. The defenders would retreat to the keep when the outer walls fell.

The figure shows the layout of a castle.



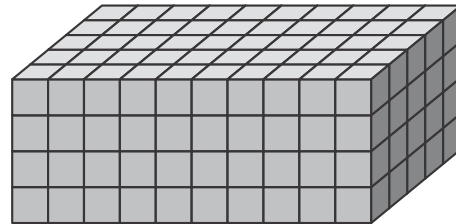
Jason made models of parts of the castle out of cubes. Find the volume of each model Jason made.

1. Tower



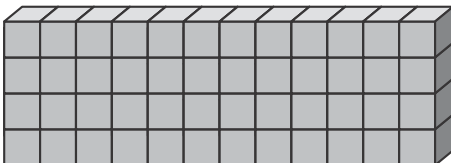
_____ cubic units

2. Keep



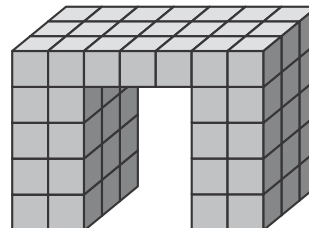
_____ cubic units

3. Wall



_____ cubic units

4. Gateway



_____ cubic units

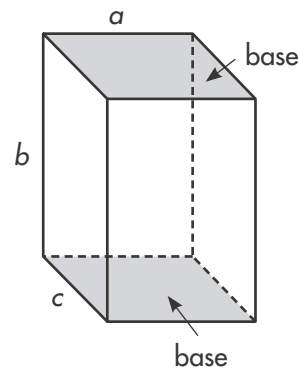
Vocabulary

1. A **rectangular prism** is a solid figure with six rectangular faces. There are two parallel bases with the same size and shape and two pairs of parallel faces, each pair with the same size and shape.

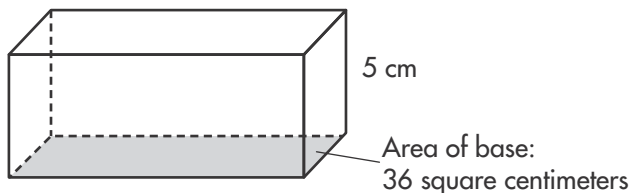
The **height** of a prism is the distance between the two bases.

How many bases are shaded? _____

Which side shows the height? _____



2. You can find the volume of a rectangular prism by multiplying the area of the base by the height of the prism.



What is the value for the base area, B , of the prism? _____

What is the value for the height, h , of the prism? _____

3. Find the volume of the prism in Problem 2.

Use the formula $V = B \times h$.

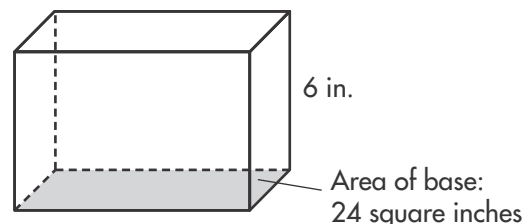
$$V = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$$

$$V = \underline{\hspace{2cm}} \text{ cubic centimeters, or } \underline{\hspace{2cm}} \text{ cm}^3$$

4. An aquarium has a base area of 6 square feet and a height of 2 feet. Will the aquarium fit in 15 cubic feet of space? Use $V = B \times h$.

On the Back!

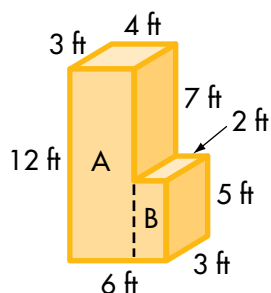
5. Find the volume of the rectangular prism.



★ Guided Practice ★

Do You Understand?

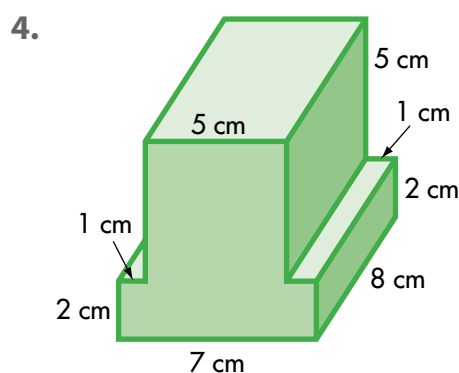
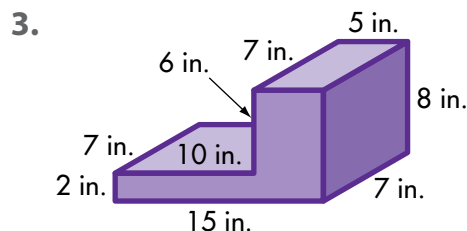
In **1** and **2**, use the solid below. The dashed line separates it into two rectangular prisms, A and B.



1. What are the length, width, and height of Prism A? What are the length, width, and height of Prism B?
2. What is another way you could separate the shape into two rectangular prisms? What are each prism's dimensions?

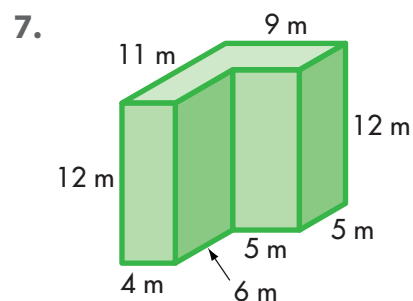
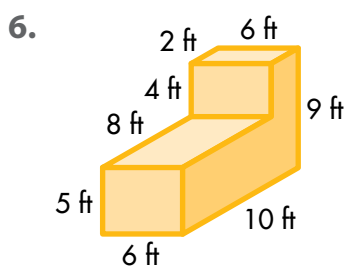
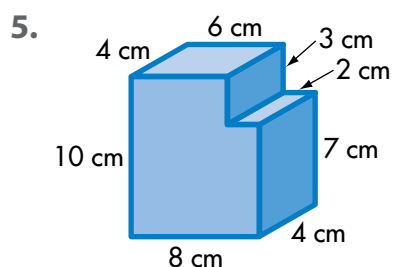
Do You Know How?

In **3** and **4**, find the volume of each solid figure.



★ Independent Practice ★

In **5–7**, find the volume of each solid figure.



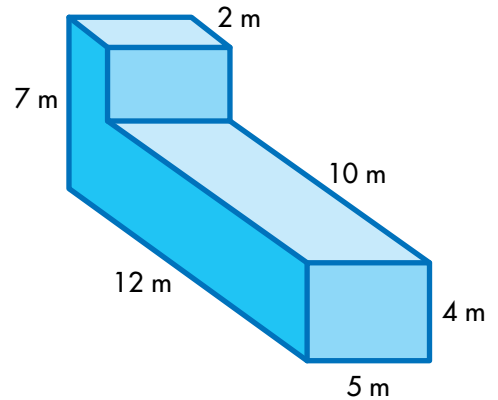
Math Practices and Problem Solving

For 8–10, use the drawing of the solid figure.

8. **MP.1 Make Sense and Persevere** How would you find the volume of the figure shown?

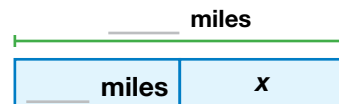
9. **Algebra** Write two expressions that can be added to find the volume of the solid figure.

10. What is the volume of the solid figure?



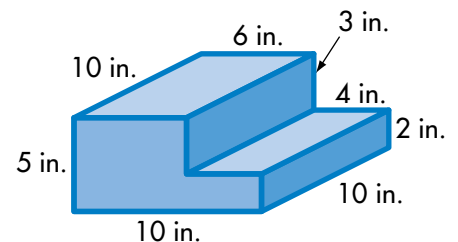
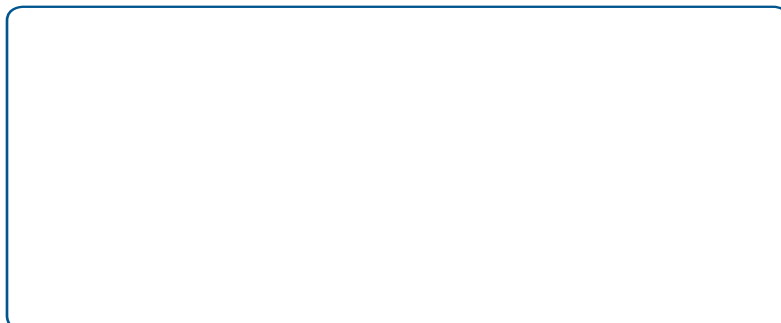
11. **Higher Order Thinking** A solid figure is separated into two rectangular prisms. The volume of Rectangular Prism A is 80 cubic feet. Rectangular Prism B has a length of 6 feet and a width of 5 feet. The total volume of the solid figure is 200 cubic feet. What is the height of Rectangular Prism B? Show your work.

12. **MP.4 Model with Math** The Peters family will drive 615 miles to reach their vacation destination. If they drive 389 miles the first day, how many miles will they drive the second day? Complete the bar diagram to help.



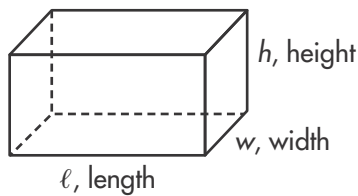
Common Core Assessment

13. Draw a line to separate the solid figure at the right into two rectangular prisms. Then write an expression for the volume of the solid figure.

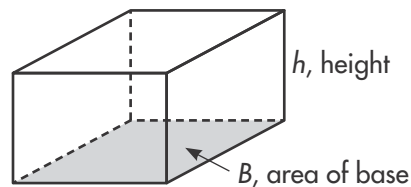


A-Z Vocabulary

1. A **formula** is a rule that uses symbols to relate two or more quantities.
Write the formulas that can be used to find the volume of a rectangular prism.

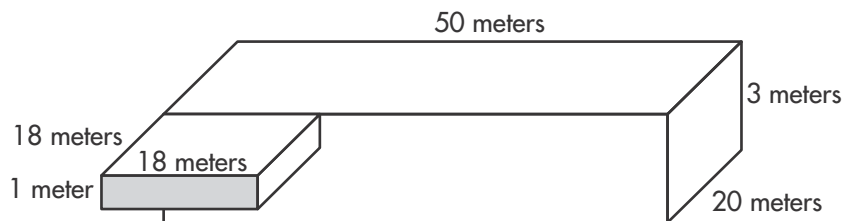


$$V = \ell \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$$



$$V = \underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$$

2. A community swimming pool has a lap pool with a smaller wading pool.
What is the total volume of water that the two pools can hold?



Complete the formula to find the area of the base of the lap pool.

$$A = \ell \times \underline{\hspace{1cm}} = 50 \text{ m} \times \underline{\hspace{1cm}} \text{ m} = \underline{\hspace{2cm}} \text{ m}^2$$

3. Complete the formula to find the volume of the lap pool.

The area of the base of the lap pool, B , is $\underline{\hspace{2cm}} \text{ m}^2$.

The lap pool has a height, h , of $\underline{\hspace{1cm}}$ meters.

$$V = B \times h = \underline{\hspace{2cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}} \text{ m}^3$$

4. Complete the formula to find the volume of the wading pool.

$$V = \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}} \text{ m}^3$$

5. Write an expression to find the total volume of the swimming pool.

$$\underline{\hspace{2cm}} \text{ m}^3 + \underline{\hspace{2cm}} \text{ m}^3 = \underline{\hspace{2cm}} \text{ m}^3$$

On the Back!

6. A shipping box is 10 inches long, 6 inches wide, and 3 inches high. What is the volume of the box? Show your work.