Dear 5th Grade Family,
I hope you are as excited as I am for the upcoming school year! As you know, at St. Malachy our core values focus on Strength of Heart, Strength of Mind, and Strength of will. These values will be the pillars of the ' $23-24$, 5 th Grade Class.

Through these values, I will provide a positive community of learning where students build one another up with kind words and actions. Strength of Heart will be the catalyst allowing students to trust the classroom is a safe place where they can be themselves.

In 5th grade we will be using our Strength of Mind to be open to new ideas and not be afraid to make mistakes as we learn new material. A growth mindset is essential and promoted, not just by me, but also by students challenging one another to grow academically.

Finally, we know that all journeys do not happen without obstacles. By using our Strength of Will, I will continue to push and challenge your scholars to overcome these issues in a productive, beneficial way! To help ensure students remain on track, we will be using LiveSchool instead of Dojo to track behaviors and instill discipline when behaviors occur. Students will be sent home with a one page description of how LiveSchool works and the rewards/punishments that are in place.

As the school year starts, I look forward to meeting all of you and having open communication ensuring the success of our young scholars. My contacts are below and please feel free to reach out with any questions or concerns you may have!

Sincerely,
Mr. Hill

Cell: 225-229-3082
Email: thill@stmalacyphila.org

5th Grade Class Vision:
"The greatness of a community is most accurately measured by the compassionate actions of its members." - Coretta Scott King

Scholars, this year we will develop and grow not just as a classroom, but as a community! Our community will be founded on the ideals of St. Malachy exhibiting Strength of Heart, Strength of Mind, and Strength of Will!

Through these values, we will grow in a positive community of learning where we as young scholars build one another up with kind words and actions. Our Strength of Heart will allow us to trust one another and use the classroom as a safe space where you are not afraid to be yourself.

We will use our Strength of Mind to be open to new ideas and not be afraid to make mistakes as we learn new material. A growth mindset will help you as scholars by challenging each other to grow academically and socially.

Finally, we know that all journeys do not happen without obstacles. By using our Strength of Will, we will push and challenge each other to overcome these issues in a productive, beneficial way!


## St. Malachy CATHOLIC SCHOOL

## An Independence Mission School

Summer Work for Students going from Grade<br>$\qquad$ to Grade 5

Dear St. Malachy Families,

Thank you again for your incredible partnership, hard work, and support throughout this past school year. Schools and students across the country faced challenges this year, and as always the St. Malachy community rose to the occasion, worked together, and accomplished something great. It wasn't always easy, it wasn't always pretty, but it was effective and impactful for our students and our classroom communities. Our students continued learning and working hard through the very end of the school year. We are so proud of them and grateful for you and our teachers.

We know that, more than ever, it is important this Summer that students be provided with learning opportunities and enriching activities. We know Summer is also a time for families to relax, spend time with friends, read books you love, find a new series, or learn a new skill. We hope you will find the work enclosed engaging, enriching, and interesting, so that your scholar remains intellectually stimulated while also making space for family life.

We recommend you designate a time for your scholar to work on their Summer Work Assignments a few times a week. Also, we recommend you let your child see you reading along with them or just enjoying a great book by yourself!

Directions for Families:

- Please complete as much of the Summer Work Packet as you can.
- In September, the first 100 students to submit completed Summer Work Packets will receive a free gift!

Contents:

1) Summer Reading (Grades 3-8 Only): In addition to the ELA Activities, please see the directions for the Summer Reading.
2) ELA Activities: Please complete the attached reading activities. This includes about 10 days worth of activities, so you may want to consider completing 1-2 per week.
3) Math Conceptual Activities
4) Math Fluency Activities

Thanks for All you Do,
The Team at St. Malachy

Students Entering Grades 5-8:

1. Read the Required Reading Book of the Grade and keep a reading log to track when you're reading. Turn this in to your teacher in the first week of school.
2. Select one book from the Suggested Reads to complete a File Folder Project. (Directions for this project are attached.) Turn this in to your teacher in the first week of school.

Summer Reading<br>for Students Entering Grade Five

## Required Reading: Ghost Boys by Jewell Parker Rhodes

Suggested Reads (Read at least one from this list):

- Data; March of the Mini Beasts -- Ada Hopper
- Gabby Duran and the Unsittables -- Elise Allen
- Mistakes that Worked -- Charlotte Foltz Jones
- Real Friends --by Sarah L. Thomson
- The Eureka Key -- Sarah L. Thomson
- The Zero Degree Zombie Zone -- Patrick Henry Boss
- Timmy Failure -- Stephan Pastis
- Star Thief -- Lindsey Becker
- Drizzle - Kathleen Van Cleve
- Zane and the Hurricane - Rodman Philbrick
- Freak the Mighty- Rodman Philbrick ***
- Peter and the Starcatchers - Dave Barry and Ridley Pearson
- My Side of the Mountain - Jean Craighead George
- Walt Whitman: Words for America - Barbara Kerley
- Inside Out and Back Again - Thanhha Lai
- The Elephant Scientist - Donna M. Jackson
- Sir Cumference and the First Round Table: A Math


Adventure - Jennifer Thompson

- Jack Plank Tells Tales - Natalie Babbitt
- Wild River - P.J. Petersen
- The Jungle Book - Rudyard Kipling
- The Call of the Wild - Jack London
- Bedknob and Broomstick - Mary Norton
- Where the Red Fern Grows - Wilson Rawls
- Black Beauty - Anna Sewell
- Call it Courage - Armstrong Perry
- The Sword in the Stone (The Once and Future King, \#1) - T.H. White
- Matilda - Roald Dahl
- Inkheart (Inkworld, \#1) - Cornelia Funke
- Emmy and the Incredible Shrinking Rat - Lynne Jonell
- The True Confessions of Charlotte Doyle - Avi
- Year of Impossible Goodbyes - Sook Nyul Choi
- The Midwife's Apprentice - Karen Cushman
- Out of the Dust - Karen Hess

Grades 5-8 Reading Log: June
$\left.\begin{array}{|l|l|l|l|l|l|}\hline \text { Date } & \begin{array}{l}\text { I read } \\ \text { with } \\ \text { parent } \\ \text { l alone }\end{array} & & \text { Book } & \begin{array}{l}\text { Page } \\ \text { s }\end{array} & \text { Task After Reading }\end{array} \begin{array}{l}\text { Parent } \\ \text { Signature } \\ \text { Initials }\end{array}\right]$.

|  |  |  |  |  | Summary |
| :--- | :--- | :--- | :--- | :--- | :--- |

July Reading Log
$\left.\begin{array}{|l|l|l|l|l|l|}\hline \text { Date } & \begin{array}{l}\text { I read } \\ \text { with } \\ \text { parent } \\ \text { l alone }\end{array} & & \text { Book } & \begin{array}{l}\text { Page } \\ \text { s }\end{array} & \text { Task After Reading }\end{array} \begin{array}{l}\text { Parent } \\ \text { Signature } \\ \text { I initials }\end{array}\right]$.

|  |  |  |  |  | Summary |
| :--- | :--- | :--- | :--- | :--- | :--- |

August Reading Log
$\left.\begin{array}{|l|l|l|l|l|l|}\hline \text { Date } & \begin{array}{l}\text { I read } \\ \text { with } \\ \text { parent } \\ \text { l alone }\end{array} & & \text { Book } & \begin{array}{l}\text { Page } \\ \text { s }\end{array} & \text { Task After Reading }\end{array} \begin{array}{l}\text { Parent } \\ \text { Signature } \\ \text { Initials }\end{array}\right]$.


## Recycling \& Conservation: Why Recycle?



Recycling is a process where something is reused rather than thrown away. Common items that are recycled include aluminum and steel cans, glass, and newspapers. Recycling can be time-consuming and dirty work. For example, recyclable objects have to be sorted from trash. Then the objects have to be cleaned. Afterwards, the objects are turned into materials that can be used by people and companies. Why should people bother to recycle even though it takes a lot of work?

Recycling helps protect the earth. Recycling means less garbage in landfills. These are places where garbage is taken and buried. Recycling also helps conserve the earth's resources. For example, factories use less energy by recycling steel cans than by making new ones. Recycling paper saves trees from being cut down. Trees are used to make paper.

Every time you are about to drop a plastic bottle in the garbage, stop and think. Is it worth harming the earth? Your actions now can help preserve the environment for generations to come. All you have to do is throw that bottle into a recycling bin.

Get in the habit. Be proud of recycling. Encourage others to recycle. You can make a difference!

Name: $\qquad$ Date: $\qquad$

1. What is recycling?
A. a process where something is reused
B. a process where something is thrown away
C. a process where something is taken and buried
D. a process where something harms the earth
2. How does the author organize the information in this passage?
A. The author explains the problems with recycling and suggests different solutions.
B. The author describes similarities and differences between recycling and throwing things away.
C. The author lists information about recycling in order of importance, from most to least important.
D. The author describes recycling and shares an argument about why it's important.
3. Read these sentences.
". . . recyclable objects have to be sorted from trash. Then the objects have to be cleaned."

These sentences can be used to support which conclusion below?
A. ". . . the objects are turned into materials that can be used by people and companies."
B. "Recycling can be time-consuming and dirty work."
C. "Recycling helps protect the earth."
D. "Be proud of recycling."
4. What can be concluded from this passage?
A. The author works for a recycling plant.
B. The author does not believe in recycling.
C. The author believes that all you have to do to save the environment is throw a bottle in a bin.
D. The author believes that everyday people can help the earth.
5. What is the main idea of this passage?
A. Recycling helps protect the earth and conserve its resources.
B. Many people avoid recycling because it is too difficult.
C. People must make decisions what to recycle.
D. Only certain things can be recycled.
6. At the end of paragraph one, the author asks, "Why should people bother to recycle even though it takes a lot of work?" Why does the author include this question?
A. to transition the reader to the next paragraph, which answers the question
B. to question the reader's knowledge about recycling
C. to summarize the major points in paragraph one
D. to allow the reader to demonstrate understanding
7. Choose the answer that best completes the sentence below.

Recycling takes work, $\qquad$ it is good for the environment.
A. instead
B. before
C. so
D. but
8. What does the author suggest you do when you are about to throw a plastic bottle in the garbage?
9. What examples does the author provide to show that recycling helps conserve the earth's resources?
10. Read these sentences from the text.
"Get in the habit. Be proud of recycling. Encourage others to recycle."
How can these actions make a difference? Use evidence from the text to support your answer.

## Take Me Out to the Ball Game

by ReadWorks

Corinne skipped through the parking lot. She couldn't hold back her excitement. Her family was going to the baseball stadium for the first time!
"Corinne, chill out," said her brother, Jake. Jake was only two years older than Corinne, but he thought that gave him the authority to boss her around. Corinne slowed to a walk and waited for her family to catch up.
"I can't help it," she said. "I've never been to a baseball game before."
Corinne had watched countless baseball games on television. Baseball was her favorite sport, and she had been a Chicago Cubs fan as long as she could remember. Corinne thought that the best moment of her life would be when the Cubs finally broke their curse and won the World Series. The team had been losing for decades, but she knew that sooner or later, they had to win.

But tonight her family wasn't going to see the Cubs. They were going to see the Cougars, a new minor league team that had come to their town. Jake wasn't excited about the game. He thought the minor leagues didn't count. "The minor league is for players who aren't good enough for the major league," Jake always said. But Corinne liked the idea that these players weren't famous yet. They were still training and learning, just like her. Maybe she'd see baseball's next big star. Maybe he'd even sign a baseball for her.
"Mom," Corinne said, "Can we wait outside the dugout after the game? I want to get some autographs."
"Sure, we can," said Corinne's mother. "But let's enjoy the game first."
They pulled out their tickets and walked into the stadium. The stadium security guard checked Corinne's mother's purse and waved them through. "Mmmm," Corinne breathed in deeply. The air smelled like a delicious mix of popcorn and soda. Corinne looked at the tickets and saw that they were sitting on the upper level, just past third base. They walked up the concrete stairs and found their seats as the first inning was beginning.

Corinne couldn't decide whether to watch the field itself or the enormous screen behind the outfield. Her eyes darted back and forth between the two. The Cougars were pitching first.

She cheered at the top of her lungs for every strike and booed when anyone on the other team, the Cyclones, got a hit. Even Jake looked like he was having fun, cheering just as loudly as Corinne.

The game was close. The Cougars would score, and then the Cyclones would score. Back and forth, the two teams battled. The Cyclones had a better pitcher, but the Cougars were quicker. Corinne especially liked the shortstop. He was short, like her, and he was really agile. No matter where the ball was, he was there first. He seemed to have a magic ability to predict its path.
"Mom," said Corinne, tugging on her mother's sleeve. "What's the shortstop's name?"
Her mother looked through the program, searching. "Cory Alvarez," she said. "Cory!" thought Corinne. "Just like me."

By the end of the ninth inning, the teams were still tied, and the Cougars were up to bat. "This is it," Corinne said to Jake. "If the Cougars can manage to score just one run, then we'll win!"
"Don't be such a baby," said Jake. "It doesn't really matter. It's just the minor leagues."
Corinne noticed, though, that Jake was leaning forward in his seat and watching the batter with interest. Jake could pretend to be as cool as a cucumber, but inside he was just as excited as Corinne.

The batter turned, and Corinne saw that it was her favorite player, Cory Alvarez. "Come on Cory," she thought, "You can do it!"

Cory walked up to the home plate and tapped the bat on the ground twice. Then he lifted the bat and waited. The pitcher wound up and then threw a ball so fast, Corinne didn't even see it. She heard the crack when the bat hit the ball, though, and saw the ball flying through the air toward third base. The ball sailed past the base, then over the stands and straight toward Corinne's family. Corinne climbed up on her seat and put her hands out. She felt a sting and tumbled backwards as the baseball slammed into her palms. She tumbled out of the chair, and her parents kneeled over her. "Corinne! Corinne! Are you okay?"

Corinne held up the baseball and smiled. "I'm much more than okay," she said.

## Name:

$\qquad$ Date: $\qquad$

1. Which team is Corinne hoping will win this baseball game?
$\qquad$
$\qquad$
$\qquad$
2. Where does this story take place?
$\qquad$
$\qquad$
$\qquad$
3. Corinne is completely enjoying herself at the baseball game. What evidence from the story supports this conclusion?
$\qquad$
$\qquad$
4. Why is Corinne so very excited about this baseball game?
5. What is the main idea of this story?
$\qquad$
$\qquad$
$\qquad$
6. Read the sentences and answer the question.
"Corinne noticed, though, that Jake was leaning forward in his seat and watching the batter with interest. Jake could pretend to be cool as a cucumber, but inside he was just as excited as Corinne."

What does the phrase "cool as a cucumber" mean in this text?
7. What word or phrase best completes the sentence?

Corinne especially likes Cory Alvarez $\qquad$ he seems to have the ability to predict where the ball will go and get there first.
8. What happens to the baseball that Cory Alvarez hits?
$\qquad$
$\qquad$
$\qquad$
9. At the end of the story, Corinne says, "I'm much more than okay." What does Corinne mean by this? Use evidence from the text to support your answer.
10. Why might Corinne be feeling "much more than okay" at the end of the story? Use evidence from the text to support your answer.

## Soccer in the Park

## by ReadWorks

Maria opened her eyes, yawned, and smiled. It was a bright, sunny morning in June. Maria loved the sunshine, and she loved June. Maria lived in Rome, the capital of Italy. In June, Rome was warm and the roses were in bloom. Maria had just finished the fifth grade. Next year, she would start at a new school and make new friends. But right now she had the entire summer to relax.

She could smell coffee coming from the kitchen. That meant that Maria's parents were awake already. Maria hopped out of bed and ran down the hallway. "What are we going to do today?" she asked her father.

Maria's father smiled as he poured her orange juice. "Eat your breakfast, and then we can talk about what we're going to do today. I thought we might go to the park."

Maria sat down, shaking with excitement. She hoped they were going to Villa Borghese, the huge park near their house. Villa Borghese had lakes where you could row boats and lots of green hills that were perfect for having picnics on. But the best part of Villa Borghese wasn't the boats or the picnics. It was the sports. In the summer, the park was full of kids playing sports. Usually Maria was too shy to join in with the other children. But she loved to watch.

Maria and her father played sports together. She liked tennis and riding horses, but her favorite sport was soccer. Maria was the youngest child, with three older brothers. Her first steps were taken on a soccer field, and she had been watching soccer games as long as she could remember. She knew when players should pass and when they should shoot.
"Can we watch soccer today?" Maria asked her father.
He smiled and patted the top of her head. "Get your cleats," he said. "Today we're not going to watch. Today we're going to play."

Maria and her father drove to the park and walked up to the soccer field. Two teams were playing. Most of the players were Maria's age, but some were much bigger. Maria reached for her father's hand. "I don't know, Papa," she said. "Some of these kids look big."
"You can do it," said her father. "I know you can."
captain. "Do you guys need a goalie?" Maria asked him hesitantly. The captain looked at Maria and nodded slowly. "Our goalie isn't here today," he said. "You can try if you want to."

Maria walked into the goal and stood between the two posts. The team was now relying on her to defend. Maria had to keep the soccer ball from going into the goal no matter what. She watched as the players kicked the ball down the field. They ran so fast and kicked the ball so hard. It was coming closer and closer to Maria. She watched as the other team passed the ball, back and forth, back and forth. The round sphere was a blur.

## "Maria!" she heard her father yell. "You can do it!"

Maria took a deep breath. She started to believe that she could do this. She bent her knees and crouched low to the ground as one of the soccer players approached. Maria saw his right leg reach back to kick. Before she had time to think, she dove to the right. As she hit the ground, Maria felt her hands slam into the ball. She saw the ball bounce away. She had kept it from the goal! Maria heard her father cheer but she kept looking at the field. The ball could come back at any moment.

Maria's team was running with the ball down the field. Her team's captain dribbled the ball and shot it perfectly into the corner of the other team's goal. The other goalie wasn't as quick as Maria, and the ball sailed past his hands. Throughout the rest of the game, the other team still wasn't able to score.

Maria jumped up and down. They had won! Her new teammates came over to congratulate her. "Good job," said the captain. "What's your name, goalie?"
"Maria," she said.
"Well, Maria," he said, "do you want to play with us again next week?"
Maria nodded. She had never felt so happy.

Name: $\qquad$ Date: $\qquad$

1. What is Maria's favorite sport?
$\qquad$
$\qquad$
$\qquad$
2. The climax of a story is the most exciting or intense part of the story. What is the climax of "Soccer in the Park"?
3. Soccer is a big part of Maria's life. What sentence from the story best supports this statement?
4. Read these sentences from the story.
"Most of the players were Maria's age, but some were much bigger. Maria reached for her father's hand. 'I don't know, Papa,' she said. 'Some of these kids look big."' How does Maria feel at this point in the story?
5. What is the main idea of this story?
6. Read the sentences and answer the question.
"Two teams were playing. Most of the players were Maria's age, but some were much bigger. Maria reached for her father's hand. 'I don't know, Papa,' she said. 'Some of these kids look big.'
"'You can do it,' said her father. 'I know you can.'
"Maria strapped on her cleats and her gloves. She walked onto the field and found the team's captain. 'Do you guys need a goalie?' Maria asked him hesitantly."

What does the word "hesitantly" mean as used in this text?
7. What word or phrase best completes the sentence?
$\qquad$ Maria was too shy to play soccer with the other children, she still loved to watch.
8. When Maria and her father arrive at the soccer field, she sees two teams playing soccer. Why does she hesitate to join them?
9. Why does Maria feel happy after the soccer game?
10. Explain how playing in the soccer game affected Maria by using evidence from the story.

## Butterflies in Culture

This text is provided courtesy of OLogy，the American Museum of Natural History＇s website for kids．


> The annual Yellow Butterfly Festival celebrates and protects butterflies and their habitats．Organized by local people and conservation groups，the festival features performances，costumes，butterfly－watching hikes，and ceremonies to honor butterflies．

To understand why butterflies are such popular symbols，look at the Chinese characters for＂butterfly．＂The first character 蝴（hú）has a similar sound as the character 福（fú）for＂good fortune．＂This is why butterflies are symbols of good luck．The second character 蝶（dié）has the same sound as the character 耋 for＂the elders．＂So butterflies are often seen in artwork celebrating a long life．


In the Rukai tribe，wearing a butterfly headdress is a great honor granted by the chief．These men run so swiftly，they have won the title＂lyalivarane．＂It means ＂butterfly＂！

Butterflies carry meaning for Taiwan＇s indigenous groups，too．For the Rukai people，the butterfly is a symbol of swiftness when used on headdresses．It is a symbol of diligence when used on clothes．The Paiwan people use tribal beads of the Swallowtail to decorate a person who is fast and nimble．And the Tao tribe believe that Magellan＇s Iridescent Birdwing represents evil spirits．
$\qquad$

1. What is one thing that butterflies are symbols of?
$\qquad$
$\qquad$
$\qquad$
2. Butterflies can mean many different things to people in Taiwan.

Support this conclusion with at least two pieces of evidence from the text.
3. What is the main idea of this text?

## Jam Session


"Aren't you a little old to be playing make-believe?"
I, myself, had given up on play-acting when I was nine. It was kid's stuff, and I didn't feel very much like a kid anymore. My mother, however, seemed to have absorbed everything about childhood that l'd left behind. Now she was dancing around the living room with the handle of a dust mop in her hand, held at an angle like a rock star's microphone, singing.

When I said that, though, she stopped.
"Hey, Monica, you like movies, right? Some people make a living out of playing make-believe."
She wasn't wrong. I did like movies, and actors did make a living dressing up, and pretending they were someone else. The fact that Mom was right annoyed me. I didn't say anything, but picked up a stack of magazines that was on the kitchen floor, and put it on the table.
"Thanks, honey. I don't think this dust mop could handle those." Mom hummed a few lines of the music she had on.

I liked rock best, and she liked musicals. But today was West Side Story, which I loved. I'd caught my mother in the middle of a very animated version of the song "Maria."
"Also, Monica, we're going blueberry picking after I finish the kitchen," Mom said, without looking up from her pile of dust, which she was now sweeping into the dustpan.
"We're WHAT?" I had just finished putting all of the books on my bedroom floor back on my bookshelves. Plus, I'd made my bed, and changed my hamster's water and food bowls. I was tired. "What am I? Your
personal assistant?"
"Ha! You're a lucky eleven-year-old girl who gets to be responsible for her very own bedroom in a safe house, in a safe neighborhood, in a free country. And you have the summer off, and a mom who is really good at making blueberry jam, but needs another set of hands."

I was about to protest, but she interrupted. "And you have full use of those hands. You're not sick or weak -so be thankful for that. You are far, far from oppressed, my friend."

Mom dumped a pan of crumbs and dust into the trash. I stared at her. She was pretty awesome, most days. I really did love her. Still...dancing in the kitchen, pretending to be a star? Blueberry picking? She was known to sing out loud a lot. The berry-picking thing was new.
"Why don't we just go to the store?" I asked.
Mom threw a rag at me, and I automatically started wiping down the counters. "Because, number one, the berries there are shipped in from across the country, and they don't taste as fresh or as flavorful as the ones we can pick ourselves. And number two..." she paused to slam a drawer full of silverware shut, which just about broke my eardrums with clashing forks. "...it's fun."

So that was that. I grumbled my way through putting the clean dishes away, and then grumbled my way into the car, staying silent as we drove out east. It felt like forever. I had looked at the car clock when we left the house, and when we rolled up to the blueberry farm, it had only been half an hour. It's funny how quickly the scenery changed. We'd gone from our little town and neighborhood-not a city, by any stretch, but at least populated-to the country, where a house seemed surrounded by a mile of corn on every side.

My mother pointed to a small barn. The big sliding door was open, and inside was an old man standing hunched over a cash register. Mom went to speak to him as I rounded the back of the building to explore. I found a wooden table full of white buckets, a few empty wooden crates stacked near a coil of hose and a dog bowl filled with water. A bumblebee was struggling in the water, and I picked up a stick to help it out.
"Monica, grab a couple of buckets. Those are what we'll pick into." Mom came around the corner, and I reached for a pail from the stacks on the table.
"They're stuck," I huffed, wrestling with two that didn't want to come apart. "Help me!"
Mom grabbed the end of one, and I held the handle on the other; and we yanked. The buckets slid free, and I fell over from the force of the pull.
"Okay," I said, dusting myself off and frowning. We started walking past rows of blueberry bushes, a lot of them taller than Mom. "How do we do this?"
"Well, just like how you'd think," my mother replied. She ducked into the path between two rows of bushes, and I followed.
"Just go for the ones that are dark all around. Don't pick anything with white or pink on it. Those aren't
ready yet, and they're going to be sour." Mom handed me an unripe berry.
"Duh, I know that, I've had blueberries before," I said, and didn't take it.
"Huh," Mom looked at me. "Not as sour as you, though, I bet." She turned away. "Let's divide and conquer, shall we? I'll pick here, and you can find your own row to work on, and we'll meet somewhere in the middle."
"Fine." I stomped away.
The grass itched my ankles. I wanted to sit down, but the sun was hot, and the shade under the bushes helped a little. So I found my own row, and started picking a short way into the patch. Almost immediately, reaching into the branches for a particularly juicy-looking berry, a yellowjacket stung my finger.
"OUCH!" I yelled. "STUPID BEE!" I swallowed to keep from crying. I listened, but didn't hear my mother reply to me.

She must not have heard. Or maybe she's ignoring me, I thought. My face felt hot, and I could feel anger bubbling up from my stomach to my chest. I kicked the near-empty pail by my feet, and screamed in frustration.

All I could hear in response were birds. I sniffed and wiped my eyes. My finger hurt, and it looked puffy. I picked up my bucket, and ran back up to where I thought my mom had been working. She wasn't there anymore. When I ran down the row calling out and looking for her, I saw no one, and heard nothing. I flipped the bucket upside down and sat on it, resting my face in my hands for a moment while I let a few tears slide down my nose.

There was nothing else to do but pick, I thought.
So I stood up, and walked a few rows back, parking myself next to a particularly tall blueberry shrub, making sure it was relatively bee-free. With both hands, I started yanking every ripe blueberry from the branches, fueled by anger. Gradually, though, I slowed down, feeling calmer as the sun shifted, and a breeze cooled off my shoulders.
"These are weird," I said to myself, looking at a handful of berries.
They were dusty-looking, like they'd been frosted. However, the dust rubbed off when I wiped them against my shirt. I'd never picked blueberries before; I'd actually never picked any berries before, and being out there was annoyingly hot and full of bugs. But I was beginning to relax. I caught myself humming one of the songs from the soundtrack my mother had been listening to that morning, and made myself stop.

I moved to the next bush, and started on that one. Shortly after, I walked to another, and then another; picking a handful of fruit from each before looking for new territory. My bucket was only a third of-the-way full, and my finger was hot and red, but I had to admit, I was having fun.

I didn't hear my mother when she walked up. I had filled my bucket another third of-the-way to the top, and I was singing and dancing in place under the branches.
"Who's making-believe now?" My mom laughed.
I was embarrassed. "Yeah...but I'm eleven. I'm allowed to do this."
"Newsflash, honey: people never get too old to pretend."
"I got stung," I said, and suddenly needed a hug. I almost tipped over my harvest, but jumped over it before kicking the pail.

Mom set hers down and hugged me back. "Let's head home, shall we?"
We paid for our berries by weight. Mom got me a can of Coke from a rickety, old machine in the barn, which I put on my finger before I popped the tab. We shared it in the car on the way home.

When we got back, Mom gave me some first-aid cream for my sting, and I curled up on the living room couch with a book. I don't remember which song exactly, because I was drifting in and out of a nap, but I heard my mom singing along to West Side Story again. Only this time, it made me smile, and when I woke up, there were five jars of jam on the counter, and the house smelled like vanilla, sugar, and fruit.

Name: $\qquad$ Date: $\qquad$

1. What activity do Monica and her mom go out to do in the country?
A. Monica and her mom go out to sing songs from West Side Story in the country.
B. Monica and her mom go out to clean houses in the country.
C. Monica and her mom go out to catch bees in the country.
D. Monica and her mom go out to pick blueberries in the country.
2. What is a turning point in the story?
A. Monica's mom dances around the living room with the dust mop.
B. Monica's mom slams shut a drawer full of silverware.
C. Monica gets stung by a yellowjacket.
D. Monica grumbles as she gets into the car.
3. While picking blueberries, Monica begins to relax. She catches herself humming a song. She dances in place under the branches.

What can be concluded from this evidence?
A. Monica enjoys picking blueberries.
B. Monica hates picking blueberries.
C. Monica wants to go back home.
D. Monica is hot and sweaty.
4. How does Monica's mood change between the beginning and end of the story?
A. She goes from being in a bad mood to being in a good mood.
B. She goes from being in a good mood to being in a bad mood.
C. She goes from being a bad mood to being in a terrible mood.
D. She goes from being in a good mood to being in a great mood.
5. What is a theme of this story?
A. how boring blueberry picking can be
B. how beautiful the song "Maria" is
C. how awesome a mother can be
D. how easy cleaning a house is
6. Read the following sentence: "I grumbled my way through putting the clean dishes away, and then grumbled my way into the car, staying silent as we drove out east."

Why does the author use the word grumbled twice in this sentence?
A. to show how long the drive out east took
B. to show how excited the main character is about going for a drive
C. to show how many dishes there are in the main character's house
D. to show how grumpy the main character is feeling
7. Choose the answer that best completes the sentence below.

Monica plays make-believe when picking blueberries $\qquad$ she felt like she was too old for make-believe at home.
A. in conclusion
B. although
C. for instance
D. above all
8. What does Monica ask her mother when she sees her singing and dancing to a West Side Story song at the beginning of the story?
9. When she hears her mother singing along to West Side Story at the end of the story, what does Monica do?
10. Why does Monica's response to her mother singing along to West Side Story change between the beginning and end of the story? Support your answer with evidence from the passage.

## The Meadowlands

by ReadWorks



The Meadowlands in New Jersey

When they described the swamp at the end of Schuyler Avenue, the adults in Sarah's life seemed confused. Whenever she asked about it, Sarah's dad would chuckle.
"You'd better stay away from the Meadowlands," her father said.
Sarah's sixth grade teacher, Mr. Morrison, said only parts of the Meadowlands are swamps. He explained to the class that the Meadowlands are precious wetlands, one of the last places near New York City where birds migrating from Florida could stop and rest.
"The Meadowlands once had a lot of garbage dumps, which polluted the water pretty badly," Mr. Morrison said. "But most of the dumps are closed now. And the habitat for wild birds is recovering."

From her yard in the winter, the Meadowlands was as her dad described: brown, dead-looking weeds with Doritos bags lying at the water's edge. By springtime, however, the reeds turned green and flowers grew along the shoreline.

So which one is it, Sarah wondered. Is the Meadowlands a big, ugly, dangerous swamp? Or is it a beautiful oasis of birds and flowers? Despite her dad's warnings to stay away, Sarah wanted to see for herself. She went under the porch and dragged out her dad's old fiberglass
canoe. She threw the paddle and an old pink life jacket into the boat and dragged it across the yard, down Schuyler Avenue to the edge of the swamp.

Whatever it was, she saw now, the Meadowlands was big. Sarah always thought of it as the swamp at the end of her street. Now she realized that the wetlands actually stretched to the north and south, and she couldn't see either end. Directly across the water, the skyscrapers of Manhattan seemed to line the opposite shore, even though they were actually twelve miles away.

Sarah could feel the fear in her throat. But she didn't want to drag the canoe back up the hill. She zipped the life vest up to her neck, pushed the boat into the water and jumped in.

Past the reeds, she found herself paddling in a shallow pond surrounded by muddy islands. She saw ducks, swallows, yellow flowers, purple flowers, white egrets. A blue heron, disturbed by the splashes of Sarah's paddle, jumped into the air, uncurled its long wings and flapped away.
"This is all so beautiful!" Sarah thought.
The canoe slowed down, as if caught by invisible hands. Sarah looked down and saw the boat was scraping along the muddy bottom. Clouds of brown mud rose to the surface with every paddle stroke, and inside each cloud little bubbles of gas burst when they hit the surface. It smelled like a combination of old paint and rotting food. Sarah nearly threw up.

Soon she was stuck. She tried paddling backward to free the canoe from the mud, but each stroke released an overwhelming gas smell. She started to cry.

Just then something heavy and dark crashed through the weeds in front of the canoe.
A hand pulled the reeds apart, and out poked the head of Sarah's dad.
"Sarah! What are you doing out here?" he called.
Sarah tried to explain, but all she could do was cry.
"Well, it's a good thing you dragged the canoe-you left a trail in the gravel a mile wide," her dad said. "Here, take this rope."

He threw a yellow plastic rope, and after a few tries, Sarah grabbed it. Her dad pulled, and the boat skidded over the mud to shore.

Sarah worried that her father would be furious. But when he offered his hand to help her out of the boat, he laughed.
"I did the same foolish thing when I was your age," he said. "Did I ever show you the otter den?"

Sarah wiped tears from her cheek and shook her head no.
"Well, c'mon. I'll show you," her dad said. "The swamps can be pretty disgusting, but there's some beautiful stuff in here. You just have to know where to look."

Name: $\qquad$ Date: $\qquad$

1. The adults in Sarah's life seem confused about what?
A. New York City
B. garbage dumps
C. birds and wildlife
D. the Meadowlands
2. Sarah takes her dad's canoe to explore the Meadowlands. What motivates Sarah's actions?
A. She wants to know if the Meadowlands are an ugly swamp or a beautiful oasis.
B. She wants to prove that her dad is wrong about the danger of the Meadowlands.
C. She wants to study the Meadowlands to complete a class project.
D. She wants to show her dad that she is brave and adventurous by exploring on her own.
3. There are different, contrasting opinions about the Meadowlands. What evidence from the story best supports this statement?
A. Sarah doesn't know what the Meadowlands are really like, so she decides to go and see for herself.
B. The Meadowlands used to be polluted by garbage dumps, but now the Meadowlands are recovering.
C. Some say the Meadowlands are a dangerous swamp; others say they are a precious habitat for birds.
D. Sarah's father warns her not to go to the Meadowlands, but Sarah ignores his warnings and visits them anyway.
4. Based on the story, what can you conclude about the Meadowlands?
A. The Meadowlands are dangerous and should be left alone.
B. The Meadowlands can be both beautiful and disgusting.
C. The Meadowlands are always a beautiful and flowering oasis.
D. The Meadowlands are still too polluted for animals to live there.
5. What is this story mostly about?
A. Sarah goes to the Meadowlands, and her father gets mad at her.
B. Sarah discovers that the Meadowlands are dangerous and ugly.
C. Sarah asks her teacher about the history of the Meadowlands.
D. Sarah goes to the Meadowlands to learn more about them.
6. Read the following sentences: "'Well, the Meadowlands once had a lot of garbage dumps that polluted the water pretty badly. But most of the dumps are closed now. And the habitat for wild birds is recovering.'"

As used in this sentence, what does the word "recovering" most nearly mean?
A. getting better
B. getting smaller
C. getting older
D. getting sick
7. Choose the answer that best completes the sentence below.

Sarah wants to see what the Meadowlands are like, $\qquad$ she takes her dad's canoe and paddles into the swamp.
A. soon
B. namely
C. so
D. but
8. According to Mr. Morrison, why are the Meadowlands precious?
9. Why does Sarah start to cry in the Meadowlands?
10. In the story, there are two different views of the Meadowlands: 1) the Meadowlands are a dangerous and ugly swamp, and 2) the Meadowlands are a beautiful and precious oasis. Which of these views (if any) accurately describes the Meadowlands? Support your answer using information from the story.

## Bear and Berry Wisdom



My náanaa k'ayáa (great-grandmother) would always say, "Sing loud, dagwáang (dear one), so the bears know it's our turn."

We always listened to our elders, because they have a lot of wisdom.
"When the táan (black bear) hear us singing our songs, they will leave us alone," greatgrandmother told us. "They respect us and we respect them. When it is their turn to pick berries, we leave them alone, too."

My family is from the Haida tribe. Every summer, my grandmother, mom, auntie, siblings, cousins and I visited our great-grandmother in our very remote Haida village of Hydaburg in southeastern Alaska. I loved to visit my village. My favorite part was playing with my friends
and cousins at the river. Oh, and hearing my elders laugh!
In our village, everyone lives humbly and takes care of each other, sharing whatever they catch from the ocean: salmon, shrimp, crabs, herring roe on kelp, seal, sea otter. Elders always receive their shares first. That's just the way it has always been. And the children serve the elders. Somehow, this practice helps bring balance among the generations.

I remember one summer day during berry-picking month when I was about 10 years old. The weather was warm and sunny, which helped the berries ripen. We all could smell the sweetness in the air as we grabbed our berry baskets, put on our rubber boots, and headed out to the wild berry patches around our village.

On the way there, we crossed the bridge over the river where the chiin (salmon) were still spawning. There were so many salmon, it looked as if you could cross the whole river just walking on their red backs!

We saw a sGáan (killer whale) family swimming by. One breached, as if to say "hello!" We all yelled "AAY YO!" The killer whales swim and hunt in between the many islands that protect our village from the strong winds of náng siigaay (the ocean). We heard the tsáak (eagle) and yáahl (raven) singing their songs and having bird-talk conversations.

Our náanaa k'ayáa would teach us how to dance and sing like the animals in and around our village. We spread our arms out like the wings of the eagle. We hopped about curiously, looking around, like the raven. We put one hand on our foreheads like a dorsal fin and make the "woosh" sound, like the orca's. Or we crouched down like the bear and growled, putting our hands up to show our claws.

For each dance we did, our great-grandmother taught us special Haida songs. She knew many languages: in addition to her native tongue, Haida, she spoke Chinook, Tlingit, Tsimshian, Russian, and English. Náanaa k'ayáa was proud to teach our language to her nine children and many generations of grandchildren.

Finally, we arrived at the berry patch. There were so many types of berries to choose from: salmonberries, huckleberries, smile berries, blueberries, thimble berries, gooseberries. As we picked (and ate!) the berries, we sang many songs so the bears could hear us. When our berry baskets were overflowing, we went back to the house of náanaa k'ayáa to make lots of jam to share and to last throughout the cold months. And we froze some berries for later, which náanaa k'ayáa served with súugaa (sugar) and cream. Yum!


Gathering food, preparing food, sharing food-these were some of the many ways my náanaa k'ayáa expressed her love for us. She taught us how to take care of ourselves and each other. She taught us many stories and songs.

She taught us how to respect creation.

Name: $\qquad$ Date: $\qquad$

1. Who is náanaa k'ayáa?
A. the narrator's great-grandmother
B. the narrator's sister
C. the narrator's friend
D. the narrator's child
2. What is the narrator describing in this story?
A. The narrator is reflecting on times that she has visited her náanaa k'ayáa in southeastern Alaska.
B. The narrator is telling a Haida story that hernáanaa k'ayáa taught her one summer in southeastern Alaska.
C. The narrator is looking forward to her visit next summer to a Haida village in Alaska, where she will meet many of her cousins.
D. The narrator is telling a story that her mother told her about growing up in a Haida community in southeastern Alaska.
3. Read the following sentences from this story.
"'When the táan (black bear) hear us singing our songs, they will leave us alone,' great-grandmother told us. 'They respect us and we respect them. When it is their turn to pick berries, we leave them alone, too...'

Our náanaa k'ayáa would teach us how to dance and sing like the animals in and around our village. We spread our arms out like the wings of the eagle. We hopped about curiously, looking around, like the raven. We put one hand on our foreheads like a dorsal fin and make the "woosh" sound, like the orca's. Or we crouched down like the bear and growled, putting our hands up to show our claws."

What can you conclude about the relationship between people in this Haida village and the animals who live in their environment?
A. People in the Haida village don't think very much about the animals near them.
B. People in the Haida village are mean to the animals that live around them.
C. People in the Haida village respect and celebrate the animals that live around them.
D. People in the Haida village are afraid of the animals that live near them.
4. What is one value that the narrator learns from her náanaa k'ayáa and the Haida community?
A. She learns not to eat animals.
B. She learns that you should always keep food for yourself.
C. She learns to respect and listen to her elders.
D. She learns to protect her family from scary animals.
5. What is the main idea of this text?
A. The narrator's náanaa k'ayáa, or great-grandmother, speaks many languages, including Haida, Chinook, Tlingit, English, Russian, and Tsimshian.
B. By spending time with hernáanaa k'ayáa in Alaska, the narrator learns about traditions of the Haida tribe and makes special memories with her family.
C. Black bears can be very dangerous, but if you make enough noise, they should leave you alone most of the time.
D. There are many types of berries in southeastern Alaska in the summer, including salmonberries and smile berries, but the narrator's favorite are gooseberries.
6. Read the following sentences from the text.
"In our village, everyone lives humbly and takes care of each other, sharing whatever they catch from the ocean: salmon, shrimp, crabs, herring roe on kelp, seal, sea otter. Elders always receive their shares first. That's just the way it has always been. And the children serve the elders. Somehow, this practice helps bring balance among the generations."

What does the word balance most closely mean as it's used here?
A. when two groups of people disagree about something
B. the feeling of calm that happens as you're falling asleep
C. when things feel chaotic and scary between two groups
D. when things are equal and peaceful between different groups
7. Choose the word that best completes the following sentence.

The narrator learns many things about Haida culture from her náanaa k'ayáa, $\qquad$ the Haida language.
A. including
B. except for
C. although
D. in conclusion
8. How does the Haida community in this story share food?
9. How do Haida people in this story treat their elders?
10. What are some ways that children can learn about the values and traditions of their family's cultures? Use examples from the story to support your answer.

## Pythons Invade the Florida Everglades

by ReadWorks



When Tommy Owen, a tour guide in the Everglades National Park, saw the animal, he immediately went after it. Owen was giving a tour of Florida's famous national park wetlands. He and a group of tourists were floating in a boat through the shallow water that makes up the Everglades. One of the women in the boat he was steering saw a snake in the water. She got Tommy's attention and pointed the snake out to him. When Tommy saw the snake, he acted fast. He reached into the water and grabbed the animal by the head. He got a good grip and didn't let go. Tourists in the boat were worried when the snake wrapped itself around Tommy's arm. After several minutes, he got control of the animal and removed it from the water. The snake was a ten-foot-long Burmese python. It was a snake not native to Florida and, quite simply, it didn't belong there.

The Florida Everglades teems with life. Situated at the southern end of the state, between Lake Okeechobee and the Gulf Coast, the Everglades is the largest wilderness east of the Mississippi River. Migratory and wading birds tiptoe through marshy grasslands. Orchids and ferns dot the hardwood forests. Alligators lounge in the shallows and on muddy riverbanks. Mangrove leaves rustle in the wind as the brackish water laps at their roots.

All of this life is made possible by the presence of water. The Everglades is a natural region of
subtropical wetlands. Water flows from the Kissimmee River into the wide, shallow Lake Okeechobee. From there the lake drains south, into the Everglades marsh and the Florida flats. The Everglades is sometimes called the "River of Grass" after a book of the same name by author Marjory Stoneman Douglas. The phrase illustrates the fact that the Everglades is basically a very wide and shallow river.

The Florida Everglades once covered 11,000 square miles across the southern end of the state. Wetlands are an important ecosystem. For centuries, however, humans thought of wetlands as unhygienic swamps. Draining the Everglades was suggested in the late 19th century. As soon as Florida became a state in 1845, its legislature asked permission from Congress to drain the Everglades. Canals were dug to remove or redirect the water. Land that dried out was reclaimed for agriculture or building purposes. This reclamation allowed for significant development in south Florida. Sugar farmers moved into the area and prospered. The city of Miami took root.

Approximately 50\% of the Everglades was reclaimed for agricultural or urban use. Much of the northern area was polluted with phosphorus. This phosphorus was agricultural runoff from the farms near the Everglades.

Concerned Floridians began advocating for saving the area in the 1930s. Their efforts paid off in 1947 when Congress created the Everglades National Park. Starting in the late 1970s, environmental concerns at both the national and international levels refocused attention on the Everglades. The area was designated as one of the world's most important wetland areas.

Since then efforts have been underway to safeguard the park and return the Everglades to health. Water levels are monitored, as are nutrient levels in both water and soil samples.

Much of the conservation project was designed to reverse-engineer the canal system that was built in the 19th and mid-20th centuries. By the mid-2010s, ecological indicators showed some improvements. For example, the crayfish population was up. Wading and migratory birds improved their nesting habits.

Despite conservation efforts, the Everglades ecosystem began facing another threat in the early 2000s.

Burmese pythons were breeding in the Everglades, and they reached numbers that designated them as an invasive species. They were classified as an invasive species when
their population swelled to a large size.
Pythons are eating machines. They can eat animals of different sizes, from mice to deer. They especially enjoy dining on small mammals and birds. Studies have shown that since the appearance of Burmese pythons in the Everglades, the numbers of small mammals in the area dropped significantly. This population loss was not observed in areas where the Burmese python had not established itself.

The Burmese python is native to tropical and subtropical zones in Southeast Asia. In their native habitat, Burmese pythons are nocturnal carnivores. When they live close to human habitations, Burmese pythons eat rats, mice, and rabbits that are attracted to human dwellings and farms. They can also eat small farm animals like chickens. When they live away from human habitations, Burmese pythons eat birds and small wild mammals. The Burmese python is a solitary animal. It kills by constricting its body around its prey. Python eggs and hatchlings are a food source for other animals. In the wild, Burmese pythons grow to be on average 12 feet long. (Habitat loss and the exotic pet trade in Asia are depleting the Burmese python's numbers in the Asian wild. )

The first Burmese python was found in the Florida Everglades in 1979. It's presumed the animal was originally kept as a pet and then released by its owner. It was removed, but that wasn't the last of Burmese pythons in south Florida. It's thought that numerous Burmese pythons escaped pet stores and cages damaged in Hurricane Andrew in 1992. Since then, the numbers of Burmese pythons grew at a fast rate. The escaped Burmese pythons weren't the only cause of the most recent population increase of Burmese pythons.

In the United States the Burmese python was a popular exotic pet. Docile and beautifully patterned in brown and gold diamond shapes, these snakes could be purchased at pet stores or reptile shows. Owners kept them in cages or tanks and fed them rats or mice. Most people bought Burmese pythons when they were small. Burmese pythons grow very quickly. For many pet owners, the pet Burmese pythons became too big to manage. So they released them into the wild.

When the Burmese python was designated as an invasive species, many agencies and individuals began trying to put a stop to the python invasion. The National Park Service started a program to study these animals in the Florida Everglades. Park Service scientists implanted tracking devices into seventeen large pythons that were later re-released into the wild. They provided scientists with information regarding python behavior.

In January 2013 to February 2013, the Florida Fish and Wildlife Conservation Commission
ran a contest called the 2013 Python Challenge. The Commission issued permits to hunt the snakes within state wildlife-managed areas of the Everglades. Sixty-eight Burmese pythons were captured.

Later in 2013, Jason Leon was driving in a rural area near Florida City when he spotted a Burmese python's head protruding from the brush. The man was a biologist, and he was familiar with pythons. He approached the snake and pulled it out of the bush. The animal was bigger than he expected. After a struggle with the animal, Leon killed it. The Burmese python was 128 pounds and longer than 18 feet. Leon contacted the Florida Fish and Wildlife Conservation Commission, which agreed to pick up and examine the snake. The snake was found to be the largest ever in the state of Florida.

The state later issued a statement:

Jason Leon's nighttime sighting and capture of a Burmese python of more than 18 feet in length is a notable accomplishment that set a Florida record. The Florida Wildlife Commission is grateful to him both for safely removing such a large Burmese python, and for reporting its capture.

Despite these efforts, the population of Burmese pythons continued to grow. The Florida Fish and Wildlife Conservation Commission held another contest in 2016 called the 2016 Python Challenge.

Name: $\qquad$ Date: $\qquad$

1. In which place did the Burmese python become an invasive species?
A. southwest Asia
B. southeast Asia
C. the Mojave Desert
D. the Florida Everglades
2. Fifty percent of the Everglades was reclaimed for agricultural or urban use. Which of the following is an effect of this agricultural or urban use?
A. The Burmese pythons spread throughout the Everglades.
B. The crayfish population increased.
C. Much of the northern area of the Everglades was polluted with phosphorous.
D. Significant developments in surrounding states took place.
3. The decreasing numbers of small mammals in the Everglades was most likely due to the presence of Burmese pythons in the area. Which of the following evidence from the text best supports this conclusion?
A. Python eggs and hatchlings are a food source for other animals.
B. The Burmese pythons reached numbers that designate them as invasive species in the Everglades.
C. The population loss of small mammals was not observed in areas where the python had not established itself.
D. The first Burmese python found in Florida was probably kept as a pet and then released by its owner.
4. Based on the information in the passage, what kind of effect did Burmese pythons have on the Everglades?
A. They had a mainly positive effect.
B. They had both a negative and positive effect.
C. They had no effect on the Everglades.
D. They had a mainly negative effect.
5. What is this passage mostly about?
A. how Jason Leon was able to capture and kill a Burmese python
B. the reclamation of the Florida Everglades for agricultural and urban use
C. the Florida Everglades and the Burmese pythons that live in them
D. efforts to decrease the number of Burmese pythons in the Florida Everglades
6. Read the following sentences from the text.
"Since then efforts have been underway to safeguard the park and return the Everglades to health. Water levels are monitored, as are nutrient levels in both water and soil samples.
"Much of the conservation project was designed to reverse-engineer the canal system that was built in the 19th and mid-20th centuries. By the mid-2010s, ecological indicators showed some improvements."

Based on the text, what does "conservation" most nearly mean?
A. preservation and protection
B. destruction and damage
C. elimination or deletion
D. discovery and exploration
7. Choose the answer that best completes the sentence below.

The Burmese python is native to tropical and subtropical zones in Southeast Asia,
$\qquad$ it managed to establish itself in the Florida Everglades.
A. since
B. so
C. but
D. because
8. The reclamation of the Everglades for agricultural and urban use had harmful effects on the Everglades. List at least two of these harmful effects.
9. How did the python invasion of the Everglades affect the other animals that live in the Everglades?
10. Identify the two main threats to the Everglades mentioned in the passage, and describe the efforts to fight these two threats.

## Amazing Trees Help Us Breathe

This text is provided courtesy of the National Fish and Wildlife Foundation.

iStock
a live oak tree in South Carolina known as "Angel Oak"

When you look at trees from the ground up, you can identify four parts: the roots, the trunk, the branches, and the leaves. All four parts are vital to the health of the tree. What might be harder to see is just how important trees are to the health of the earth and all of us people! Here are some of the many ways that trees help us all.

The roots of trees help prevent erosion, which makes streams and rivers healthier by keeping soil where it is supposed to be. If topsoil washes into streams and rivers during heavy rains, it can lower oxygen levels in the water and hurt fish. Soil and sediment can form layers in areas that cause other problems, like changing the water depth.

Trees also help us breathe! Tree trunks transport water and nutrients from the roots to the branches, which hold the leaves. Leaves are like tiny chemistry laboratories. They use water from the roots, the sun's energy, and carbon dioxide - one of the gases in the air - in a process called photosynthesis, which creates sugars to feed the tree. While making their own food and absorbing carbon dioxide, trees discard oxygen, which is the gas in the air that animals (including people) breathe. One large tree can provide a day's supply of oxygen for up to four people!

Trees also store carbon dioxide in their fibers, which are found in the roots, trunk, branches, stems, and leaves. Carbon dioxide in the atmosphere helps keep the earth warm through a
process called the greenhouse effect, which traps heat from the sun. Too much carbon dioxide makes the earth heat up too much, causing strong storms and sea-level rise. Since trees absorb carbon dioxide, they can help reduce the greenhouse effect. One mature tree absorbs about 48 pounds of carbon dioxide from the atmosphere each year.

Now that people understand how important trees are, groups are getting together to plant more trees and help forests in other ways. Arborists and forestry specialists study trees, tree diseases, and ways to keep trees healthy. They work with community groups to promote healthy forests.

Some people help support the health of natural forests by removing dead brush to prevent bad wildfires. They may remove smaller trees to open up space that helps other trees grow larger. There are even groups in cities that focus on planting trees to provide shade for recreation, food for wildlife and people, and carbon absorption to help cities cool down in summer months.

You can help the earth and people, too, by planting more amazing trees.

These conservation efforts are supported by the National Fish and Wildlife Foundation (NFWF), which specializes in bringing together individuals, government agencies, nonprofit organizations, and corporations to restore our nation's fish, wildlife, plants, and habitats for current and future generations.

Name: $\qquad$ Date: $\qquad$

1. What four parts of a tree can you identify by looking at a tree from the ground up?
A. head, shoulders, legs, and feet
B. back, side, front, and top
C. roots, trunk, branches, and leaves
D. fruit, flowers, vegetables, and bark
2. What effect do trees have on streams and rivers?
A. They make streams and rivers healthier by keeping soil where it's supposed to be.
B. They make streams and rivers dirtier when branches break off and fall in.
C. They make streams and rivers shallower by blocking off the flow of water.
D. They make streams and rivers less photogenic by blocking sun from the water.
3. Trees play an important role in making sure our atmosphere doesn't get too hot. What evidence from the passage supports this idea?
A. "Arborists and forestry specialists study trees, tree diseases, and ways to keep trees healthy. They work with community groups to promote healthy forests."
B. "If topsoil washes into streams and rivers during heavy rains, it can lower oxygen levels in the water and hurt fish. Soil and sediment can form layers in areas that cause other problems, like changing the water depth."
C. "Too much carbon dioxide makes the earth heat up too much, causing strong storms and sea-level rise. Since trees absorb carbon dioxide, they can help reduce the greenhouse effect."
D. "The roots of trees help prevent erosion, which makes streams and rivers healthier by keeping soil where it is supposed to be."
4. The text says that conservationists are trying to keep forests healthy. Based on the information in the text, how would a healthy forest impact the earth's atmosphere?
A. By creating more wood to burn, a healthy forest would make the atmosphere smokier.
B. By blocking sunlight, a healthy forest would make the atmosphere too cold.
C. By absorbing too much carbon dioxide, a healthy forest would make the atmosphere thin.
D. By absorbing more carbon dioxide, a healthy forest would help the atmosphere not get too hot.
5. What is the main idea of this text?
A. Trees are very important for the earth's atmosphere and living things, and many people are working together to make sure that trees are healthy.
B. Trees discard oxygen, which is the gas in the air that helps people breathe, and one large tree can provide oxygen for four people for a whole day.
C. Photosynthesis is the process by which trees use water from their roots, the energy from the sun, and carbon dioxide to make sugars to feed the tree.
D. Trees process carbon dioxide in two ways: by using it to make sugars in photosynthesis, and by storing it in their fibers.

## Sunrise, Sunset...or Not?

by ReadWorks


The sun is a wonderful thing for Earth. It is a star that heats the planet and makes life on Earth possible. In addition, its light shines onto the planet. It is Earth's ultimate source of energy.

Summer days may be longer than winter days, but for most people, the sun seems to do the same thing each day: it appears to come up in the east for the day, and it appears to go down in the west for the night. The sun looks like it rises in the east and sets in the west because of how the earth spins in space. It spins toward the east, or counterclockwise. This means that when most people look at the sky in the morning, the sun will first appear in the east.

The earth takes 24 hours to complete one turn. For most places on Earth, there is a daytime and nighttime every 24 hours. But in some places for many days at a time, the sun might stay up in the sky, or it might not even come up above the horizon.

In some parts of the world, the sun can be up in the sky for months. During part of the spring and summer in Earth's Northern Hemisphere, the Northern Hemisphere is tilted towards the sun so much that the sun in northern Alaska, which is located in the Arctic Circle, never goes below the horizon. The Arctic Circle is an area at the top of the earth. In Barrow, Alaska, the sun doesn't set for almost three months! This phenomenon is called the midnight sun, when the sun has not set at midnight. Try sleeping through that!

During parts of the fall and winter in Earth's Northern Hemisphere, the Northern Hemisphere is tilted in such a way that the sun doesn't come over the horizon in northern Alaska for a little over two months. Therefore, nights last more than 24 hours. This phenomenon is called the polar night. Although the sun never rises above the horizon during parts of the fall and winter in the Arctic Circle, enough light often shines so that people who live there don't need flashlights to walk around outside.

It may be hard for many people to get through these times of very little or prolonged sunlight. But arctic plants and wildlife have adapted to these seasons of long days and long nights. In the arctic winter, some animals hibernate, and others travel south to where there is more sunlight.

In the arctic summer, there are pools of still water from melted ice, and the 24 -hour sunlight warms the Arctic Circle. These conditions are favorable for mosquitoes, which lay their eggs on the surface of water, to thrive. The birds that eat these insects now have plenty of food in the arctic summer. For animals like caribou that mainly eat plants, they can easily find food during the long days of summer.

Most animals, including humans, are used to a period of sunlight and a period of no sunlight every 24 hours. In places where there are months when the sun continuously stays above the horizon or below the horizon, living things have had to adapt to survive.

Name: $\qquad$ Date: $\qquad$

1. What is the sun?
A. a planet that can only be seen from northern Alaska
B. an asteroid that shines light onto the earth
C. a star that can only be seen from northern Alaska
D. a star that shines light onto the earth
2. Midnight sun in northern Alaska is an effect described in the passage. What is its cause?
A. animals moving south in the winter
B. getting a sunburn in the winter
C. the Northern Hemisphere tilling away from the sun
D. the Northern Hemisphere tilting toward the sun
3. Read the following sentences: "During part of the spring and summer in Earth's Northern Hemisphere, the Northern Hemisphere is tilted towards the sun so much that the sun in northern Alaska, which is located in the Arctic Circle, never goes below the horizon. . . . During parts of the fall and winter in Earth's Northern Hemisphere, the Northern Hemisphere is tilted in such a way that the sun doesn't come over the horizon in northern Alaska for a little over two months."

What conclusion about the impact of the tilt of the earth does this information support?
A. The tilt of the earth has no impact on the amount of sunlight different parts of the earth receive.
B. The tilt of the earth has an impact on how fast the earth moves around the sun.
C. The tilt of the earth has an impact on the amount of sunlight different parts of the earth receive.
D. The tilt of the earth has an impact on how fast the Earth rotates on its axis.
4. Based on the text, how does the Northern Hemisphere tilt during the Northern Hemisphere's winter months?
A. away from the sun
B. towards the sun
C. away from the moon
D. towards the moon
5. What is this passage mostly about?
A. the town of Barrow, Alaska, and what people there do in the arctic summer
B. sunrise, sunset, midnight sun, and polar night
C. mosquitoes, caribou, and adult birds
D. how living things have adapted to survive the arctic summer and winter
6. Read the following sentences: "During some of the spring and summer in Earth's Northern Hemisphere, the Northern Hemisphere is tilted towards the sun so much that the sun in northern Alaska, which is located in the Arctic Circle, never goes below the horizon. In Barrow, Alaska, the sun doesn't set for almost three months! This phenomenon is called the midnight sun, when the sun has not set at midnight."

What does the word "phenomenon" mean above?
A. large body of water
B. event or occurrence
C. big problem or disaster
D. the study of stars, planets, and space
7. Choose the answer that best completes the sentence below.

The midnight sun is when the sun never sets; $\qquad$ , the polar night is when the sun never rises.
A. for instance
B. most importantly
C. in contrast
D. in the end
8. How does the Northern Hemisphere of the earth tilt when northern Alaska is experiencing the midnight sun?
9. How does the Northern Hemisphere of the earth tilt when northern Alaska is experiencing the polar night? Use information from the text to support your answer.
10. How does the earth's tilt affect the earth? Use information from the text to support your answer.

## Summer Work Packet



Math - Conceptual Practice
$\qquad$

## Multi-Digit Addition Review

1 Solve the problems below. Show all your work.

| 120 | 459 | 533 |  |
| ---: | ---: | ---: | ---: |
| +207 |  |  |  |
|  | +320 | +429 | +832 |
|  |  |  | +845 |
| 457 | 538 | 576 | 1,438 |
| +372 | +975 | +423 | 2,754 |

2 Rewrite these problems in vertical form. Then solve them. Show all your work.

| example $583+645$ | a $276+986$ | b $362+1,534$ |
| :---: | :--- | :--- |
| 1 <br> 583 <br> +645 <br> 1,228 |  |  |

3 Use two numbers from the box to complete each addition problem below. You will use some numbers more than once.

| 97 | 204 | 297 | 405 | 498 | 607 |
| :--- | :--- | :--- | :--- | :--- | :--- |

$\square$

$\qquad$

## Addition Story Problems

Solve the problems below. Show all your work.
1 Last week, Jose picked 325 pounds of apples. Gloria picked 236 pounds of apples. How many pounds of apples did Jose and Gloria pick altogether? Show all your work.


2 The year Marcus was born, there were 2,308 people living in the town where his parents lived. Now Marcus is nine years old, and the town has 856 more people than it did when he was born. How many people live in the town where Marcus lives? Show all your work.

## CHALLENGE

3 Fran is flying in an airplane. Right now it is 13,500 feet above the ground. It will go 16,800 more feet before it stops going any higher. How high will the airplane be then? Show all your work.

$\qquad$

## Multi-Digit Subtraction Review

1 Solve the problems below. Show all your work.


2 Rewrite these problems in vertical form. Solve them and then add the numbers to check your answer. Show all your work.

| example | $906-458$ | a $607-569$ | b $8,046-753$ |
| ---: | ---: | :--- | :--- |
| 89 | 11 |  |  |
| 986 | 458 |  |  |
| $\frac{-458}{448}$ | +448 |  |  |

## CHALLENGE

3 Complete these problems. There is more than one correct solution to the first two problems.
a

b

C

$\qquad$

## Subtraction Story Problems

Solve the problems below. Show all your work.
1 Last week the cafeteria served 486 breakfast sandwiches. This week they served 538 breakfast sandwiches. How many more breakfast sandwiches did they serve this week?


2 There were 6,742 bags of potato chips stored in the cafeteria. They served 781 of them at lunch. How many bags of potato chips are left?


## CHALLENGE

3 At the basketball game last night, the home team was losing by 48 points at half time, so fans started to leave. If there were 18,862 people at the game when it started and 6,946 went home at half time, how many people were still at the game for the second half?

$\qquad$

## Add, Subtract \& Multiply

1 Solve the addition and subtraction problems below Show all your work.

| \$1.74 | \$20.71 | \$43.53 | \$8.14 |
| :---: | :---: | :---: | :---: |
| + \$2.25 | + \$6.55 | + \$7.18 | + \$7.03 |
| \$5.32 | \$3.42 | \$54.66 | \$3.04 |
| - \$2.81 | - \$1.84 | - \$6.93 | - \$1.26 |

2 Rewrite these problems in vertical form. Then solve them. Show all your work.

| example $\$ 2.96+\$ 8.45$ | a $\$ 4.72+\$ 2.39$ | b \$506.00-\$3.57 |
| :--- | :--- | :--- |
| $\$ 2.96$ <br> $+\$ 8.45$ |  |  |
| $\$ 11.41$ |  |  |

3 Complete these multiplication problems.

| 3 | 5 | 9 | 2 | 0 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\times 8$ | $\times 4$ | $\times 3$ | $\times 7$ | $\times 3$ | $\times 6$ |
| 6 | 7 | 4 | 0 | 7 | 2 |
| $\times 4$ | $\times 4$ | $\times 8$ | $\times 9$ | $\times 7$ | $\times 10$ |

$\qquad$

## Miles, Books \& Jellybeans

Solve the problems below. Show all your work.
1 Felipe's family is driving to see his grandmother. Altogether, they have to drive 856 miles. If they have gone 269 miles so far, how much farther do they have to drive?


2 In our classroom library, we had 326 books. We gave 38 books to the other fourth grade classroom, but our teacher got 97 more books for our classroom library. How many books do we have in our classroom library now?


## CHALLENGE

3 At the school fair, students were guessing how many jellybeans were in a jar. Nicky guessed there were 296 jellybeans. Caitlyn guessed there were 435 jellybeans. Samira guessed a number that was 52 more than Nicky and Caitlyn's put together. What was Samira's guess?

$\qquad$
$\qquad$

## Centimeters, Decimeters \& Meters

The information below will help you solve Problems 1-3.

- There are 10 centimeters in 1 decimeter.
- There are 10 decimeters in 1 meter.
$1 \mathbf{a}$ Luis and Sara measured their heights in centimeters. Luis was 132 cm tall, and Sara was 148 cm tall. What is the sum of their heights in centimeters? Show your work.

b What is the sum of their heights in decimeters? Show your work.

2 The snail crawled 1 meter in the morning, 4 decimeters after lunch, and 60 centimeters before falling asleep. How far did the snail crawl altogether? Express your answer in centimeters, decimeters, and meters. Show your work.
a The snail crawled $\qquad$ centimeters.
b The snail crawled $\qquad$ decimeters.

C The snail crawled $\qquad$ meters.

## CHALLENGE

3a Sidney Snail crawled two and a half meters in a half hour. Sherman Snail crawled 487 centimeters in an hour. Who crawled farther, Sidney or Sherman? How much farther? Show your work.
b Which snail was faster? Explain your answer.

$\qquad$

## Multiplication \& Division Facts

1 Solve the problems below.

| 8 | 4 | 7 | 5 | 3 | 2 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\times 3$ | $\times 4$ | $\times 6$ | $\times 6$ | $\times 8$ | $\times 9$ | $\times 1$ |
| 1 | 6 | 9 | 10 | 5 | 7 | 6 |
| $\times 8$ | $\times 6$ | $\times 4$ | $\times 4$ | $\times 3$ | $\times 9$ | $\times 8$ |

$63 \div 7=$
$42 \div 7=$ $\qquad$ $36 \div 4=$ $\qquad$ $20 \div 5=$ $\qquad$
$16 \div 8=$ $\qquad$ $18 \div 3=$
$6 \div 3=$ $\qquad$ $14 \div 2=$ $\qquad$

2 Fill in the missing numbers.
$\begin{array}{r}6 \\ \times \quad 3 \\ \hline \square \\ \hline\end{array}$


## CHALLENGE

3 Use words and/or numbers to show how you could use the answer to $4 \times 8$ to solve $4 \times 16$.
$\qquad$
$\qquad$

## Sandwiches, Pizza \& Books

1 Rodney had a friend over on Saturday. His dad took them out for sandwiches. Each person (Rodney, his dad, and his friend) got a sandwich for $\$ 6$. How much did they spend on sandwiches altogether? Show all your work.


2 Jasmine had a pizza party with 3 of her friends to celebrate the last day of school. They ordered 2 pizzas. Each pizza had 8 slices. They all ate the same amount of pizza and finished both pizzas. How many pieces did each person eat? Show all your work.


## CHALLENGE

3 There were 12,387 books in the school library. The librarian bought 445 more books to add to the library and put 126 books on the Give Away shelf near the office. How many books are in the library now? Show all your work.

$\qquad$

## Multiples \& Multiplication Facts

1 When you count by a number, you are naming the multiples of that number. For example, if you skip count by 5's, you are naming the multiples of five: 5,10 , $15,20,25$, and so on. In each sequence below, fill in the missing multiples.

| ex $5,10,15, \ldots 20,25,30, \ldots$ | a $3,6, \ldots, 12,15,18, \ldots, 24$ |
| :--- | :--- |
| $\mathbf{b} 6, \ldots, 18, \ldots, 30$ | c $9,18, \ldots, 36,45, \ldots, 63$ |

2 Circle all the multiples of the number in each box.

| ex | 5 | 16 | $(20)$ | $(15)$ | 42 | 36 | $(45)$ | 18 | $\mathbf{a}$ | 2 | 5 | 6 | 7 | 8 | 14 | 21 | 10 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{b}$ | 4 | 8 | 6 | 14 | 16 | 20 | 28 | 19 | $\mathbf{c}$ | 7 | 22 | 33 | 21 | 14 | 16 | 42 | 35 |
| $\mathbf{d}$ | 8 | 28 | 32 | 48 | 16 | 60 | 72 | 19 | $\mathbf{e}$ | 3 | 21 | 35 | 18 | 36 | 44 | 12 | 29 |

3 Fill in the missing numbers.
$\begin{array}{r}9 \\ \times \quad 9 \\ \hline \square \\ \hline\end{array}$


## CHALLENGE


$\qquad$
$\qquad$

## Area \& Perimeter

1 Find the area and perimeter of each rectangle. Area is the total amount of space covered by the rectangle. Perimeter is the distance around the rectangle.


## CHALLENGE

2 Find the area and perimeter of this shape. Show all your work.

$\qquad$

## Area \& Perimeter Story Problems

You can make sketches to help solve the problems below. Remember to include the units of measurement in your answers. Show all of your work.

1a The classroom rug is 9 feet long and 8 feet wide. What is the total area of the rug?
$\mathbf{6}$ What is the perimeter of the rug?

2a Chrissy is going to make a big painting on a piece of wood that is 4 feet wide and 7 feet long. What is the total area of the piece of wood?
$\mathbf{b}$ What is the perimeter of the piece of wood?

3 The school playground measures 465 feet by 285 feet. What is the perimeter of the playground?
$\qquad$

## Place Value \& Perimeter

1 Write each number below in standard form.
example twenty-three thousand, five hundred six 23,506
a nine thousand, two hundred forty-eight $\qquad$
b seventeen thousand, six hundred thirty-three $\qquad$
C thirty-two thousand, fifty-eight $\qquad$
2 Identify the place value and value of the underlined digit in each number.

| Number | Place Value | Value |
| :--- | :---: | :---: |
| ex $3 \underline{6}, 874$ | thousands | six thousand |
| a $17, \underline{6} 04$ |  |  |
| b $8, \underline{0} 97$ |  |  |
| C $\underline{4} 1,000$ |  |  |

3 Find the perimeter of each rectangle below. Show your work.

$\qquad$

## Expanded Notation \& Fact Families

1 Complete each equation by writing a number in standard form.

| ex $17,508=10,000+7,000+500+8$ | a $=20,000+400+50+6$ |
| :---: | :---: |
| b $=30,000+2,000+100+10+2$ | C $=7,000+40+6$ |
| d | e $=60,000+3,000+7$ |
| f__ $=10,000+3,000+800+50+5$ | S |

2 Fill in the missing number in each equation.

| ex $40,000+6,000+\ldots 50+8=46,058$ | a $41,092=40,000+\ldots+90+2$ |
| :--- | :--- |
| b $50,000+1,000+\ldots+50+4=51,354$ | c $17,035=10,000+\ldots+30+5$ |
| d $96,035=90,000+6,000+\ldots+5$ | e $20,000+\ldots+50+6=20,456$ |
| f $2,000+500+\ldots \ldots+7=2,567$ | $\mathbf{S} 20,408=20,000+\ldots \ldots+8$ |

3 Fill in the missing information for each rectangle. Then write the multiplication and division fact family that goes with the rectangle.

$\qquad$ DATE $\qquad$

## Fill the Frames

Label each array frame below. Then fill it in with labeled rectangles. Write an addition equation to show how you got the total. Then write a multiplication equation to match the array.

$\qquad$

## Comparing Fractions on a Number Line

When you are comparing fractions, it can help to think about how close those fractions are to landmarks like one whole and one-half. Use the number line to help complete the problems below.


1 Complete the table.

| Circle the fraction that is <br> greater than $\frac{1}{2}$. |  |  | Write a number sentence showing which fraction is greater. |
| :--- | :--- | :--- | :--- |
| example $\frac{4}{6}$ | $\frac{1}{4}$ |  |  |
| a $\frac{2}{6}$ | $\frac{2}{3}$ | $>\frac{1}{4}$ |  |
| b | $\frac{1}{3}$ | $\frac{5}{6}$ |  |

2 Complete the table.

| Circle the fraction that is <br> closest to 1. |  | Write a number sentence showing which fraction is greater. |
| :--- | :---: | :--- |
| a | $\frac{3}{4}$ | $\frac{2}{3}$ |

$\qquad$
$\qquad$

## Egs Carton Fractions

1 Solve the following multiplication and division problems. They might help you think about the egg cartons in problem 2.
$12 \div 2=$
$12 \div 3=$ $\qquad$
$12 \div 4=$ $\qquad$
$12 \div 6=$
$\qquad$
$6 \times 3=$ $\qquad$
$4 \times 2=$ $\qquad$
$3 \times 3=$ $\qquad$
$2 \times 5=$
$\qquad$

2 Write a fraction to show the amount of each egg carton that is filled with eggs. The cartons are divided into equal parts for you.


3 Write greater than ( $>$ ) or less than ( $<$ ) to show which fraction is greater. If they are equal, write an equal sign ( $=$ ).

| ex a $\frac{1}{4}<\frac{1}{2}$ | ex b $\frac{1}{2}>\frac{1}{3}$ | a $\frac{4}{6}$ | $\frac{2}{3}$ |  |  |
| :--- | :---: | :--- | :--- | :--- | :---: |
| b $\frac{1}{3}$ | $\frac{1}{4}$ | c $\frac{3}{4}$ | $\frac{5}{6}$ | d $\frac{1}{3}$ | $\frac{3}{4}$ |
| e $\frac{1}{2}$ | $\frac{2}{4}$ | f $\frac{2}{3}$ | $\frac{3}{4}$ | S $\frac{2}{6}$ | $\frac{1}{3}$ |

$\qquad$

## Fractions \& Mixed Numbers on a Number Line

1 Use the number line to answer the questions below.


| example a What improper fraction is equal to $2 \frac{1}{4}$ ? In other <br> words, how many fourths are in two and one-fourth? | $\frac{9}{4}$ |
| :--- | :---: |
| example b What number is halfway between 2 and 3 ? | $2 \frac{1}{2}$ |
| a What improper fraction is equal to $1 \frac{1}{2}$ ? In other words, how <br> many halves are in one and one-half? |  |
| b What mixed number is equal to $\frac{6}{4}$ ? |  |
| C Which is greater, $\frac{5}{4}$ or $1 \frac{1}{2}$ ? |  |
| d What mixed number is equal to $\frac{13}{4}$ ? |  |
| e What improper fraction is equal to $2 \frac{1}{2}$ ? In other words, how <br> many halves are in two and one-half? |  |
| f Which is greater, $1 \frac{3}{4}$ or $\frac{8}{4}$ ? |  |

## CHALLENGE

2 What number is halfway between 0 and 1 ?

3 What number is halfway between 0 and 3?

4 What number is halfway between 0 and 17?

NAME $\qquad$

## Classroom Groups

1 Mrs. Larsen has 20 little erasers. She wants to divide the erasers evenly among the 6 students in her reading group. How many erasers will each student get? Show all your work.

2a The teacher wanted his class to work in groups of 4. After he divided them into groups, there were 6 groups of 4 and 1 group of 3 . How many students were in the class? Show all your work.
b If the teacher wanted all the groups to be exactly the same size, how many students should be in each group? How many small groups would there be? Show all your work.
$\qquad$ DATE $\qquad$

## Fractions of an Hour

Complete the table.

| Fractions of an Hour | Picture on a Clock | How Many Minutes? |
| :---: | :---: | :---: |
| example $\frac{1}{4}$ |  | 15 minutes |
| $1$ $\frac{1}{3}$ |  |  |
| 2 |  |  |
| 3 |  |  |
| $4$ $\frac{1}{6}$ |  |  |

$\qquad$

## Sharing Problems

1 Kendra and Veronica's aunt gave them $\$ 19$ to spend at the store. If they split the money evenly, how much did they each get to spend? Use labeled sketches, numbers, and/or words to solve this problem. Show all your work.


2 Frank had 42 shells that he wanted to share with his 4 friends. If he gave each friend the same number of shells (and kept the same number of shells for himself), how many shells did each person get? Use labeled sketches, numbers, and/ or words to solve this problem. Show all your work.


## CHALLENGE

3 Joe's grandma lives 36 blocks up the street from Joe. On Saturday, Joe rode his bike two-thirds of the way to his grandma's house and then realized he forgot the present he was going to give her. Joe rode back to his house, got the present, and rode all the way to his grandma's house. Then he rode straight home. How many blocks did Joe ride altogether? Use labeled sketches, numbers, and/or words to solve this problem. Show all your work.

$\qquad$
$\qquad$

## Multiplying by $10,100 \& 1,000$

1 Multiply by 10, 100, and 1,000. Some of the problems below are already done for you as examples.

| $\begin{array}{r}10 \\ \times 3 \\ \hline\end{array}$ | $\begin{array}{r}10 \\ \times 5 \\ \hline\end{array}$ | $\begin{array}{r}10 \\ \times 7 \\ \hline\end{array}$ | 100 $\times 2$ | $\begin{array}{r}100 \\ \times \quad 4 \\ \hline\end{array}$ | $\begin{array}{r}100 \\ \times \quad 9 \\ \hline\end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 30 |  |  | 200 |  |  |
| 1,000 | 1,000 | 1,000 | 10 | 1,000 | 100 |
| $\times 2$ | $\times 7$ | $\times 6$ | $\times 9$ | $\times \quad 5$ | $\times 3$ |
| 2,000 |  |  |  |  |  |

2 Fill in the missing numbers.

$\qquad$

## Area Problems

1 Frank bought a rug for his room. It is 60 inches by 40 inches. What is the total area of the rug in square inches? Use labeled sketches, numbers, and/or words to solve this problem. Show all your work.

2 The school gym is 80 feet by 50 feet. What is the total area of the gym floor in square feet? Use labeled sketches, numbers, and/or words to solve this problem. Show all your work.

## CHALLENGE

3 Lisa's room is 90 inches by 90 inches. She bought a rug for her floor that is 50 inches by 40 inches. How much of her floor is not covered by the rug? Use labeled sketches, numbers, and/or words to solve this problem. Show all your work.
$\qquad$

## Two Different Multiplication Methods

1 Solve each problem below. Use the standard algorithm at least two times. Use the partial products method at least two times.

| ex $\mathbf{a}$ standard algorithm $\begin{array}{r} 12 \\ 135 \\ \times \quad 4 \\ \hline 540 \end{array}$ | ex 6 partial product $\begin{array}{r} 135 \\ \times \quad 4 \\ 4 \times 100=400 \\ 4 \times 30=120 \\ 4 \times 5=+\frac{20}{540} \end{array}$ | a | $\begin{array}{r} 28 \\ \times \quad 8 \end{array}$ | $b$ | $\begin{array}{r} 47 \\ \times \quad 5 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C $\begin{array}{r}56 \\ \times \quad 3 \\ \hline\end{array}$ | d $\begin{array}{r} 321 \\ \times \quad 7 \\ \hline \end{array}$ | e | $\begin{array}{r} 482 \\ \times \quad 6 \\ \hline \end{array}$ | f | $\begin{array}{r} 259 \\ \times \quad 3 \\ \hline \end{array}$ |

2 Ramon bought 8 big cases of breakfast cereal. Each case held 12 boxes of cereal. Each box of cereal held 18 oz . of cereal. How many boxes of breakfast cereal did Ramon buy?
a Restate the question in your own words:
b Underline the information in the problem you do need to solve the problem.
C Cross out the information in the problem you don't need to solve the problem.
d Solve the problem. Show all your work.
$\qquad$

## More Partial Products

Use partial products to solve each multiplication problem below.

$\qquad$

## Using the Standard Algorithm \& Partial Products to Multiply

1 Solve these multiplication problems.

| 30 | 40 | 40 | 200 | 200 |
| ---: | ---: | ---: | ---: | ---: |
| $\times 30$ |  |  |  |  |
| $\times 30$ | $\times 40$ | $\times 20$ | $\times 30$ | $\times 40$ |

2 Solve these multiplication problems. Use the standard algorithm to solve two of them. Use partial products to solve the other two. Hint: Use the answers above to make sure your answers are reasonable.

| $\begin{gathered} \text { ex a } \begin{array}{c} \text { Standard Algorithm } \\ 21 \\ \frac{21}{} \\ 184 \\ \times 36 \\ \hline 1,104 \\ +5,520 \\ \hline 6,624 \end{array} \end{gathered}$ | ex b Partial Products $\begin{array}{r} 63 \\ \times 21 \\ \times 21 \\ 20 \times 60=1,200 \\ 20 \times 3=60 \\ 1 \times 60=60 \\ 1 \times 3=+\quad 3 \\ \hline 1,323 \end{array}$ |
| :---: | :---: |
| a $\begin{array}{r} 36 \\ \times \quad 29 \end{array}$ | b $\begin{array}{r} 43 \\ \times \quad 38 \end{array}$ |
| c $\begin{array}{r} 186 \\ \times \quad 22 \end{array}$ | $\begin{array}{r} \text { d } \\ \\ \\ 207 \\ \times 35 \end{array}$ |

$\qquad$

## Favorite Fruit Graph

The people working in the cafeteria wanted to know what fruit students like best. They asked the 240 students in the school to pick their favorite fruit. The results are shown on the circle graph below.

1 Which was the most popular fruit?

2 Did more students select peaches or apples?

3 Which two fruits are favored by the same number of students?
Students' Favorite Fruit

4 Exactly half of the students said watermelon was their favorite fruit. What number of students said watermelon was their favorite fruit? (There are 240 students altogether.) Show your work.

5 Exactly one-fourth of the students said peaches were their favorite fruit. What number of students said peaches were their favorite fruit? Show your work.

6 Exactly one-eighth of the students said strawberries were their favorite fruit. What number of students said strawberries were their favorite fruit? Show your work.
$\qquad$

## Spinner, Tile \& Marble Fractions

1 What fraction of each spinner is shaded in?


2 What fraction of the tile in each collection are gray? Some collections have 8 tile, and some have 6 tile.


3 What fraction of the marbles in each collection are black?

$\qquad$
$\qquad$

## Dos Bone Graph

A pictograph uses pictures or symbols to show numbers of things. A pet store owner used a pictograph to keep track of how many dog bones she sold each day. Use the pictograph to answer the questions below.

Number of Dos Bones Sold Each Day

| Monday | $3 C$ |
| :--- | :--- | :--- |
| Tuesday | 3 |
| Wednesday | 3 |
| Thursday | 3 |
| Friday | $-3 C$ |

Key - 10 Bones

1 How many bones does each bone picture stand for?

2 How many bones does each half-bone picture stand for?

3 On which day were the most bones sold?

4 How many bones were sold on Tuesday?

5 How many bones were sold altogether this week, from Monday to Friday? Show all your work.

## CHALLENGE

6 The pet store owner sold half as many dog bones last week as she did this week. How many bones were sold last week? (The pictograph shows the bones sold this week.) Show your work.
$\qquad$

## Estimating to Decide if Your Answer Is Reasonable

Making an estimate before solving a problem can help you decide if your answer is reasonable. Make an estimate, solve the problem, and then use your estimate to help decide if your answer makes sense.

1 The school got new dictionaries for the third, fourth, and fifth graders this year. They got 23 boxes, and there were 12 dictionaries in each box. How many dictionaries did they get altogether?
a Use rounding or another strategy to decide which estimate below is best. Circle the best estimate.
less than 200
dictionaries
about 2,000
dictionaries
more than 200
but less than 400
dictionaries
b Solve the problem. Show all your work.

C Is your answer reasonable? How can you tell?

2 Solve these multiplication problems.

| 300 |
| ---: |
| $\times \quad 70$ |
| $\times \quad 14$ |

$\qquad$

## Darryl's Present

Making an estimate before solving a problem can help you decide if your answer is reasonable. Make an estimate, solve the problem, and then use your estimate to help decide if your answer makes sense.

Darryl makes $\$ 12$ an hour. He wants to earn $\$ 180$ to buy a really nice present for his mom. He worked 3 hours last week and 5 hours this week. How many hours will he have to work next week in order to earn enough money to buy the present?

1 Use rounding or another strategy to make a reasonable estimate before you solve the problem.
a I know the answer will be greater than $\qquad$ .
b I know the answer will be less than $\qquad$ .

2 Solve the problem. Show all your work.

3 Is your answer reasonable? How can you tell?

$\qquad$

## Time Conversions

1 Fill in the following equivalencies for measurements of time.
a There are $\qquad$ seconds in 1 minute. $\mathbf{d}$ There are $\qquad$ days in 1 week.
b There are $\qquad$ minutes in 1 hour. e There are $\qquad$ days in 1 year.

C There are $\qquad$ hours in 1 day.
f There are $\qquad$ weeks in 1 year.

2 How many seconds are in 1 hour? Show your work.

3 How many minutes are in 1 day? Show your work.

4 How many hours are in a day and a half? Show your work.

5 Today is Luis's birthday. He is turning 12 years old. How many days has it been since he was born? Show your work.


## CHALLENGE

6 Today is also Luis's grandfather's birthday. He is turning 78 years old. How many days has it been since he was born? Show your work.
$\qquad$

## Weight Conversions

1 Fill in the following equivalencies for measurements of weight.
a There are $\qquad$ ounces in 1 pound. $\mathbf{b}$ There are $\qquad$ pounds in 1 ton.

2 Solve the problems below. Show all your work for each one.
a Ming has a very big cat that weighs 15 pounds. How many ounces does his cat weigh?
b Esperanza's baby sister weighs 11 and a half pounds. How many ounces does she weigh?

C Mr. Chang weighs 175 pounds. How many ounces does he weigh?
d An average male African elephant weighs 5 tons. How many pounds does it weigh?
e How many ounces does an average male African elephant weigh?
f A blue whale can weigh up to $300,000 \mathrm{lbs}$. How many tons is that?
$\qquad$

## Capacity Conversions

1 Fill in the following equivalencies for measurements of capacity.
a There are $\qquad$ fluid ounces in 1 cup $\mathbf{b}$ There are $\qquad$ cups in 1 pint.

C There are $\qquad$ pints in 1 quart.
d There are $\qquad$ cups in 1 quart.
e There are $\qquad$ quarts in 1 gallon.
f There are $\qquad$ pints in 1 gallon.

2 Solve the problems below. Show all your work for each one.
a I have a full gallon of milk in my refrigerator. How many cups are in it?
b How many fluid ounces are in 1 gallon?


C Anthony's grandpa drives a semi truck for work. It has two gas tanks. Each gas tank holds 75 gallons of gasoline. How many quarts of gasoline does the truck hold altogether?
d How many fluid ounces of gasoline does the truck hold?

$\qquad$
$\qquad$

## Length Conversions

1 Fill in the following equivalencies for measurements of length and distance.
a There are $\qquad$ inches in 1 foot.
b There are $\qquad$ feet in 1 yard.

C There are $\qquad$ inches in 1 yard.
d There are $\qquad$ feet in 1 mile.

2 Solve the problems below. Show all your work.
a The pool is 12 feet deep at its deepest part. How many inches deep is it?
b We run a 50 -yard-dash on Field Day. How many feet are in 50 yards?

C How many inches are there in 50 yards?
d The cross country team ran 8 miles for practice yesterday. How many feet did they run?
e About how many yards are there in a mile? Write your best estimate.
f Exactly how many yards are there in a mile? Show all your work.

$\qquad$

## Decimals \& Fractions

1 Write the place value of the underlined digit in each number. The place values are spelled for you here:

|  | hundreds tens | ones | tenths | hundredths |
| :---: | :---: | :---: | :---: | :---: |
| example 2.03 | hundredths |  | a 3.17 |  |
| b 120.4 |  |  | C 506.92 |  |
| d 54.29 |  |  | e 32.1 |  |

2 Write each decimal number.
exa Twenty-three and two-tenths: $\qquad$
ex $\mathbf{b}$ One hundred thirty and five-hundredths: $\qquad$
a Six and seven-hundredths: $\qquad$
b Two-hundred sixty-five and eight-tenths: $\qquad$

3 Write each fraction or mixed number as a decimal number.

| ex a $5 \frac{3}{10}=5.3$ | ex b $12 \frac{4}{100}=12.04$ | ex c $3 \frac{17}{100}=3.17$ |
| :--- | :--- | :--- |
| a $\frac{7}{10}=$ | b $3 \frac{5}{100}=$ | c $\frac{4}{100}=$ |
| d $4 \frac{38}{100}=$ | e $1 \frac{9}{100}=$ | f $1 \frac{9}{10}=$ |

4 Use a greater than (>), less than (<), or equal sign to show the relationship between the decimal numbers below.

| ex 1.09 | $<1.9$ | a 1.12 | 1.2 | b 3.5 | 3.48 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| c 23.81 | 23.85 | d 4.50 | 4.5 | e 3.06 | 3.65 |

$\qquad$

## Running Problems

1a Steven is a runner training for the Olympics. Yesterday he ran 100 meters in 9.86 seconds. He ran 200 meters in 19.42 seconds. How much longer (in seconds) did it take him to run 200 meters? Show all your work.
b Did it take him more than twice as long or less than twice as long to run 200 meters than 100 meters? Use numbers and words to explain your answer.

2 Jamaican runner Asafa Powell set the men's world record for running 100 meters in 2007. He ran 100 meters in 9.74 seconds. How close is Steven to tying this world record? Show all your work.

3 In 1988, Florence Griffith Joyner set the women's world record for running the 100 meters. She ran it in 10.49 seconds. How much longer did it take her to run 100 meters than it took Asafa Powell? Show all your work.

$\qquad$

## Area Problems

Determine the area of each figure below. Some figures are divided into rectangles for you with dotted lines. Show all your work.

$\qquad$
$\qquad$

## Thinking about Area

1 Determine the area of each rectangle below. Write the area inside the rectangle.
a

b

C

d

$\boldsymbol{e}$ Look at the rectangles above. What happens to the area of the rectangle when one of the dimensions is doubled?

2 Determine the area of each rectangle below. Write the area inside the rectangle.
a
32
4 $\square$
b
16

C
4

d

$\boldsymbol{e}$ Look at the rectangles above. What happens to the area of the rectangle when one of the dimensions is halved?

## CHALLENGE

3 What happens to the area of a rectangle when both dimensions are doubled? Start with this rectangle and then draw and label two more rectangles to show what happens.

$\qquad$

## What's the Rule?

For each pattern, fill in what comes next. Then use words to describe the rule that makes each pattern.

| ex |  | Pattern 1, 4, 7, 10, 13 | 16 | 19 |
| :---: | :---: | :---: | :---: | :---: |
|  | b Rule Add 3 each time. |  |  |  |
|  | a Pattern 3, 6, 12, |  |  |  |
|  | b Rule |  |  |  |
|  | a Pattern 16, 8, 4, |  |  |  |
|  | b Rule |  |  |  |
|  | a Pattern 6.13, 7.26, 8.39, -_ |  |  |  |
|  | $b$ Rule |  |  |  |
|  | a Pattern $2 \frac{1}{8}, 3 \frac{1}{4}, 4 \frac{3}{8}, 5 \frac{1}{2} \longrightarrow$, |  |  |  |
|  | b Rule |  |  |  |
|  | a Pattern $\frac{18}{9}, \frac{15}{9}, 1 \frac{1}{3}, 1, \longrightarrow$ - |  |  |  |
|  | b Rule |  |  |  |

$\qquad$

## Jeff's Wallpaper Problem

1 Jeff is going to hang wallpaper on the big wall in his living room. The wall is 16 feet tall and 23 feet wide. There is a window in the middle of the wall that is 5 feet tall and 8 feet wide. How many square feet of wall does Jeff have to cover with wallpaper? Hint: Draw a picture. Show all of your work.

2 The wallpaper Jeff wants to use comes in rolls that are 1 yard wide and 10 yards long. How many square feet of wallpaper are in each roll? Show all of your work.

## CHALLENGE

3 What happens to the area of a rectangle if you double one side while cutting the other side in half? Start with the rectangle below. Draw and label two more rectangles to show what happens.

8

2 $\square$

## Summer Work Packet



Math - Fluency Practice Multiplication

| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 2

Write out the partial products then add them in your head.


To multiply 2 times a double-digit number, break the number into two parts. Multiply 2 times the first part then 2 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
2 \times 17 & =(2 \times 10)+(2 \times 7) \\
& =20+14 \\
& =34
\end{aligned}
$$

|  |  | Think Smart | Think Quick |
| :---: | :---: | :---: | :---: |
| 1. | $2 \times 15$ | $(2 \times 10)+(2 \times 5)=$ | $2 \times 15=$ |
| 2. | $2 \times 14$ | $(2 \times 10)+(2 \times 4)=$ | $2 \times 14=$ |
| 3. | $2 \times 11$ | $(2 \times 10)+(2 \times 1)=$ | $2 \times 11=$ |
| 4. | $2 \times 13$ | $(2 \times 10)+(2 \times 3)=[$ | $2 \times 13=$ |
| 5. | $2 \times 12$ | $(2 \times 10)+(2 \times 2)=\square$ | $2 \times 12=$ |
| 6. | $2 \times 18$ | $(2 \times 10)+(2 \times 8)=$ | $2 \times 18=$ |
| 7. | $2 \times 16$ | $(2 \times 10)+(2 \times 6)=$ | $2 \times 16=$ |
| 8. | $2 \times 19$ | $(2 \times 10)+(2 \times 9)=$ | $2 \times 19=$ |
| 9. | $2 \times 17$ | $(2 \times 10)+(2 \times 7)=$ | $2 \times 17=$ |
| 10. | $2 \times 20$ | $(2 \times 10)+(2 \times 10)=\left[{ }^{-\cdots-\cdots}\right.$ | $2 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 3

Write out the partial products then add them in your head.


To multiply 3 times a double-digit number, break the number into two parts. Multiply 3 times the first part then 3 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
3 \times 17 & =(3 \times 10)+(3 \times 7) \\
& =30+21 \\
& =51
\end{aligned}
$$

| Think Smart |  |  | Think Quick |
| :---: | :---: | :---: | :---: |
| 1. | $3 \times 15$ | $(3 \times 10)+(3 \times 5)=[$ | $3 \times 15=$ |
| 2. | $3 \times 14$ | $(3 \times 10)+(3 \times 4)=[$ | $3 \times 14=$ |
| 3. | $3 \times 11$ | $(3 \times 10)+(3 \times 1)=\left[{ }^{-------\cdots}\right.$ | $3 \times 11=$ |
| 4. | $3 \times 13$ | $(3 \times 10)+(3 \times 3)=[$ | $3 \times 13=$ |
| 5. | $3 \times 12$ | $(3 \times 10)+(3 \times 2)=$ | $3 \times 12=$ |
| 6. | $3 \times 18$ | $(3 \times 10)+(3 \times 8)=$ | $3 \times 18=$ |
| 7. | $3 \times 16$ |  | $3 \times 16=$ |
| 8. | $3 \times 19$ | $(3 \times 10)+(3 \times 9)=$ | $3 \times 19=$ |
| 9. | $3 \times 17$ | $(3 \times 10)+(3 \times 7)=[$ | $3 \times 17=$ |
| 10. | $3 \times 20$ |  | $3 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 4

Write out the partial products then add them in your head.



| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 5

Write out the partial products then add them in your head.


To multiply 5 times a double-digit number, break the number into two parts. Multiply 5 times the first part then 5 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
5 \times 17 & =(5 \times 10)+(5 \times 7) \\
& =50+35 \\
& =85
\end{aligned}
$$

## Think Quick

| 1. | $5 \times 15$ | $(5 \times 10)+(5 \times 5)=$ | $5 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $5 \times 14$ | $(5 \times 10)+(5 \times 4)=$ | $5 \times 14=$ |
| 3. | $5 \times 11$ | $(5 \times 10)+(5 \times 1)=$ | $5 \times 11=$ |
| 4. | $5 \times 13$ | $(5 \times 10)+(5 \times 3)=$ | $5 \times 13=$ |
| 5. | $5 \times 12$ | $(5 \times 10)+(5 \times 2)=$ | $5 \times 12=$ |
| 6. | $5 \times 18$ | $(5 \times 10)+(5 \times 8)=$ | $5 \times 18=$ |
| 7. | $5 \times 16$ | $(5 \times 10)+(5 \times 6)=$ | $5 \times 16=$ |
| 8. | $5 \times 19$ | $(5 \times 10)+(5 \times 9)=$ | $5 \times 19=$ |
| 9. | $5 \times 17$ | $(5 \times 10)+(5 \times 7)=$ | $5 \times 17=$ |
| 10. | $5 \times 20$ | $(5 \times 10)+(5 \times 10)=$ | $5 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 6

Write out the partial products then add them in your head.


To multiply 6 times a double-digit number, break the number into two parts. Multiply 6 times the first part then 6 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
6 \times 17 & =(6 \times 10)+(6 \times 7) \\
& =60+42 \\
& =102
\end{aligned}
$$

Think Smart

## Think Quick

| 1. | $6 \times 15$ | $(6 \times 10)+(6 \times 5)=$ | $6 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $6 \times 14$ | $(6 \times 10)+(6 \times 4)=$ | $6 \times 14=$ |
| 3. | $6 \times 11$ | $(6 \times 10)+(6 \times 1)=$ | $6 \times 11=$ |
| 4. | $6 \times 13$ | $(6 \times 10)+(6 \times 3)=$ | $6 \times 13=$ |
| 5. | $6 \times 12$ | $(6 \times 10)+(6 \times 2)=$ | $6 \times 12=$ |
| 6. | $6 \times 18$ | $(6 \times 10)+(6 \times 8)=$ | $6 \times 18=$ |
| 7. | $6 \times 16$ | $(6 \times 10)+(6 \times 6)=$ | $6 \times 16=$ |
| 8. | $6 \times 19$ | $(6 \times 10)+(6 \times 9)=$ | $6 \times 19=$ |
| 9. | $6 \times 17$ | $(6 \times 10)+(6 \times 7)=$ | $6 \times 17=$ |
| 10. | $6 \times 20$ | $(6 \times 10)+(6 \times 10)=$ | $6 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 7

Write out the partial products then add them in your head.


To multiply 7 times a double-digit number, break the number into two parts. Multiply 7 times the first part then 7 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
7 \times 17 & =(7 \times 10)+(7 \times 7) \\
& =70+49 \\
& =119
\end{aligned}
$$

## Think Quick

| 1. | $7 \times 15$ | $(7 \times 10)+(7 \times 5)=$ | $7 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $7 \times 14$ | $(7 \times 10)+(7 \times 4)=$ | $7 \times 14=$ |
| 3. | $7 \times 11$ | $(7 \times 10)+(7 \times 1)=$ | $7 \times 11=$ |
| 4. | $7 \times 13$ | $(7 \times 10)+(7 \times 3)=$ | $7 \times 13=$ |
| 5. | $7 \times 12$ | $(7 \times 10)+(7 \times 2)=$ | $7 \times 12=$ |
| 6. | $7 \times 18$ | $(7 \times 10)+(7 \times 8)=$ | $7 \times 18=$ |
| 7. | $7 \times 16$ | $(7 \times 10)+(7 \times 6)=$ | $7 \times 16=$ |
| 8. | $7 \times 19$ | $(7 \times 10)+(7 \times 9)=$ | $7 \times 19=$ |
| 9. | $7 \times 17$ | $(7 \times 10)+(7 \times 7)=$ | $7 \times 17=$ |
| 10. | $7 \times 20$ | $(7 \times 10)+(7 \times 10)=$ | $7 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 8

Write out the partial products then add them in your head.


To multiply 8 times a double-digit number, break the number into two parts. Multiply 8 times the first part then 8 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
8 \times 17 & =(8 \times 10)+(8 \times 7) \\
& =80+56 \\
& =136
\end{aligned}
$$

|  |  | Think Smart | Think Quick |
| :---: | :---: | :---: | :---: |
| 1. | $8 \times 15$ |  | $8 \times 15=$ |
| 2. | $8 \times 14$ | $(8 \times 10)+(8 \times 4)=[$ | $8 \times 14=$ |
| 3. | $8 \times 11$ |  | $8 \times 11=$ |
| 4. | $8 \times 13$ | $(8 \times 10)+(8 \times 3)=[$ | $8 \times 13=$ |
| 5. | $8 \times 12$ | $(8 \times 10)+(8 \times 2)=[$ | $8 \times 12=$ |
| 6. | $8 \times 18$ |  | $8 \times 18=$ |
| 7. | $8 \times 16$ | $(8 \times 10)+(8 \times 6)=[$ | $8 \times 16=$ |
| 8. | $8 \times 19$ | $(8 \times 10)+(8 \times 9)$ | $8 \times 19=$ |
| 9. | $8 \times 17$ | $(8 \times 10)+(8 \times 7)=[$ | $8 \times 17=$ |
| 10. | $8 \times 20$ | $(8 \times 10)+(8 \times 10)=\left[{ }^{----\cdots}\right.$ | $8 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 9

Write out the partial products then add them in your head.


To multiply 9 times a double-digit number, break the number into two parts. Multiply 9 times the first part then 9 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
9 \times 17 & =(9 \times 10)+(9 \times 7) \\
& =90+63 \\
& =153
\end{aligned}
$$

| Think Smart |  |  | Think Quick |
| :---: | :---: | :---: | :---: |
| 1. | $9 \times 15$ | $(9 \times 10)+(9 \times 5)=$ | $9 \times 15=$ |
| 2. | $9 \times 14$ | $(9 \times 10)+(9 \times 4)=$ | $9 \times 14=$ |
| 3. | $9 \times 11$ | $(9 \times 10)+(9 \times 1)=[$ | $9 \times 11=$ |
| 4. | $9 \times 13$ | $(9 \times 10)+(9 \times 3)=\left[{ }^{----\cdots}+{ }^{---\cdots-\cdots}\right.$ | $9 \times 13=$ |
| 5. | $9 \times 12$ | $(9 \times 10)+(9 \times 2)=$ | $9 \times 12=$ |
| 6. | $9 \times 18$ | $(9 \times 10)+(9 \times 8)=$ | $9 \times 18=$ |
| 7. | $9 \times 16$ | $(9 \times 10)+(9 \times 6)=$ | $9 \times 16=$ |
| 8. | $9 \times 19$ | $(9 \times 10)+(9 \times 9)$ | $9 \times 19=$ |
| 9. | $9 \times 17$ | $(9 \times 10)+(9 \times 7)$ | $9 \times 17=$ |
| 10. | $9 \times 20$ |  | $9 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 10

Write out the partial products then add them in your head.


To multiply 10 times a double-digit number, break the number into two parts. Multiply 10 times the first part then 10 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
10 \times 17 & =(10 \times 10)+(10 \times 7) \\
& =100+70 \\
& =170
\end{aligned}
$$

Think Smart


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 11

Write out the partial products then add them in your head.


A group of 11 is a group of 10 plus a group of 1. So 11 times a number is 10 times the number plus 1 times the number. The sum of the "partial products" is the total product or answer.

$$
\begin{aligned}
11 \times 7 & =(10 \times 7)+(1 \times 7) \\
& =70+7 \\
& =77
\end{aligned}
$$

Think Smart

## Think Quick



| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 12

Write out the partial products then add them in your head.



| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 20

Write out the partial products then add them in your head.



| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 2

Now do everything in your head!

To multiply 2 times a double-digit number, break the number into two parts. Multiply 2 times the first part then 2 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
2 \times 17 & =(2 \times 10)+(2 \times 7) \\
& =20+14 \\
& =34
\end{aligned}
$$

## Think Smart

## Think Quick

| 1. | $2 \times 15$ | $(2 \times 10)+(2 \times 5)$ | $2 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $2 \times 14$ | $(2 \times 10)+(2 \times 4)$ | $2 \times 14=$ |
| 3. | $2 \times 11$ | $(2 \times 10)+(2 \times 1)$ | $2 \times 11=$ |
| 4. | $2 \times 13$ | $(2 \times 10)+(2 \times 3)$ | $2 \times 13=$ |
| 5. | $2 \times 12$ | $(2 \times 10)+(2 \times 2)$ | $2 \times 12=$ |
| 6. | $2 \times 18$ | $(2 \times 10)+(2 \times 8)$ | $2 \times 18=$ |
| 7. | $2 \times 16$ | $(2 \times 10)+(2 \times 6)$ | $2 \times 16=$ |
| 8. | $2 \times 19$ | $(2 \times 10)+(2 \times 9)$ | $2 \times 19=$ |
| 9. | $2 \times 17$ | $(2 \times 10)+(2 \times 7)$ | $2 \times 17=$ |
| 10. | $2 \times 20$ | $(2 \times 10)+(2 \times 10)$ | $2 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 3

Now do everything in your head!

To multiply 3 times a double-digit number, break the number into two parts. Multiply 3 times the first part then 3 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
3 \times 17 & =(3 \times 10)+(3 \times 7) \\
& =30+21 \\
& =51
\end{aligned}
$$

## Think Smart

## Think Quick

| 1. | $3 \times 15$ | $(3 \times 10)+(3 \times 5)$ | $3 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $3 \times 14$ | $(3 \times 10)+(3 \times 4)$ | $3 \times 14=$ |
| 3. | $3 \times 11$ | $(3 \times 10)+(3 \times 1)$ | $3 \times 11=$ |
| 4. | $3 \times 13$ | $(3 \times 10)+(3 \times 3)$ | $3 \times 13=$ |
| 5. | $3 \times 12$ | $(3 \times 10)+(3 \times 2)$ | $3 \times 12=$ |
| 6. | $3 \times 18$ | $(3 \times 10)+(3 \times 8)$ | $3 \times 18=$ |
| 7. | $3 \times 16$ | $(3 \times 10)+(3 \times 6)$ | $3 \times 16=$ |
| 8. | $3 \times 19$ | $(3 \times 10)+(3 \times 9)$ | $3 \times 19=$ |
| 9. | $3 \times 17$ | $(3 \times 10)+(3 \times 7)$ | $3 \times 17=$ |
| 10. | $3 \times 20$ | $(3 \times 10)+(3 \times 10)$ | $3 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 4

Now do everything in your head!

To multiply 4 times a double-digit number, break the number into two parts. Multiply 4 times the first part then 4 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
4 \times 17 & =(4 \times 10)+(4 \times 7) \\
& =40+28 \\
& =68
\end{aligned}
$$

## Think Smart

## Think Quick

| 1. | $4 \times 15$ | $(4 \times 10)+(4 \times 5)$ | $4 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $4 \times 14$ | $(4 \times 10)+(4 \times 4)$ | $4 \times 14=$ |
| 3. | $4 \times 11$ | $(4 \times 10)+(4 \times 1)$ | $4 \times 11=$ |
| 4. | $4 \times 13$ | $(4 \times 10)+(4 \times 3)$ | $4 \times 13=$ |
| 5. | $4 \times 12$ | $(4 \times 10)+(4 \times 2)$ | $4 \times 12=$ |
| 6. | $4 \times 18$ | $(4 \times 10)+(4 \times 8)$ | $4 \times 18=$ |
| 7. | $4 \times 16$ | $(4 \times 10)+(4 \times 6)$ | $4 \times 16=$ |
| 8. | $4 \times 19$ | $(4 \times 10)+(4 \times 9)$ | $4 \times 19=$ |
| 9. | $4 \times 17$ | $(4 \times 10)+(4 \times 7)$ | $4 \times 17=$ |
| 10. | $4 \times 20$ | $(4 \times 10)+(4 \times 10)$ | $4 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 5

Now do everything in your head!

To multiply 5 times a double-digit number, break the number into two parts. Multiply 5 times the first part then 5 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
5 \times 17 & =(5 \times 10)+(5 \times 7) \\
& =50+35 \\
& =85
\end{aligned}
$$

## Think Smart

## Think Quick

| 1. | $5 \times 15$ | $(5 \times 10)+(5 \times 5)$ | $5 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $5 \times 14$ | $(5 \times 10)+(5 \times 4)$ | $5 \times 14=$ |
| 3. | $5 \times 11$ | $(5 \times 10)+(5 \times 1)$ | $5 \times 11=$ |
| 4. | $5 \times 13$ | $(5 \times 10)+(5 \times 3)$ | $5 \times 13=$ |
| 5. | $5 \times 12$ | $(5 \times 10)+(5 \times 2)$ | $5 \times 12=$ |
| 6. | $5 \times 18$ | $(5 \times 10)+(5 \times 8)$ | $5 \times 18=$ |
| 7. | $5 \times 16$ | $(5 \times 10)+(5 \times 6)$ | $5 \times 16=$ |
| 8. | $5 \times 19$ | $(5 \times 10)+(5 \times 9)$ | $5 \times 19=$ |
| 9. | $5 \times 17$ | $(5 \times 10)+(5 \times 7)$ | $5 \times 17=$ |
| 10. | $5 \times 20$ | $(5 \times 10)+(5 \times 10)$ | $5 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 6

Now do everything in your head!

To multiply 6 times a double-digit number, break the number into two parts. Multiply 6 times the first part then 6 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
6 \times 17 & =(6 \times 10)+(6 \times 7) \\
& =60+42 \\
& =102
\end{aligned}
$$

Think Smart

## Think Quick

| 1. | $6 \times 15$ | $(6 \times 10)+(6 \times 5)$ | $6 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $6 \times 14$ | $(6 \times 10)+(6 \times 4)$ | $6 \times 14=$ |
| 3. | $6 \times 11$ | $(6 \times 10)+(6 \times 1)$ | $6 \times 11=$ |
| 4. | $6 \times 13$ | $(6 \times 10)+(6 \times 3)$ | $6 \times 13=$ |
| 5. | $6 \times 12$ | $(6 \times 10)+(6 \times 2)$ | $6 \times 12=$ |
| 6. | $6 \times 18$ | $(6 \times 10)+(6 \times 8)$ | $6 \times 18=$ |
| 7. | $6 \times 16$ | $(6 \times 10)+(6 \times 6)$ | $6 \times 16=$ |
| 8. | $6 \times 19$ | $(6 \times 10)+(6 \times 9)$ | $6 \times 19=$ |
| 9. | $6 \times 17$ | $(6 \times 10)+(6 \times 7)$ | $6 \times 17=$ |
| 10. | $6 \times 20$ | $(6 \times 10)+(6 \times 10)$ | $6 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 7

Now do everything in your head!

To multiply 7 times a double-digit number, break the number into two parts. Multiply 7 times the first part then 7 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
7 \times 17 & =(7 \times 10)+(7 \times 7) \\
& =70+49 \\
& =119
\end{aligned}
$$

Think Smart

## Think Quick

| 1. | $7 \times 15$ | $(7 \times 10)+(7 \times 5)$ | $7 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $7 \times 14$ | $(7 \times 10)+(7 \times 4)$ | $7 \times 14=$ |
| 3. | $7 \times 11$ | $(7 \times 10)+(7 \times 1)$ | $7 \times 11=$ |
| 4. | $7 \times 13$ | $(7 \times 10)+(7 \times 3)$ | $7 \times 13=$ |
| 5. | $7 \times 12$ | $(7 \times 10)+(7 \times 2)$ | $7 \times 12=$ |
| 6. | $7 \times 18$ | $(7 \times 10)+(7 \times 8)$ | $7 \times 18=$ |
| 7. | $7 \times 16$ | $(7 \times 10)+(7 \times 6)$ | $7 \times 16=$ |
| 8. | $7 \times 19$ | $(7 \times 10)+(7 \times 9)$ | $7 \times 19=$ |
| 9. | $7 \times 17$ | $(7 \times 10)+(7 \times 7)$ | $7 \times 17=$ |
| 10. | $7 \times 20$ | $(7 \times 10)+(7 \times 10)$ | $7 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 8

Now do everything in your head!

To multiply 8 times a double-digit number, break the number into two parts. Multiply 8 times the first part then 8 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
8 \times 17 & =(8 \times 10)+(8 \times 7) \\
& =80+56 \\
& =136
\end{aligned}
$$

## Think Smart

## Think Quick

| 1. | $8 \times 15$ | $(8 \times 10)+(8 \times 5)$ | $8 \times 15=$ |
| :--- | :--- | :--- | :--- |
| 2. | $8 \times 14$ | $(8 \times 10)+(8 \times 4)$ | $8 \times 14=$ |
| 3. | $8 \times 11$ | $(8 \times 10)+(8 \times 1)$ | $8 \times 11=$ |
| 5. | $8 \times 13$ | $(8 \times 10)+(8 \times 3)$ | $8 \times 12=$ |
| 6. | $8 \times 18$ | $(8 \times 10)+(8 \times 2)$ | $8 \times 18=$ |
| 7. | $8 \times 16$ | $(8 \times 10)+(8 \times 6)$ | $8 \times 16=$ |
| 8. | $8 \times 19$ | $(8 \times 10)+(8 \times 9)$ | $8 \times 19=$ |
| 10 | $8 \times 17$ | $(8 \times 10)+(8 \times 7)$ | $8 \times 17=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 9

Now do everything in your head!

To multiply 9 times a double-digit number, break the number into two parts. Multiply 9 times the first part then 9 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
9 \times 17 & =(9 \times 10)+(9 \times 7) \\
& =90+63 \\
& =153
\end{aligned}
$$

## Think Smart

## Think Quick

| 1. | $9 \times 15$ | $(9 \times 10)+(9 \times 5)$ | $9 \times 15=$ |
| :---: | :---: | :---: | :---: |
| 2. | $9 \times 14$ | $(9 \times 10)+(9 \times 4)$ | $9 \times 14=$ |
| 3. | $9 \times 11$ | $(9 \times 10)+(9 \times 1)$ | $9 \times 11=$ |
| 4. | $9 \times 13$ | $(9 \times 10)+(9 \times 3)$ | $9 \times 13=$ |
| 5. | $9 \times 12$ | $(9 \times 10)+(9 \times 2)$ | $9 \times 12=$ |
| 6. | $9 \times 18$ | $(9 \times 10)+(9 \times 8)$ | $9 \times 18=$ |
| 7. | $9 \times 16$ | $(9 \times 10)+(9 \times 6)$ | $9 \times 16=$ |
| 8. | $9 \times 19$ | $(9 \times 10)+(9 \times 9)$ | $9 \times 19=$ |
| 9. | $9 \times 17$ | $(9 \times 10)+(9 \times 7)$ | $9 \times 17=$ |
| 10. | $9 \times 20$ | $(9 \times 10)+(9 \times 10)$ | $9 \times 20=$ |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 10

Now do everything in your head!

To multiply 10 times a double-digit number, break the number into two parts. Multiply 10 times the first part then 10 times the second part. Add these "partial products" to get the total product.

$$
\begin{aligned}
10 \times 17 & =(10 \times 10)+(10 \times 7) \\
& =100+70 \\
& =170
\end{aligned}
$$

Think Smart

## Think Quick

| 1. | $10 \times 15$ | $(10 \times 10)+(10 \times 5)$ | $10 \times 15=$ |
| :--- | :--- | :--- | :--- |
| 2. | $10 \times 14$ | $(10 \times 10)+(10 \times 4)$ | $10 \times 14=$ |
| 3. | $10 \times 11$ | $(10 \times 10)+(10 \times 1)$ | $10 \times 11=$ |
| 4. | $10 \times 13$ | $(10 \times 10)+(10 \times 3)$ | $10 \times 13=$ |
| 5. | $10 \times 12$ | $(10 \times 10)+(10 \times 8)$ | $10 \times 18=$ |
| 7. | $10 \times 18$ | $(10 \times 10)+(10 \times 9)$ | $10 \times 19=$ |
| 8. | $10 \times 19$ | $(10 \times 10)+(10 \times 7)$ | $10 \times 17=$ |
| 9. | $10 \times 17$ | $(10 \times 10)+(10 \times 10)$ | $10 \times 20=$ |
| 10 | $10 \times 20$ | $(10 \times 6)$ |  |


| Name: | Date: |
| :--- | :--- |
| Teacher: | Part 3: Beyond the Basic Times Tables |

## Multiply by 20

Now do everything in your head!


## Summer Work Packet



Math - Fluency Practice Division

Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: $\qquad$

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $\mathbf{9 1 \div 7 ?}$
91 is 70 plus 21 .
Divide 70 by 7 to get 10 .
Divide 21 by 7 to get 3 .
The answer is $10+3=13$.

Partial 1

${\underset{70}{5}+7}_{\frac{10}{3}}^{21 \div 7}=$| 13 |
| :---: |


2. $\underset{50-30}{80} \div 5$

4. $64 \div 4 \Rightarrow$
3. $153 \div 9 \Rightarrow$ $\widehat{9063}$


$$
90 \div 9
$$

$$
63 \div 9
$$

5. $34 \div 2 \Rightarrow$ $\widehat{2014}$


6. $48 \div 3 \Rightarrow$ $\widehat{30} 18$




Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: $\qquad$

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $78 \div 6 ?$
78 is 60 plus 18 .
Divide 70 by 6 to get 10 .
Divide 18 by 6 to get 3 .
The answer is $10+3=13$.

1.

3.

5. $144 \div 8 \Rightarrow$ $\widehat{8064}$


4. $144 \div 9 \Rightarrow$
 9054

$$
90 \div 9
$$


$\square$
6. $30 \div 2 \Rightarrow$

$$
20 \div 2
$$

$$
10 \div 2
$$

$=-\quad$ 2010


9. $126 \div 7 \leftrightharpoons$ $\widehat{7056}$
 $=$
7. $114 \div 6 \Rightarrow$ 6054


$54 \div 6$
2. $68 \div 4$



$=$ -----------
.
$80 \div 8$


Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: $\qquad$

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $42 \div 3$ ?
42 is 30 plus 12 .
Divide 30 by 3 to get 10 .
Divide 12 by 3 to get 4 .
The answer is $10+4=14$.
$\mid$

1.

3.

5.


2. $95 \div 5$



$=$ -----------
4. $117 \div 9 \Rightarrow$ $90 \widehat{27}$

$\square$ $27 \div 9$
$=$ --------------------
6. $65 \div 5 \Rightarrow$

$$
50 \div 5
$$

 5015
8. $108 \div 9 \Rightarrow$


10. $102 \div 6 \leadsto$



Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: $\qquad$

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $57 \div 3$ ?
57 is 30 plus 27.
Divide 30 by 3 to get 10 .
Divide 27 by 3 to get 9 .
The answer is $10+9=19$.
$\mid$

|  | Partial 1 |  | Partial 2 |  | Answer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $57 \div 3 \leadsto$ | 10 | + | 9 | $=$ | 19 |
| 3027 | $30 \div 3$ |  | $27 \div 3$ |  |  |


3. $162 \div 9 \Rightarrow$ $\widehat{90 \widehat{72}}$


$$
90 \div 9
$$

$$
72 \div 9
$$

5. $76 \div 4 \Rightarrow$ $\widehat{4036}$


6. $\underset{20_{2}}{\mathbf{2 2} \div \mathbf{2}} \Rightarrow{ }_{20 \div 2}^{2 \div 2}=$
7. $104 \div 8 \Rightarrow$ $\widehat{8024}$

8. $54 \div 3 \Rightarrow$

 3024

$$
30 \div 3
$$


$\square$
 $\widehat{\widehat{50}} \div 3 \Rightarrow$ $=-$
8. $108 \div 6 \leftrightharpoons$


60
6. $\widehat{30 \quad} \underset{37}{7} \div$



Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: $\qquad$

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $\mathbf{9 6 \div 6 ?}$
96 is 60 plus 36 .
Divide 60 by 6 to get 10 .
Divide 36 by 6 to get 6 .
The answer is $10+6=16$.


5. $72 \div 4 \Rightarrow$ $\widehat{4032}$




4. $144 \div 9 \Rightarrow$ $\underset{90}{\substack{144 \div 9}}$ $54 \div 9$
6. $\begin{array}{cc}\widehat{171} \div 9 \\ 9081 & +\cdots \\ 90 \div 9 & 81 \div 9\end{array}$
8. $38 \div 2 \Rightarrow$ $\widehat{20 \widehat{18}}$

10. $136 \div 8 \Rightarrow$



Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: 11-Partials

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $\mathbf{6 8} \div \mathbf{4 ?}$
68 is 40 plus 28.
Divide 40 by 4 to get 10 .
Divide 28 by 4 to get 7 .
The answer is $10+7=17$.

Answer
$\widehat{4028} \mathbf{6 8} \div 4=17$
1.


6. $\mathbf{8 0} \div 5=$
 5030
11. $\mathbf{8 0} \div 5=$

2. $153 \div 9=$

9063
7. $\widehat{40 \text { 64 }} \div \mathbf{4}=$
12. $\mathbf{6 4 \div 4 =}$
 4024
13. $133 \div 7=$ 7063
4. $128 \div 8=$ $\square$ 8048
9. $\widehat{30}_{30} \mathbf{1 8} \div \mathbf{3}=$
8. $133 \div 7=$ 7063
14. $\widehat{38} \div \mathbf{3}=$
5. $\widehat{40 \div 16}$

3. $34 \div 2=$ 2014
$48 \div 3$
$30 \quad 18$
10.. $\underset{505}{\mathbf{5 0}} \div \mathbf{5}=$
15. $55 \div 5=$


Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: 13-Partials

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $52 \div$ ?
52 is 40 plus 12 .
Divide 40 by 4 to get 10 .
Divide 12 by 4 to get 3 .
The answer is $10+3=13$.

Answer


1. $51 \div 3=$


$$
3021
$$

2. $\underset{50 \mathrm{4}}{\mathbf{9 5} \div 5}=$
3. $\underset{7049}{119 \div 7}=$

$$
7049
$$


9. $\underset{40 \mathrm{o}}{\mathbf{4 0}} \div \mathbf{4}=$
10. $\widehat{60 ~}_{\mathbf{7 8}}^{\mathrm{m}} \div \mathbf{6}=$
6. $152 \div 8=$


$$
8072
$$

3. 


8.

$$
\begin{gathered}
\\
6 . \\
7 . \\
8 .
\end{gathered}
$$

11. $39 \div 3=$
 309

12. $\mathbf{1 2 0} \div \mathbf{8}=$
 8040
13. $90 \div 5=$
 5040
14. $171 \div 9=$


Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: $\qquad$

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $\mathbf{7 8 \div \mathbf { 6 } \text { ? }}$
78 is 60 plus 18 .
Divide 70 by 6 to get 10 .
Divide 18 by 6 to get 3 .
The answer is $10+3=13$.

Answer


1. $24 \div \mathbf{2}=$
 204

2. $\underset{40 \text { 28 }}{\mathbf{6 8}} \mathbf{4}=$
3. $\widehat{4016}_{\mathbf{5 6}}^{\widehat{4}} \mathbf{4}=-\quad-\quad------------$

4. $152 \div 8=$
 8072
5. $\mathbf{8 0} \div 5=$



6. $171 \div 9=$
 9081 8
7. $\mathbf{2 8} \div \mathbf{2}=$ 208
8. $126 \div 7=$ $\square$ 7056
9. $\mathbf{7 6} \div \mathbf{4}=-\quad------------$ 4036
10. $136 \div 8=$
8056

Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: 17-Partials

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $\mathbf{7 6} \div \mathbf{4 ?}$
76 is 40 plus 36 .
Divide 40 by 4 to get 10 .
Divide 36 by 4 to get 9 .
The answer is $10+9=19$.

Answer


1. $144 \div 8=$

$\widehat{80 \widehat{64}}$
2. $144 \div 9=$ $\square$
$90 \widehat{54}$
3. $\underset{20 \mathrm{ar}}{\mathbf{2 8}} \div \mathbf{2}=$
4. $\widehat{404}_{\mathbf{4 4}}^{40} \mathbf{4}=$
5. 


13. $\underset{\widehat{707} \div 7}{ } \mathbf{7}$
9. $105 \div 7=$ 7035
14. $\mathbf{1 1 2 \div 8 =}$
 8032
15. $153 \div 9=$
 $90 \widehat{63}$

Name: $\qquad$ Strategy: $\qquad$
Date: $\qquad$ Worksheet: $\qquad$

Partials Division Strategy: Instead of dividing a big number all at once, first break it into parts and divide the parts. Add the resulting "partial quotients" to get the total quotient or answer.

## Example

What is $84 \div \mathbf{6}$ ?
84 is 60 plus 24.
Divide 60 by 6 to get 10 .
Divide 24 by 6 to get 4 .
The answer is $10+4=14$.

Answer
$84 \div 6=14$
6024

1. $\mathbf{3 0} \div \mathbf{2 =}$ 2010
2. $57 \div 3=$ 3027
 4024
3. $153 \div 9=$ $\square$ 9063
4. $162 \div 9=$ 9072
5. $\underset{8048}{128} \div 8=$
6. $\widehat{48}^{\mathbf{4}} \div \mathbf{3}=$
9036
7. $126 \div 9=$ $\square$
8. $108 \div 6=$ 6048
3018

12
9. $119 \div 7=$
 7049
10. $\widehat{40 \div 4} \div$
11. $128 \div 8=$ 8048

