

## St. Malachy CATHOLIC SCHOOL

## An Independence Mission School

Welcome to 4th Grade
Dear Parents,
Welcome to your child's fourth-grade year at St. Malachy School! My name is Ms. Mary Holmes ( go by Ms. Mary), and I am your child's homeroom teacher. We are going to have a busy and productive school year filled with fun and exciting learning activities, social events, and much more. Throughout the school year, please feel free to contact me with any questions or concerns you may have about your child or other school issues. I will do the same. I believe keeping the lines of communication open between home and school is a key component to the success of a child's education. I will keep you informed of our classroom policies, curriculum, your child's progress, and any information that will aid in making this year successful and memorable!

I am very excited about the upcoming school year, as I hope you and your child are too! Teaching is a commitment I take very seriously. I recognize that each of my students has his or her own way of learning and as the teacher, it is important for me to determine these styles and help all of my students achieve to the best of their ability. Throughout the school year, I will not only be helping my students learn but learn how to learn. I also believe in learning from my students as they do from me. Learning is a lifelong process. I myself recently completed my Master's in Educational Leadership. I also plan to obtain my Doctorate in the near future.

I will set high but clear and appropriate expectations for all my students and will assist them in using their knowledge and abilities to meet those expectations. As I expect respect, cooperation, participation, and honesty from
my families, yall should expect the same from me. I believe my enthusiasm and dedication I have for my profession sets an example for my parents \& students.

You are the most important people in your child's life and together we can help him or her reach many exciting goals. Thanks again for choosing Malachy, together we're better!

Peace Love \& Blessings,

Ms. Mary


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Summer Work for Students going from Grade $\sqrt[3]{ }$ to Grade $\underline{4}$

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


# St. Malachy CATHOLIC SCHOOL 

## An Independence Mission School

Dear Parents, Guardians, Scholars, and Families,
Congratulations on completing your 3rd grade year! I know it was far from normal and know everyone has worked very hard! I would like to officially welcome you to our 4th Grade Learning Community!! My name is Ms. Flynn and I am very excited to have you all join our 4th Grade Learning Community! I like to refer to our class as a Learning Community because it is not just myself and the scholars, it includes all of the family members and community members that are involved in the scholars' lives. Whether we learn in a classroom or learn on a screen, each and everyone of you are integral parts to our Learning Community!

It is my goal to provide your scholar an educationally challenging yet fun experience in my classroom. They will grow very much as scholars this year. All expectations that I will have of your scholar will be with the goal of their growth and success as the core. Here at St. Malachy we believe all scholars will achieve great and wonderful things! Those great and wonderful things will continue to cultivate as we work as diligent scholars in 4th grade.

Weekly, your scholar will learn and work in the subjects of ELA (reading and writing), math, religion, social studies, and science. In our lessons, you can expect that each lesson will have the following: a "Do Now," which is a warm up and fluency activity; a "Direct Teach," which is where they learn the lesson; "Guided Practice," which is where we practice the new lesson together; an "Independent Practice," which is where they get to try the work on their own; and an "Exit Ticket," which is a quick check of how well they understood the lesson. For our core subjects of ELA and Math, you can also expect two additional components which include: "Blended Learning," which is twenty minutes of computer work and a "Skill Practice," which is where they practice skills and background knowledge that are useful to the lesson work we are doing.

No matter what will be thrown our way, I am confident how great our 4th grade year will be together! Thank you for joining me on this journey and I look forward to beginning!

Have a great summer,
Ms. Flynn

## Summer Reading:

Students Entering Grades 3 or 4:
Please select and read at least two of the books from the Recommended Reading List. These books will build background knowledge for our first ELA Unit of Study in the Fall. Use the Reading Log attached to process the book by completing the Task after Reading. (Once you finish the two books you selected, you are welcome to keep reading and log your reading here!)

## Summer Reading for Students Entering Grade Four

| Title | Author And Illustrator | Text Type | Lexile |
| :---: | :---: | :---: | :---: |
| Tia Lola Stories <br> How Tía Lola Came to VisitStay <br> How Tía Lola Saved the Summer | Julia Alvarez | Literature | 850 |
| Return to Sender | Julia Alvarez | Literature | 890 |
| Hidden Roots | Joseph Bruchac | Literature | 830 |
| Thirteen Moons on Turtles Back: A Native American Year of Moons | Joseph Bruchac | Literature/Poetr y | 960 |
| Red Bird Sings: The Story of Zitkala-Sa, Native American Author, Musician, and Activist | Gina Capaldi and Q.L. Pearce Gina Capaldi (illustrator) | Biography | 940 |
| A Boy Named Beckoning: The True Story of Dr. Carlos Montezuma, Native American Hero | Gina Capaldi | Biography | 880 |
| Dia's Story Cloth: The Hmong People's Journey of Freedom | Dia Cha and Cha Chue | Autobiography | 1050 |
| Guests | Michael Dorris | Literature | 850 |
| Sees Behind Trees | Michael Dorris | Literature | 840 |
| The Caribou Feed Our Soul | Pete Enzoe | Informational Text/story | $\begin{gathered} \text { NA } \\ \text { (Grades 4-6) } \end{gathered}$ |
| The Birchbark House | Louise Erdrich | Literature | 970 |


| Sacagewea | Louise Erdrich | Literature | 840 |
| :--- | :--- | :--- | :--- |
| The Matchbox Diary | Paul Fleischman | Literature <br> picture book | 420 |
| Homesick: My Own Story | Jean Fritz | Autobiography | Paul Goble |
| (author/illustrator) | Literature | 860 |  |
| Death of the Iron Horse | Paul Goble <br> (author/illustrator) | Literature, <br> collection of <br> stories | 950 |
| The Woman who Lived with Wolves and Other <br> Stories from the Tipi | Susan Hughes | Informational <br> Text | 930 |
| Off to Class: Incredible and Unusual Schools <br> Around the World | Tony Johnston | Novel in <br> vignettes | Literature |
| Any Small Goodness: A Novel of the Barrio | Grace Lin | 690 |  |
| The Year of the Dog |  |  |  |


| Mohala Mai; Hau: How Hau Became Hau'ula | Robert Lono 'Ikuwa <br> Matthew Kawika Ortiz <br> (illustrator) | Literature | NA (bilingual- <br> English and <br> Hawaiian) |
| :---: | :---: | :---: | :---: |
| Ellen's Broom | Kelly Starling Lyons | Literature | 610 |


| DK Eyewitness Books: North American Indian | David S. Murdoch | Informational Text | $\begin{gathered} \text { NA } \\ \text { (Grades 4-6) } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Sequoyah: The Cherokee Man Who Gave His People Writing | James Rumford <br> Anna Sixkiller <br> Huckaby (Cherokee translator) | Informational Text (picture book) | 700 |
| Tales from Big Spirit Series: <br> The Ballad of Nancy April: Shawnadithit <br> The Land of Os: John Ramsay <br> The Poet: Pauline Johnson <br> The Rebel: Gabriel Dumont <br> The Scout: Tommy Prince <br> The Peacemaker: Thanadelthur | David Alexander <br> Robertson, et al | Graphic Novels based on historical figures | $\begin{gathered} \text { NA } \\ \text { (Grades 4-6) } \end{gathered}$ |
| Brother Eagle, Sister Sky: A Message from Chief Seattle | Chief Seattle (author), <br> Susan Jeffers <br> (illustrator) | Literature (picture book) | 740 |
| Giving Thanks: A Native American Good Morning Message | Chief Jake Swamp, <br> Erwin Printup Jr. (illustrator) | Literature (picture book) | 680 |
| Crossing Bok Chitto: A Choctaw Tale of Friendship \& Freedom | Tim Tingle and Jeanne Rorex Bridges | Literature | 800 |
| The Quilt | Gary Paulsen | Literature | 1160 |
| The Dreamer | Pam Munoz Ryan | Fictionalized Biography | 650 |

Grades 3-4 June Reading Log
$\left.\begin{array}{|l|l|l|l|l|l|}\hline \text { Date } & \begin{array}{l}\text { I read } \\ \text { with } \\ \text { parent } \\ \text { l alone }\end{array} & & \text { Book } & \begin{array}{l}\text { Page } \\ \text { s }\end{array} & \text { Task After Reading } \\ \hline & & & & \text { Describe one event in this story: } & \begin{array}{l}\text { Parent } \\ \text { Signature } \\ \text { Initials }\end{array} \\ \hline & & & & \text { Describe your favorite character: }\end{array}\right]$

|  |  |  |  |  | Describe your favorite character: |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | Describe one event in this story: |

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

|  |  |  |  |  | Describe your favorite character: |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | Describe one event in this story: |

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

|  |  |  |  |  | Describe your favorite character: |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | Describe one event in this story: |

## Summer Work Packet



ELA - English Language Arts Activities for 10 days

## English Language Arts

## Grade 3

## Days 1 \& 2

Genre: Folktales
Task: Read and jot your thinking about folktales.

## Directions (choose one on day 1 and another for day 2):

Select and read from the following titles:

- Medio Pollito (Half-Chicken) by Alma Flor Ada
http://teacher.scholastic.com/writewit/mff/folktale almafolktale.htm
- A Collection of Folk Tales from Around the World
http://bloximages.chicago2.vip.townnews.com/heraldextra.com/content/tncms/assets/v3/edi torial/5/3c/53c67e18-e563-11e1-9af0-0019bb2963f4/50292bf8c534b.pdf.pdf
*These web sites are not controlled or approved by the NYC Department of Education


## While you read and jot:

Folktales are passed by word of mouth from one story teller to another and may express the wishes, hopes, fears, and values of a group of people. They often explain a phenomenon in the world, or tell a lesson about human behavior.

## As you read, think about:

- What message (the lesson) is the author communicating through the story? (i.e. "I think the author is saying $\qquad$ .")
- What evidence from the text supports your understanding of the author's message? (two or more pieces of evidence from the text)
- Do you agree with the author's message? Why or why not?
- From you reading, what have you learned about the culture of the people who created the story?
- To help find the author's message, you need to pay attention to the character's actions, his/her goal, and how the major conflict is resolved.
- Take notes as you read (if you can print the stories, highlight important parts as well). You can use sticky notes or a loose leaf paper. Use what you know about story elements to help you stay in the story.

Days 3 \& 4

Genre: Folktales
Task: Write a folktale.

## Directions Days 3 \& 4:

Write your own folktale that expresses the wishes, hopes, fears, or values of a group of people and includes a lesson to be learned (the central message).

## While you write:

- Get to know the world of your character by researching your setting. Read about the people and their culture, the animal and plants that grow there, the climate and geography, etc.
- Invite the readers to hear your character think and feel, to enter his or her mind, to know the character closely. Do not TELL the readers what your characters are saying. Let the characters speak for themselves by using dialogue in your story.
- Plan the timing of events in your story. You want to keep your readers' interest. Keep adding details to your story and do not rush to the end. To plot out your story, try using one of these strategies:

○ Think about the Somebody (main character)... Wants (the character's goal)... But (someone or something got in the way)... So (how the problem was solved)....

- Count through your five fingers - Thumb: Introduction of characters and setting; Index Finger: Rising Action (includes events leading up to the main problem or conflict); Middle Finger: Climax (when the problem reaches a high point); Ring Finger: Falling Action (when the characters work to solve the problem or conflict); and Pinky: Resolution (how things end up in the story - a lesson learned)
- Draw and color your characters and the sequence of events (first, next, etc.) of the story on paper, include thought bubbles and speech bubbles if you wish. Then write from the images you have drawn and imagined.

Read what other students have published and get inspired. Here are a few examples:

- http://teacher.scholastic.com/writewit/mff/folktale readrep.asp?id=58820\&age=8\&Page=1\&sort By=
- http://teacher.scholastic.com/writewit/mff/folktale readrep.asp?id=54655\&age=8\&Page=1\&sort By=
- http://teacher.scholastic.com/writewit/mff/folktale readrep.asp?id=67708\&age=8\&Page=1\&sort By=
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## Days 5 \& 6

Genre: Informational Articles
Task: Read at least two articles about a country and jot down what you are learning as you read.

## Directions Day 5:

Select and read about the two countries listed below. Be sure to read both articles related to each country:

## Japan

- Japan - http://kids.nationalgeographic.com/explore/countries/iapan/
- Giant Jellyfish Invasion - http://kids.nationalgeographic.com/kids/stories/animalsnature/giant-jellyfish-invasion/


## Directions Day 6:

## India

- India - http://kids.nationalgeographic.com/explore/countries/india/
- Diwali - http://kids.nationalgeographic.com/explore/diwali/?ar a=1
*These web sites are not controlled or approved by the NYC Department of Education


## While you read:

- Before reading:
- Skim and scan the whole text and jot down what you think the article will teach you before you start reading, (i.e. "I think I will learn $\qquad$ because $\qquad$ .").
- During reading:
- Use text features (e.g. section heading, illustrations/photographs, captions, graphs/diagrams, boxes and sidebars, etc.) to chunk the text.
- As you read each chunk, use any of the following to help you read deeply: "This reminds me of..." or "I already knew that..." or "Oh, I realize now that..." or "Something new I learned is..." or "I was surprised by ..." or "I didn't get ... because ...."
- Stop and jot down key information you learned at the end of every "chunk."


## After reading:

- Can you describe how the information is structured and name it? Is the information set up more like a story and we read along to learn about it; or each page in this book tells us something about where, when, why, or how; or every page begins with the same line. Why do you think the writer made that choice and if it seems to work well?
- In your reading response journal or on a sheet of loose leaf paper:
- What the piece is about (the big idea) and what are the important details?
- What was the author's purpose for writing this piece (to explain, to inform, to teach how to do something, to express an opinion, to persuade the reader to do or believe something or to entertain)? How do you know?
- Your new questions (i.e. "I now wonder


## Days 7 \& 8

Genre: Informational Articles
Task: Write an informational article about the country you wrote about in your folktale.

## Directions Days 7 \& 8:

1. Write an informational article as an informed writer to a less informed reader about the country your folktale took place.
2. Use the following suggested websites to help with your research:

- http://kids.nationalgeographic.com/explore/countries/
- http://teacher.scholastic.com/products/grolier/
- http://www.cengage.com/search/showresults.do?N=197
*These web sites are not controlled or approved by the NYC Department of Education


## While you read and write:

- Narrow your focus by asking questions like, "What especially interest you about $\qquad$ ?" "When you think about $\qquad$ what is the first thing you picture?" "What else can you imagine writing about this topic?"
- Gather additional information and make decisions about what and how much you will need of a particular text. What make one resource better than another?
- Take notes on your research materials that you have decided to read. Think about your decision making strategies in choosing what to read and not to read.
- Remember how to identify important points and retell them in a short way.
- Use the articles you read on Day 3 as your mentor texts.


## Days 9 \& 10

Independent Reading

## Directions Days 9 \& 10:

Read a book with your family in English or your native language. Write the title and author below. Read the book on day 9 and discuss with your family. On day 10, re-read the book and write about it.

* A note to parents and guardians: please pause and talk about the text with your child as you read along with them.

If you would like an e-book, go to https://www.galepages.com/nycdoe11/ebooks

Title: $\qquad$

Author: $\qquad$

After Reading: Write a one page summary of your book.

- Describe the characters in the book. Who are they and what are their relationships?
- Describe the setting of the story.
- Explain the events of the story so far.
- What is the main problem or conflict in the story?
- How is the problem or conflict dealt with by the main characters?
- Think about what might happen next in the book or what happens might happen after the story ends (if you have finished the book).


## Summer Work Packet



Math - Conceptual Practice
$\qquad$

## Addition \& Subtraction Fact Practice

1 Complete the doubles addition facts.

| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +2 | +3 | +4 | +5 | +6 | +7 | +8 |

2 Complete the neighbors addition facts.

| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +3 | +4 | +5 | +6 | +7 | +8 | +9 |

3 Complete the half subtraction facts.

| 4 | 6 | 8 | 10 | 12 | 14 | 16 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | | 18 |
| ---: |
| -2 |
| - |

4 Complete the neighbors subtraction facts.

| 4 | 6 | 8 | 10 | 11 | 14 | 16 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| -3 | -4 | -7 | -8 | -9 | -13 | -14 |
| - | - | - | -17 |  |  |  |

5 Look at the facts in problems 1 and 2. Describe one pattern you see.

## Sam's Pet Graph

Sam asked his classmates to choose their favorite pets. The bar graph shows how many students chose each pet.


1 Which pet did the greatest number of students choose?

2 How many students chose fish?

3 How many more students chose dogs than cats?

4 How many more students chose cats than birds?

5a Write another question you could answer by looking at this graph.
b Write the answer to your question here:

## Numbers in the Hundreds

1 Write the number that matches each picture.


2 Write each pair of numbers. Then use a greater than (>) or less than (<) symbol to compare them.

| ex | four hundred eighty-three | four hundred thirty-eight | compare with <br> $>$ or $<$ |
| :--- | :---: | :---: | :---: |
|  | 483 | 438 | $483>438$ |
|  | two hundred twenty-six | two hundred sixty-two | compare with <br> $>$ or $<$ |
| b | three hundred seven | three hundred seventeen | compare with <br> $>$ or $<$ |
|  |  |  |  |
| $\mathbf{C}$ | eight hundred ninety-four | eight hundred forty-nine | compare with <br> $>$ or $<$ |
|  |  |  |  |

$\qquad$
$\qquad$

## Fast Tens \& Fast Nines Practice

1 Complete the fast tens addition facts.

| 10 | 3 | 4 | 10 | 6 | 10 | 10 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +2 | +10 | +10 | +5 | +10 | +7 | +8 |

2 Complete the fast nines addition facts.

3 Complete the take away ten subtraction facts.

| 18 | 12 | 15 | 17 | 13 | 16 | 14 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| -10 | -10 | -10 | -10 | -10 | -10 | -10 |
| - | - | - | -10 |  |  |  |

4 Complete the runaway ones subtraction facts.

| 17 | 13 | 15 | 14 | 16 | 18 | 12 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | | 19 |
| ---: |
| -7 |
| $-\quad-3$ |

## CHALLENGE

5 Look at the facts in problems 1 and 2. Describe one pattern you see.
$\qquad$
$\qquad$

## Missing Numbers Fill-In

1 Fill in the missing numbers in the make ten addition facts.
$5+\ldots=10$
$\ldots+3=10$
$6+$ $\qquad$ $10=$ $\qquad$
$0+\ldots=10$
$9+\ldots=10$
$10=$ $\qquad$ $+7$ $10=4+$ $\qquad$

2 Fill in the missing numbers in the equations below.
$2+$ $\qquad$ $=4$
$16=$ $\qquad$ $+8$
$6=3+$ $\qquad$
$\ldots=9+9$
$5+$ $\qquad$ $=10$ $\qquad$ $+6=12$
$8=$ $\qquad$ $+4$
$7+7=$ $\qquad$

3 Fill in the missing numbers to complete the subtraction facts.


## CHALLENGE

4 What is one way the equations in problem 2 are alike?
$\qquad$
$\qquad$

## Name the Fraction

1 Fill in the bubble next to the fraction that shows how much of each shape is filled in.


## CHALLENGE

2 Follow the instructions to color the array at the right.

- Color half the squares in the array red.
- Color one-fourth of the squares in the array blue.
- Color the rest of the squares in the array green.

What fraction of the array is green?

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

$\qquad$
$\qquad$

## Eyes, Ears \& Whiskers

Answer each question below. Write an addition or multiplication equation to show how you figured it out.

| Picture | Answer the question. | Write your equation here. |
| :---: | :---: | :---: |
| example | There is 1 cat. How many eyes? | $1 \times 2=2$ |
|  | There are 10 cats. How many eyes? |  |
| $2$ | There are 6 cats. How many ears? |  |
| $3$ | There are 3 cats. How many whiskers? |  |

## Eric's Three-Coin Problem

Eric has 3 coins in his pocket. They are worth $\$ 0.40$. What coins does he have in his pocket?

1 What is this problem asking you to figure out?

2 Underline any information in the problem that will help you find the answer.
3 Use this space to solve the problem. Show all your work using numbers, words, and/or labeled sketches. Write the answer on the line below when you're finished.
$\qquad$

NAME $\qquad$ DATE $\qquad$

## Understanding Place Value

1 Circle the place value of the underlined digit. Then write its value.

| Number | Place Value | Value |
| :---: | :---: | :---: |
| ex a $4 \underline{5} 2$ | ones <br> tens <br> hundreds | 50 |
| ex b 103 | ones <br> tens <br> hundreds | 3 |
| $\mathbf{a} \underline{382}$ | ones <br> tens <br> hundreds |  |


| Number | Place Value | Value |
| :--- | :--- | :---: | :---: |
| b $16 \underline{4}$ | ones <br> tens <br> hundreds |  |
| C $4 \underline{71}$ | ones <br> tens <br> hundreds |  |
| d $\underline{504}$ | ones <br> tens <br> hundreds |  |

2 Write > or < on the line to make a true statement.

| ex 456 < 546 | a $96 \ldots 69$ | b $326 \ldots 362$ | C $127 \ldots 217$ |
| :---: | :---: | :---: | :---: |
| d 960 ___ 906 | e $312 \ldots 231$ | f $304 \ldots$ | ¢ $719 \ldots 790$ |

3 Fill in the missing digits to make each statement true. There is more than one right answer for each one.

| ex $3 \underline{2} 7<347$ | a $435>\ldots 35$ | b $107<\ldots 07$ | C $935<93$ |
| :---: | :---: | :---: | :---: |
| d 2__3 ${ }^{\text {c }}$ 263 | e 1__ 7 < 137 | f $276>2 \_6$ | 8 119 < 1___9 |

$\qquad$
$\qquad$

## Expanded Notation 3-Digit Numbers

1 Write the value of the base ten pieces. Then write an equation to show the total value in expanded form.

|  | Hundreds | Tens | Ones | Equation |
| :---: | :---: | :---: | :---: | :---: |
| ex |  200   <br>     <br>     <br>     <br>     <br>     |  | $\begin{aligned} & 5 \\ & \\ & \square \\ & \square \square \\ & \square \square \end{aligned}$ | $200+40+5=245$ |
| a |   <br>   <br>   <br>   | $\begin{aligned} & \exists B B \\ & B \exists B \\ & \exists \exists B \end{aligned}$ | $\square$ <br> $\square \square$ <br> $\square \square$ <br> $\square \square$ |  |
| $b$ |     $\|l\| l \mid$ <br>      <br>      <br>      <br>      |  | $\begin{aligned} & \square \\ & \square \square \\ & \square \square \end{aligned}$ |  |

## CHALLENGE

2 Which has the greater total, part $a$ or part b? Exactly how much more? Show all of your work.

## Place Value Practice 3-Digit Numbers

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

| example $300+20+9=\ldots 329$ | a $800+40+5=\ldots$ |
| :--- | :--- |
| b $500+8=\ldots$ | C $600+20=$ |
| d $500+80+7=\ldots$ | e $900+10+4=$ |

2 Complete each equation by writing the number in expanded form.

| example $659=\ldots 600+50+9$ | $\mathbf{a} 437=\ldots$ |
| :--- | :--- |
| $\mathbf{b}$ | C $549=$ |
| $\mathbf{d} 692=508$ | e $=749$ |

3 Write each set of numbers in order from least to greatest.

| example 207, 720, 270, 702 | 207 | 270 | 702 | 720 |
| :---: | :---: | :---: | :---: | :---: |
|  | least |  |  | greatest |
| a 437, 347, 734, 473 |  |  |  |  |
|  | least |  |  | greatest |
| b 603, 630, 360, 316 |  |  |  |  |
|  | least |  |  | greatest |
| C 191, 119, 190, 109 |  |  |  |  |
|  | least |  |  | greatest |
| 6,071; 6,107; 6,017; 6,701 | least |  |  | greatest |

$\qquad$

## Loops \& Groups

Write a multiplication equation to show how you can find the total number of squares. The loops in each problem contain the same number of squares.

| Loops | Equation |
| :---: | :---: |
| example | $2 \times 5=10$ |
| 1 |  |
| 2 |  |
| $3$ |  |
| 4 |  |
| 5 |  |

## Alfonso's Money Problem

Alfonso had $\$ 23$. He spent $\$ 8$ at the store during the day. That night, his dad gave him $\$ 5$ for his allowance. How much money did Alfonso have at the end of the day?

1 What is this problem asking you to figure out?

2 Underline any information in the problem that will help you find the answer.
3a Use this space to solve the problem. Show all your work using numbers, words, and/or labeled sketches. Write the answer on the line below when you're finished.
b Answer $\qquad$ CHALLENGE

4 Alfonso wants to share his money with his little sister. He wants to give her enough so that they each have exactly the same amount of money. His sister has $\$ 9$. How much money should Alfonso give her, and how much money will they each have? Show your work.
$\qquad$

## More Related Addition \& Subtraction Facts

1 Complete the addition facts.

| 4 | 8 | 8 | 5 | 8 | 8 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| + 7 | + 5 | + 4 | + 7 | + 6 | + 3 | + 6 |
| 9 | 4 | 7 | 9 | 7 | 9 | 10 |
| + 8 | + 9 | + 7 | + 3 | + 9 | + 5 | + 8 |

2 Complete the subtraction facts.

| 20 | 13 | 18 | 16 | 12 | 11 | 12 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| -7 | -7 | -9 | -9 | -5 | -5 | -8 |
|  | - | - | - | - |  |  |
| 13 | 14 | 11 | 15 | 13 | 13 | 14 |
| -4 | -8 | -8 | -8 | -5 | -9 | -5 |

## CHALLENGE

3 Use what you know about basic facts to solve these addition problems.

| 800 | 20 | 44 | 30 | 2 | 800 | 3,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r}+3 \\ \hline\end{array}$ | + 20 | + 6 | + 70 | + 70 | + 200 | + 3,000 |
| 496 | 80 | 400 | 1,400 | 9,000 | 108 | 225 |
| + 4 | + 20 | + 300 | + 600 | + 9,000 | + 208 | + 526 |

## Ling's Basketball Cards

Ling had 34 basketball cards. She gave away 18 cards. Then she bought a pack of 6 new cards and her friend gave her 2 more. How many cards does she have now?

1 What is this problem asking you to figure out?

2 Underline any information in the problem that will help you find the answer.
3a Use this space to solve the problem. Show all your work using numbers, words, and/or labeled sketches. Write the answer on the line below when you're finished.
b Answer $\qquad$

4 Ling put her basketball cards in an album. She put 4 cards on each page. How many pages did she fill with her cards? Show all your work.
$\qquad$
$\qquad$

## Patterns \& Sums

1 Fill in the missing numbers in each skip-counting pattern.
a $7,17,27$, $\qquad$ , $\qquad$ , 57, $\qquad$ , $\qquad$ 87, 97, $\qquad$
b $8,28,48$, $\qquad$
$\qquad$ , 108, $\qquad$
$\qquad$ 168, 188, $\qquad$
C $4,34,64$, $\qquad$ , 124, 154, $\qquad$ , $\qquad$ 244, 274, $\qquad$

2 Find each sum.

| 67 | 38 | 53 | 76 | 49 | 63 | 58 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +20 | +10 | +30 | +30 | +20 | +10 | +20 |

3 Find each sum. Show all your work. Use the answers above to help you.

| a $\begin{array}{r} 67 \\ +\quad 20 \end{array}$ | $\begin{aligned} & \mathbf{b} \quad 38 \\ & \\ & \\ & +16 \end{aligned}$ |
| :---: | :---: |
| C $53+38=$ | d $76+35=$ |
| $\begin{array}{r} \text { e } 257 \\ +60 \end{array}$ | $\begin{array}{r} \mathbf{f} 668 \\ +70 \\ \hline \end{array}$ |

$\qquad$

## Adding Money Amounts

1 Add the two amounts of money. Show all your work. Then write an equation to show the two amounts and the total.

| Add these amounts. | Show all your work. | Write an equation. |
| :---: | :---: | :---: |
| ex $\$ 0.86+\$ 1.23$ | $\begin{aligned} 6 \phi+3 \phi & =\$ 0.09 \\ 80 \phi+20 \phi & =\$ 1.00 \\ \$ 0+\$ 1 & =\frac{\$ 1.00}{\$ 2.09} \end{aligned}$ | \$0.86-\$1.23 = \$2.09 |
| a $\$ 0.73+\$ 1.65$ |  |  |
| b \$1.46+\$0.87 |  |  |
| C $\$ 0.83+\$ 1.39$ |  |  |

2 Keiko has 7 coins in her pocket. They add up to $\$ 0.48$. What coins does she have in her pocket? Show all your work.

She has $\qquad$ quarter(s), $\qquad$ dime(s), $\qquad$ nickel(s), and $\qquad$ penny (pennies).
$\qquad$

## Double-Digit Addition

1 Add each pair of numbers. Show all your work.

| $\mathbf{a} 30+65=$ | $\mathbf{b} 42+35=$ | $\mathbf{c} 46+38=$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |

2 Victor had 126 baseball cards. His cousin gave him 20 more cards. Then his brother gave him 58 more cards. How many baseball cards does Victor have now? Show all your work.
$\qquad$

## Telling Time to the Minute

1 Fill in the circle next to the time shown on each clock.

| a 1:45 |  |  |
| :---: | :---: | :---: |

2 Write the time shown on each clock.


3 Circle the digital clock that shows the same time as this analog clock.

$\qquad$
$\qquad$

## Number Patterns

1 Fill in the missing numbers in each skip-counting pattern.
a $15,30,45$, $\qquad$ , $\qquad$ , 90, 105, $\qquad$
b $25,50,75$, $\qquad$ , $\qquad$ , 150, 175, $\qquad$
C 12,42 , $\qquad$ 102, $\qquad$ , $\qquad$ 192

2 Fill in the missing numbers in each counting pattern on the number lines.

## example


b


## CHALLENGE

3 What are the first two numbers that the number lines in 2 a and 2 b will have in common? Explain your answer.
$\qquad$

## Using the Number Line to Find Differences

You can use a number line to count up from a smaller number to a larger number. This can help you find the difference between two numbers.

Use the number lines to solve each problem below.
She needs $\qquad$ more.


1 Clive and his family are driving to the beach. They will drive 136 miles total. So far, they have driven 84 miles. How much farther do they have to go? Show your work. Write your answer in the space below.


They have $\qquad$ more miles to go.


2 Shanice is reading a book that is 143 pages long. So far, she has read 56 pages. How many more pages does she have to read? Show your work. Write your answer in the space below.


She has $\qquad$ pages left to read.


## Inches \& Feet

1 Use a ruler marked in inches to measure each strip. Write the length in the space next to the strip. Label your answers with the correct units (inches, in. or ")

|  | Strip | Length |
| :--- | :---: | :---: |
| a |  |  |
| b |  |  |
| c |  |  |
| d |  |  |

2 There are 12 inches in 1 foot. Use this information to answer the questions below.
a How many feet are equal to 24 inches? $\qquad$
b How many feet are equal to 36 inches? $\qquad$

3 Rodney has a piece of rope that is 144 inches long. Simon has a piece of rope that is 87 inches long. How much longer is Rodney's piece of rope? Show all your work.

## CHALLENGE

4 Maria and Katy each have a piece of string. When they put the 2 pieces of string together end-to-end, the total length is 84 inches. Maria's string is 6 inches longer than Katy's. How long is Maria's piece of string? How long is Katy's piece of string? Show all your work. Use another piece of paper if you need to.
$\qquad$

## Double-Digit Subtraction

1 Solve the subtraction problems. Show all your work.

| a $67-28$ | b 83-37 | C 92-54 |
| :--- | :--- | :--- |
|  |  |  |

2 Mr. Jones needs 126 pieces of construction paper to do an art project with his students. All he has is a full pack with 50 sheets of paper and an open pack with some more sheets. How many more pieces of paper does he need to borrow from the teacher next door?
a Choose the information that will help you solve the problem.There are 24 students in the class.The open pack has 17 sheets of paper.Packs of construction paper cost \$3 each.He has 32 pencils.
b Solve the problem. Show all your work. Write your answer on the line at the bottom of the page.

Mr. Jones needs to borrow $\qquad$ more sheets of paper.

NAME $\qquad$
$\qquad$

## Target Practice

1 Circle the number you would add to the first number to get as close to the target number as you can. Use rounding and estimation to help. Then explain your thinking.

| Target Number | First Number | Circle one number. | Explain your thinking. |  |
| :--- | :---: | :---: | :---: | :---: |
| example 60 | 32 | 43 | 27 | $30+20$ is 50. Then you <br> have 2+7 more, so that's <br> very close to 60. |
| a 120 | 63 | 78 | 58 |  |
| b 150 | 56 | 91 | 76 |  |
| C 140 | 76 | 89 | 68 |  |

2 Solve the problems.

| 143 | 207 | 198 | 529 | 309 | 457 | 195 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| -68 | -39 | -99 | -405 | -206 | -28 | -174 |

## CHALLENGE

3 Fill in the missing digits.


$\qquad$

## Subtraction Problems

1 Solve the subtraction problem. Show all your work.
a 238-157
b Use addition to double check your answer.

2 Cliff had \$5 to spend at the store. He got an apple for 55\$, a bottle of juice for $\$ 1$, and a snack bar. How much change did he get back?
a Choose the information that will help you solve the problem.The snack bar cost 89¢.The cashier didn't have any dimes.The juice was in a 16 -ounce bottle.Ice cream bars cost 994.
b Solve the problem. Show all your work. Write your answer on the line at the bottom of the page.
$\qquad$ back in change.

$\qquad$

## Right, Acute \& Obtuse Angles

## Dear Students - These geometry pages are CHALLFNGF pages. Just do your best!

1 Use the information below to help solve the following problems.

| A right angle is <br> exactly 90 degrees. | An acute angle is <br> less than 90 degrees. | An obtuse angle is <br> more than 90 degrees. |
| :---: | :---: | :---: |

a Circle all the right angles.

b Circle all the acute angles.


C Circle all the obtuse angles.


2 Draw another ray to make an acute angle.

3 Draw another ray to make an obtuse angle.
$\qquad$

## Parallel, Intersecting \& Perpendicular Lines

Dear Students - These geometry pages are CHALLENGE pages. Just do your best!
Use the following information to help solve the problems below.

| Parallel lines are always the <br> same distance apart. <br> They will never cross. | Intersecting lines cross <br> each other. | Perpendicular lines are <br> special intersecting lines. <br> Where they cross, they <br> form a right angle. |
| :---: | :---: | :---: |

1 Fill in the bubble(s) next to the word(s) that best describe(s) each pair of lines.

| $a \xrightarrow{\longleftrightarrow}$ | $\bigcirc$ parallel $\bigcirc$ intersecting $\bigcirc$ perpendicular |
| :---: | :---: |
|  | $\bigcirc$ parallel $\bigcirc$ intersecting $\bigcirc$ perpendicular |
|  | $\bigcirc$ parallel $\bigcirc$ intersecting $\bigcirc$ perpendicular |
|  | $\bigcirc$ parallel $\bigcirc$ intersecting $\bigcirc$ perpendicular |

2 Draw a pair of intersecting lines.

3 Draw three lines that are all parallel.
$\qquad$
$\qquad$

## Angles \& Sides

Dear Students - These geometry pages are CHALLENGE pages. Just do your best!
Use the following information to help solve the problems below.

| Right Angle <br> exactly $90^{\circ}$ <br> a square corner | Acute Angle <br> smaller than <br> a right angle | Obtuse Angle <br> larger than <br> a right angle |
| :--- | :--- | :--- | | Parallel Sides |
| :---: |
| would never cross if |
| they went on forever |

1 Circle the shape with exactly 1 pair of parallel sides.


2 Circle the shape that has only acute angles.


3 Circle the shape that has only obtuse angles.


4 Circle the two shapes that have only right angles.

$\qquad$

## Perimeter Practice

Perimeter is the total length of all sides of a shape. To find the perimeter, add the lengths of all the sides of a shape.

1 Use a ruler marked in inches to measure the sides of the squares and rectangles.
Label each side. Then find the perimeter of each shape. Show your work.

$\qquad$
$\qquad$

## Different Kinds of Quadrilaterals

A quadrilateral is a shape with 4 sides. Here are some different kinds of quadrilaterals.

| Trapezoid: a quadrilateral with exactly 1 pair |
| :--- | :--- |
| of parallel sides |
| Rhombus: a quadrilateral with 4 sides that are |
| allel sides and 4 right angles |
| all the same length |
| 4 sides that are all the same length |

1 Circle the word(s) that describe each shape.


2 Jackie circled all these words for this shape. Is she right or wrong? Explain your answer.

$\qquad$

## Finding the Perimeters of Quadrilaterals

1 Use a ruler to measure the sides of each quadrilateral in centimeters. Label all the sides of each shape. Then find the perimeter. Show your work.
example Perimeter $=\ldots$ Perimeter $=$

2a Which shape above is a rhombus? $\qquad$
b Explain how you can tell.
$\qquad$
$\qquad$

## Shape Sorting

## Dear Students - These geometry pages are CHALIENGE pages. Just do your best!

1 Walt sorted some shapes into these two groups.

a Circle the shapes that belong in group B.

b What do the shapes in group B have in common?

2a How can you tell if a shape is a hexagon?
b Circle all the hexagons.

$\qquad$
$\qquad$

## More Perimeter Practice

1 Find the perimeter of each shape below. Think carefully about how it will be easiest for you to add the numbers. Show your work.

| example $\text { Perimeter }=400 \mathrm{~m}$ | a Perimeter $=$ $\qquad$ |
| :---: | :---: |
| b Perimeter = $\qquad$ | C Perimeter = $\qquad$ |

## CHALLENGE

2 On another piece of paper, draw and label two different 4-sided shapes that each have a perimeter of exactly 20 centimeters.
$\qquad$

## Dividing \& Combining Shapes

1 Circle the shape you would make if you cut this triangle on the dotted line.


2 Circle the shape you would make if you cut the circle along the dotted line.


3 Circle the shape you would make if you cut the hexagon along the dotted line.


4 Circle the two shapes that would make the pentagon if you put them together.


5 Circle the two shapes that would make the octagon if you put them together.
P
$\qquad$

## Sandbox \& Garden Problems

$1 \mathbf{a}$ Mrs. Smith made a sandbox for her kindergarten students. It was 60 inches wide and 125 inches long. Make a labeled sketch of the sandbox below.
$\mathbf{b}$ What was the perimeter of the sandbox? Use your sketch to help solve the problem.

The perimeter of the sandbox was $\qquad$ inches.

2 Mai and her sister Keiko were planting a garden. They made two beds to plant flowers. One was 4 feet by 3 feet. The other was 5 feet by 5 feet. They want to outline the beds with bricks that are each 1 foot long. How many bricks will they need to outline both beds? Show all of your work.


They will need $\qquad$ bricks to outline both beds.
$\qquad$

## Adding 2-Digit Numbers

1 Add each pair of numbers. Show all your work.

| $\mathbf{a} 60+35=\ldots$ | $\mathbf{b} 27+61=\ldots$ | $\mathbf{C} 36+45$ |
| :--- | :--- | :--- |



## CHALLENGE

2 Fill in the missing digits.
$\square$ 8
$\square$
4

$\begin{array}{r}\square 7 \\ +\quad 77 \\ \hline 106\end{array}$

$\qquad$

## All About Circles

 Dear Students - These geometry pages are CHALLENGE pages. Just do your best!Use the following information to help solve the problems below.
A circle has different parts.

- The center is the point right in the middle.
- The circumference is the outline of the circle.
- The radius is a line segment that goes from the center to the circumference.
- The diameter is a line segment that goes between two points on the circumference and passes through the center.


1 The parts of this circle are labeled with letters. Fill in the bubbles to show the correct name of each part.


| $\mathbf{a} \bigcirc$ center | $\bigcirc$ circumference | $\bigcirc$ radius | $\bigcirc$ diameter |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{b} \bigcirc$ center | $\bigcirc$ circumference | $\bigcirc$ radius | $\bigcirc$ diameter |
| $\mathbf{c} \bigcirc$ center | $\bigcirc$ circumference | $\bigcirc$ radius | $\bigcirc$ diameter |
| $\mathbf{d} \bigcirc$ center | $\bigcirc$ circumference | $\bigcirc$ radius | $\bigcirc$ diameter |

2 This ant wants to get from point $e$ to point $f$. She can walk along the diameter of the circle or along the circumference. Which way should she go if she wants to walk the shortest distance? Ocircumference $\bigcirc$ diameter


3 This ant wants to get from point $g$ to point $h$. Draw the path he should take in order to walk the shortest distance.

$\qquad$

## More Subtraction Problems

1 Solve the subtraction problems. Show all your work.

| a <br>  <br> $-\quad 43$ <br>  | b | $\begin{array}{r} 236 \\ -\quad 29 \end{array}$ | C | $\begin{array}{r} 103 \\ -\quad 58 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|lr} \hline \mathbf{d} & 357 \\ & -124 \end{array}$ | e | $\begin{array}{r} 335 \\ -\quad 99 \end{array}$ | f | $\begin{array}{r} 387 \\ -149 \end{array}$ |

2 There are two third grade classes at our school. There are 28 students in one class and 25 students in the other. There are also two fourth grade classes at our school. There are 27 students in one class and 23 students in the other. Which grade has more students? Exactly how many more students does that grade have? Show all your work.
$\qquad$
$\qquad$

## Thinking About Triangles

Dear Students - These geometry pages are CHALLENGE pages. Just do your best!
1 What is the same about all of these triangles?


All of the triangles $\qquad$

2

a All of the triangles in group A have something in common. Fill in the circle next to the triangle that belongs with them.

b How do you know the triangle you picked belongs in group A?

3 What do these three triangles have in common?


All of the triangles $\qquad$
$\qquad$

## Different Types of Triangles

Dear Students - These geometry pages are CHALLENGE pages. Just do your best!
Use the following information to help solve the problems below.

- You can group triangles by the size of their angles.

- You can also group triangles by the lengths of their sides.


1 Fill in the bubble to show what kind of triangle each one is.

| a acute right obtuse | b acute right obtuse | C acute right obtuse |
| :---: | :---: | :---: |
| d equilateral isosceles scalene | e equilateral isosceles scalene | f equilateral isosceles scalene |

## Drawing Line Segments, Lines \& Rays Dear Students - These geometry pages are CHALLENGE pages. Just do your best!

Use the following information to help solve the problems below.

| A line segment connects <br> two points. | A line goes through two <br> points and keeps going in <br> both directions. | A ray starts at one point <br> and keeps going in just <br> one direction. |
| :---: | :---: | :---: |

1 Draw a line to connect the two points on each grid. You can use a ruler to make the lines straight.
a

b

C


2 Draw a ray that starts at point E and goes through point F on each grid.
a

b

C


3 Draw a line segment that goes from point A to point B on each grid.
a

b

C

$\qquad$

## Drawing Shapes

 Dear Students - These geometry pages are CHALLENGE pages. Just do your best!1 Draw a shape with 5 sides and one right angle.


3 Draw a shape with 2 acute angles.


2 Draw a shape with only two parallel sides.


4 Draw a shape with only obtuse angles.


5 What is the smallest number of sides that the shape in problem 4 could have? Explain how you know.

## Slides, Turns \& Flips <br> Dear Students - These geometry pages are CHALLENGE pages. Just do your best!

There are three different kinds of transformations.


1 Fill in the bubble to name the transformation on each grid.


C
$\bigcirc$ slideturnflipslide
turn
$\bigcirc$ flip

b

O slide
turn$\bigcirc$ flip

Cslideturnflip
d

side
$\qquad$

## Garden Patch Problems Dear Students - These geometry pages are CHALLENGE pages. Just do your best!

1 Liam wanted to put a fence around his vegetable garden patch. His brother asked him to put a fence around his garden patch too. Liam's garden patch was 5 feet wide and 10 feet long. His brother's patch was 6 feet wide and 7 feet long. How many feet of fencing will Liam need? Show all your work.

2 Liam bought too much fencing and had 26 feet of it left over. He and his brother decided to make a rectangle-shaped garden patch for their little sister. They wanted to use all the extra fencing to outline her garden patch. What could be the dimensions of the patch they make for their sister? (Use only whole numbers of feet.) Show all your work.


## CHALLENGE

3 Draw and label two other ways Liam and his brother could use all 26 feet of fencing for their sister's garden.
$\qquad$
$\qquad$

## Equal Jumps on the Number Line

1 Complete the multiplication facts.

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

2 Show equal jumps on the number line to solve each multiplication problem. If you already know the answer, use the number line to show how someone else could solve the problem. The first jump is done for you each time.
example $3 \times 2=\underline{6}$

a $7 \times 2=$ $\qquad$

b $9 \times 2=$ $\qquad$


C $8 \times 2=$ $\qquad$

$\qquad$

## Multiplication Story Problems

Write a story problem to go with each equation and picture. Then write the answer.
example

$\qquad$

## T-Shirts, Erasers \& Marbles

1 Fill in the bubble next to the equation that will help you solve each word problem.
a Marco wants to buy a T-shirt for each of his 4 cousins. Each T-shirt costs $\$ 12$. How much will Marco spend on the T-shirts in all?$4+12=?$
$4 \times 12=?$$12-4=?$
$12 \div 4=?$
b Kaylee has 4 erasers. Imani has 12 erasers. How many more erasers does Imani have than Kaylee?$4+12=?$$4 \times 12=?$$12-4=?$$12 \div 4=$ ?

C Lucia had 12 marbles. Her sister gave her 4 more. How many marbles does Lucia have now?
O $4+12=$ ?$4 \times 12=$ ?$12-4=?$$12 \div 4=$ ?

## CHALLENGE

2 Use what you know about multiplication strategies to solve the problems below.


$$
\left[\left.\begin{array}{cc}
\infty & + \\
x
\end{array} \right\rvert\,\right.
$$

DATE

$$
\begin{aligned}
& \bar{\square} \times \\
& 0[
\end{aligned}
$$

Maltiplication Practice
1 Complete the multiplication facts.
$\sim$
$\times$
$\times$
1

$$
\begin{array}{r}
5 \\
\times 3 \\
\hline
\end{array}
$$

$$
\infty \quad \begin{gathered}
\square \\
\times
\end{gathered}
$$

$9 \times$
$I$

$$
\stackrel{0}{0} \begin{array}{ll}
n \\
& \times
\end{array}
$$

$\qquad$

## More Multiplication Story Problems

Write a story problem to go with each equation and picture. Then write the answer.


$\qquad$
$\qquad$

## Fact Families \& Missing Numbers

1 Write the multiplication and division fact family that belongs with each array.


2 Fill in the missing numbers below.


## CHALLENGE

3
a $16+20-(2 \times 4)=$ $\qquad$ b $(7 \times 5)+150=$ $\qquad$ C $(10 \times 10)-79=$ $\qquad$
$\qquad$

## Time in the Garden

1 Sara is helping her neighbor plant lettuce in her garden. It takes Sara two minutes to plant one lettuce plant. How many minutes would it take her to plant fifteen lettuce plants? Show all your work. You can use the clock to help if you want to.


2 Sara's neighbor says she will pay her $\$ 10$ per hour to help in the garden. If she asks Sara to plant 36 tomato plants and it takes Sara 5 minutes to plant each one, how much money will Sara earn? Show all your work. You can use the clock to help if you want to.

$\qquad$
$\qquad$

## Multiplication Arrays

1 Complete the multiplication facts.

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

2 Use the array to show how you could solve each fact.

$\qquad$
$\qquad$

## Frank the Frog \& Bob the Beetle

1a Frank the frog goes 4 feet each time he jumps. How many times will he have to jump to make it 32 feet? Show all your work. Use the number line below to help.

b Complete the division equation to show your answer above: $32 \div 4=$ $\qquad$

2a Bob the beetle can crawl 6 feet in a minute. How long will it take him to crawl 18 feet? Show all your work. Use the number line below to help.

b Write a division equation to show your answer. $\qquad$


C How long would it take Bob to crawl 27 feet? Show all of your work.

$\qquad$

## Flowers \& Gifts

1a Will is helping his mom get ready for a party. His mom wants Will to put flowers in jars to put on the tables. He needs to put 7 flowers in each jar. He has 45 flowers. How many jars can he fill? Show all your work.
b How many flowers did Will have left over?


2 Mai is buying gifts for her 4 friends. She wants to get each friend a bracelet that costs $\$ 4$ and a mechanical pencil that costs $\$ 3$. How much money will she spend in all? Show all your work.


3 Mai changed her mind and decided to get each of her 4 friends a comic book that cost $\$ 3.99$ and an eraser that cost 99¢. How much money did she spend in all? Show all of your work.

## Missing Numbers \& Fact Families

1 Fill in the missing numbers below.


2 Write the multiplication and division fact family that goes with each array. Use the arrays to find each product if you need to.

$\qquad$
$\qquad$

## Cats \& Kittens

Pick the equation you could use to solve each problem. Then solve the problem.

1a Ray's cat had 6 kittens. His neighbor adopted 2 of them.
How many kittens does Ray have left?
$6 \div 2=$ ?
$6+2=?$
6-2 $=$ ?$6 \times 2=$ ?
b Ray had $\qquad$ kittens left.

Da Marsha's cat had 6 kittens. She gave all of them away by giving 2 kittens each to some of her neighbors. How many neighbors got 2 kittens?
$6 \div 2=$ ?
$6+2=$ ?$6-2=$ ?
$6 \times 2=?$
b $\qquad$ neighbors got 2 kittens each.

Ba One of Larry's cats had 6 kittens. Another one of his cats had only 2 kittens. How many kittens were there in all?
$6 \div 2=$ ?
$6+2=?$$6-2=$ ?
$6 \times 2=$ ?
b There were $\qquad$ kittens in all.

## CHALLENGE

Aa Write a story problem to match this equation. $24 \div 3=$ $\qquad$
b Solve the story problem. Write your answer here: $\qquad$

## Family Math Night

1 Flora was helping Mr. Jackson get ready for Family Math Night. Eight families were coming. Flora needed to count out 4 square pattern blocks and 3 triangle pattern blocks for each family. How many pattern blocks did she count out altogether? Show all your work.
b Solve the problem a different way or use estimation to show that your answer makes sense.

2a Mr. Jackson also wanted Flora to set out 22 game markers for each family. How many game markers did she set out in all? Show all your work.
b Solve the problem a different way or use estimation to show that your answer makes sense.
$\qquad$
$\qquad$

## Products \& Sums

1 Complete the multiplication facts. Do the ones that are easy for you first. Then go back and do the rest. Use the facts you know to help solve the ones you don't know.

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

2 Find the mystery numbers for each pair of clues. A product is the number you get when you multiply numbers. A sum is a number you get when you add numbers.

| a Use these clues to help <br> - The product of these two numbers is 12 . <br> - The sum of these two numbers is 7 . | b Use these clues to help <br> - The product of these two numbers is 8 . <br> - The sum of these two numbers is 9 . |
| :---: | :---: |
| The numbers are ___ and | The numbers are ___ and |

$\qquad$

## Andrea, Erica \& Joe Go Shopping

1 Andrea, Erica, and Joe were shopping with their dad. He said they could split the money that was left after they bought what they needed. They bought a shovel for $\$ 8$, two packs of seeds that were $\$ 3$ each, and two bags of flower bulbs that were $\$ 4$ each. Their dad paid with two $\$ 20$ bills. How much money did Andrea, Erica, and Joe each get?
a Write a list of steps you will need to take to solve the problem:
b Solve the problem. Show all your work.


C How do you know your answer makes sense? You could solve it another way, use estimation to show that your answer makes sense, or start with your answer and work backwards through the problem.

$\qquad$
$\qquad$

## Addition \& Subtraction Review

1 Complete the addition facts.

| 2 | 8 | 4 | 9 | 7 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +8 | +4 |  |  |  |  |  |

2 Complete the subtraction facts.

| 13 | 16 | 14 | 15 | 13 | 17 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| -7 | -8 |  |  |  |  |
| - | -6 | -8 | -5 | -9 | -9 |
|  |  |  |  |  |  |
|  | 15 | 12 | 18 | 15 | 13 |

## CHALLENGE

3 Use what you know about basic facts to complete these problems.

| 28 | 30 | 18 | 24 | 193 | 40 | 130 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| + 6 | + 30 | + 5 | + 6 | + 7 | + 20 | + 2 |
| 107 | 875 | 60 | 117 | 515 | 313 | 412 |
| - 98 | - 2 | - 54 | - 108 | - 309 | - 104 | - 108 |

$\qquad$

## Grams \& Kilograms

There are 1,000 grams in 1 kilogram.
1 John's cat weighs 5 kilograms. How many grams is that?

2 Carly's dog weighs 18 kilograms. How many grams is that?

3 Ramona weighs 27 kilograms. How many grams is that?

4 John's cat had kittens. One of them weighed 500 grams. How many kilograms is that?

5 Frank was measuring out some peanuts. He wanted exactly 1 kilogram of peanuts. So far, he has 300 grams. How many more grams does he need to get exactly 1 kilogram of peanuts? Show all of your work.

6 One baby chick weighs about 50 grams. How many baby chicks would it take to make 1 kilogram? Show all of your work.

$\qquad$
$\qquad$

## Multiplication Review

1 Complete the multiplication facts.

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

2 Fill in the missing number in each fact. Then write a related division equation.


## CHALLENGE

3 Use what you know about basic facts to complete these problems.

| 20 | 21 | 43 | 62 | 62 | 87 | 382 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\times 10$ | $\times 4$ | $\times 2$ | $\times 10$ | $\times 5$ | $\times 1$ |  |
| 24 | 14 | 14 | 63 | 52 | 10 | 24 |
| $\times 2$ | $\times 10$ | $\times 5$ | $\times 2$ | $\times 3$ | $\times 69$ |  |

$\qquad$
$\qquad$

## Rounding to the Nearest Ten

You can use a number line to help round to the nearest ten. If the digit in the ones place is 5 or higher, round up. If the digit in the ones place is less than 5 , round down.


3 Round each number to the nearest ten. (Look at the digit in the ones place. Think about a number line if it helps you.)
a 132 $\qquad$ b 365 $\qquad$ C 646
d 282 $\qquad$
e 617
$\qquad$
f 539
$\qquad$
$\qquad$

## Two Different Addition Methods

There are many ways to solve addition problems. One is to break the numbers you are adding into ones, tens, and hundreds and then add them. Another way is to use a number line to add up from one number. See the examples below.


1 Solve the addition problems below. Use the Break Apart Method to solve two problems. Use the Number Line Method to solve two problems.

> 237
> $+\quad 156$
b
$+357$
C
638
$+185$
d 544
$+369$
$\qquad$
$\qquad$

## Round, Estimate \& Find the Sum

Before you start adding numbers, it is a good idea to estimate what their sum will be. That way, you can tell if your final answer is reasonable. Round each pair of numbers to the nearest ten and then add the rounded numbers to estimate the sum. Then use the standard algorithm to find the exact sum.

| Numbers to Add | Round and Add | Estimated Sum | Exact Sum (use the algorithm) |
| :---: | :---: | :---: | :---: |
| $\text { ex } \begin{array}{r} 348 \\ +\quad 173 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 350 \\ +170 \\ \hline 520 \end{array}$ | The sum will be $\qquad$ about 520 | $\begin{array}{r} 11 \\ 348 \\ +\quad 173 \\ \hline 521 \end{array}$ |
| $\begin{array}{\|r} 267 \\ \hline 1 \\ +\quad 338 \\ \hline \end{array}$ |  | The sum will be about $\qquad$ | $\begin{array}{r} 267 \\ +\quad 338 \end{array}$ |
| $\begin{array}{\|r} \hline 238 \\ \hline \\ \\ +\quad 583 \\ \hline \end{array}$ |  | The sum will be about $\qquad$ | $\begin{array}{r} 438 \\ +\quad 583 \end{array}$ |
| $\begin{array}{\|rr} \hline 3 & 842 \\ & +159 \end{array}$ |  | The sum will be about $\qquad$ | $\begin{array}{r} 842 \\ +\quad 159 \end{array}$ |

## Reasonable Estimates

1 Make a reasonable estimate before adding each pair of numbers. Then use any strategy you like to find the exact sum. Compare the exact sum to your estimate to make sure that it makes sense. If your answer does not make sense, double check your work or solve the problem another way.

| Numbers to Add | Estimated Sum | Exact Sum | Check your answer if <br> the sum and estimate <br> were far apart. |
| :--- | :--- | :--- | :--- |
| a386 <br> +275 |  |  |  |
| b517 <br> +378 |  |  |  |
| C |  |  |  |

2 Use estimation to answer each question yes or no. Do not find exact sums.
a Shawna has a photo album with space for 160 pictures. She has 33 pictures of her family, 48 pictures from summer camp, and 57 pictures from school. Does she have enough pictures to fill the photo album?
b Fred needs 400 game markers to play a game with his classmates and their families on Family Math Night. He has 96 red markers, 123 blue markers, 106 yellow markers, and 72 green markers. Does he have enough game markers to play the game?
$\qquad$

## Rounding to the Nearest Ten, Hundred \& Thousand

When you are rounding, look at the digit one place to the right of where you want to round. If you round to the nearest ten, look at the digit in the ones place. If you round to the nearest hundred, look at the digit in the tens place. If you round to the nearest thousand, look at the digit in the hundreds place.

If the digit is 5 or higher, round up. If it is less than 5 , round down.
1 Underline the number in the ones place. Then circle up or down to show whether you are rounding up or down. Then round the number to the nearest ten.

a 26 rounds up/down to $\qquad$ .
b 182 rounds up/down to $\qquad$ .

C 1,208 rounds up/down to $\qquad$ .

2 Underline the number in the tens place. Then circle up or down to show whether you are rounding up or down. Then round the number to the nearest hundred.
a 129 rounds up/down to $\qquad$ .
b 467 rounds up/down to
C 253 rounds up/down to $\qquad$ . d 3,348 rounds up/down to $\qquad$ .

3 Underline the number in the hundreds place. Then circle up or down to show whether you are rounding up or down. Then round the number to the nearest thousand.
a 5,702 rounds up/down to $\qquad$ .
b 4,207 rounds up/down to $\qquad$ .

C 2,540 rounds up/down to $\qquad$ .
d 8,395 rounds up/down to $\qquad$ .

4 Complete the addition facts.

| 5 | 7 | 10 | 7 | 9 | 12 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| +6 | +8 | +11 | +6 | +8 | +13 |

$\qquad$
$\qquad$

## Round \& Subtract

1 Rounding numbers can help you make good estimates. Round each pair of numbers to the nearest ten and then subtract the rounded numbers to estimate the difference.

| Numbers to Subtract | Rounded to the Nearest Ten | Estimated Difference |
| :---: | :---: | :---: |
| ex 867-485 | $870-490$ | $\begin{array}{r} 7870 \\ -490 \\ \hline 380 \end{array}$ |
| The difference between 867 and 485 is about equal to - 380 |  |  |
| a 608-263 |  |  |
| The difference between 608 and 263 is about equal to ___. |  |  |
| b 732-546 |  |  |
| The difference between 732 and 546 is about equal to ___. |  |  |

2 Now round to the nearest hundred and then subtract to estimate the difference.

| a 1,508-620 |  |  |
| :---: | :---: | :---: |
| The difference between 1,508 and 620 is about equal to |  |  |
| b 2,482-936 |  |  |
| The difference between 2,482 and 936 is about equal to |  |  |

$\qquad$

## Rounding Review

When you are rounding, look at the digit one place to the right of where you want to round. If you round to the nearest ten, look at the digit in the ones place. If you round to the nearest hundred, look at the digit in the tens place. If you round to the nearest thousand, look at the digit in the hundreds place.

If the digit is 5 or higher, round up. If it is less than 5 , round down.

1 Underline the number in the ones place. Then circle up or down to show whether you are rounding $u p$ or down. Then round the number to the nearest ten.
example 334 rounds up down to 330 .
b 2,053 rounds up/down to $\qquad$ .

C 4,388 rounds up/down to $\qquad$ .

2 Underline the number in the tens place. Then circle up or down to show whether you are rounding $u p$ or down. Then round the number to the nearest hundred.
a 328 rounds up/down to $\qquad$ .
b 961 rounds up/down to $\qquad$ .

C 4,553 rounds up/down to $\qquad$ .
d 3,348 rounds up/down to $\qquad$ .

3 Underline the number in the hundreds place. Then circle up or down to show whether you are rounding up or down. Then round the number to the nearest thousand.
a 4,389 rounds up/down to $\qquad$ .
b 2,503 rounds up/down to ___. d 6,614 rounds up/down to $\qquad$ .

4 Complete the subtraction facts.

| 16 | 15 | 18 | 12 | 13 | 11 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| -7 | -8 | -9 | -3 | -8 | -8 |

## Estimates \& Exact Answers

1 Use estimation to answer each question yes or no.
a Sue has $\$ 346$ dollars. She wants to buy a bike and still have $\$ 150$ left. She found a bike that costs $\$ 189$. Can she buy it and still have $\$ 150$ left?
b Bruce decided to give away some of his 400 baseball cards. He wants to keep at least 150 of them. If Bruce gives one friend 167 cards and another friend 112 cards, will he have at least 150 left?

C Luis and Carlos are in a reading contest to see who can read the most pages. Luis wants to win by at least 150 pages. Carlos read 427 pages. If Luis reads 526 pages, will he win by at least 150 pages?

2 First estimate the difference between the two numbers. You could round them and then subtract, or you could think about what you have to add to the smaller number to get to the bigger number. Then find the exact difference between the two numbers. Check your answer with your estimate to be sure it makes sense: if it doesn't make sense, check your work or do it another way.

| Numbers to Subtract | Estimated Difference | Exact Difference |
| :--- | :--- | :--- | :--- |
| a487 <br> -309 |  |  |
| b1,825 <br> -643 |  |  |

$\qquad$
$\qquad$

## Place Value Four-Digit Numbers

1 Complete each equation by writing each number in standard form. example $8,000+20+6=8,026$
a $4,000+800+30+1=$ $\qquad$
b $9,000+400+60+2=$
C $\qquad$ $=7,000+60+2$
d $5,000+300+80=$ $\qquad$
$\boldsymbol{e} \ldots=2,000+100+4$

2 Fill in the missing numbers or words.

| Numbers | Words |
| :--- | :--- |
| exa 5,629 | five thousand six hundred twenty-nine |
| ex $\mathbf{b} 3,082$ | three thousand eighty-two |
| a | two thousand twelve |
| b | eight thousand five hundred sixty-seven |
| C 6,032 |  |
| d 1,583 |  |

3 Use your estimation skills to answer each question yes or no without adding or subtracting to find an exact answer.
a The Lighting Bolts need 200 points to make it to the next round of the basketball tournament. So far, they have 154 points. If they score 37 more points by the end of the game, will they make it to the next round?
b Simon has $\$ 300$ to spend. Can he afford to buy a bike for $\$ 150$, safety lights for $\$ 34$, and a good helment for $\$ 56$ ?
$\qquad$

## Flora's Book \& Greg's TV

1 Flora was reading a book that was 283 pages long. She read 56 pages on Thursday, 45 pages on Friday, and 72 pages on Saturday. How many pages will she have to read on Sunday to finish her book? Show all your work.


2 Greg wants to buy a new TV that costs $\$ 1,679$. He has $\$ 326$ in his bank account. His grandma gave him $\$ 50$ for his birthday. He will earn $\$ 385$ mowing lawns this summer. How much more money will he need to buy the TV? Show all your work.

$\qquad$

## Estimate Before You Subtract

Before you start subtracting numbers, it is a good idea to estimate what the difference will be. That way, you can tell if your final answer is reasonable. Round each pair of numbers to the nearest ten and then subtract the rounded numbers to estimate the difference. Then use the algorithm to find the exact difference.

| Numbers to Subtract | Round and Subtract | Estimated Difference | Exact Difference (use the algorithm) |
| :---: | :---: | :---: | :---: |
| example $\begin{array}{r} 1,357 \\ -\quad 849 \end{array}$ | $\begin{array}{r} 1,360 \\ -\quad 850 \\ \hline 510 \end{array}$ | 510 | $\begin{array}{r} 1,31 \\ -\quad 849 \\ \hline 508 \end{array}$ |
| $1$ $\begin{array}{r} 643 \\ -427 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 643 \\ -427 \\ \hline \end{array}$ |
| $\begin{array}{\|rr} \hline \mathbf{2} & \\ & 812 \\ & -364 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 812 \\ -\quad 364 \\ \hline \end{array}$ |
| $\begin{array}{\|r} \hline 3 \\ \hline \end{array} \begin{array}{r} 4,302 \\ -\quad 656 \end{array}$ |  |  | $\begin{array}{r} 4,302 \\ -\quad 656 \\ \hline \end{array}$ |

## Pages \& Miles

1a Tasha and her friends are in a reading contest. Last year, the winning team read 2,546 pages. So far, Tasha has read 186 pages. Her friend Lisa has read 203 pages, and her friend Robert has read 215 pages. Estimate how many more pages they need to read altogether to beat last year's winning team.
b Exactly how many pages do they need to read to beat last year's winning team? Show all your work. Make sure your answer comes close to your estimate. If it does not, check your work or solve the problem another way.


2a Esteban and his mom are driving to see his grandma. They have to drive 865 miles altogether. On Monday, they drove 186 miles. On Tuesday, they drove 267 miles. Estimate how many miles they will need to drive on Wednesay to get to his grandma's house.
b Exactly how many miles do they need to drive on Wednesday to get to his grandma's house? Show all your work. Make sure your answer comes close to your estimate. If it does not, check your work or solve the problem another way.

$\qquad$
$\qquad$

## Using the Standard Algorithm to Add \& Subtract

1 Solve each addition problem using the standard algorithm.

| $\begin{array}{\|ll} \hline \text { ex } & \\ & 1 \\ & 457 \\ & 392 \\ \hline & 849 \end{array}$ | a $\begin{array}{r} 638 \\ +\quad 365 \\ \hline \end{array}$ | b $\begin{array}{r} 237 \\ +\quad 108 \end{array}$ | c $\begin{array}{r} 428 \\ +\quad 296 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: |
| d $\begin{array}{r} 3,804 \\ +\quad 568 \end{array}$ | e $\begin{array}{r} 2,153 \\ +\quad 1,939 \end{array}$ | f $\begin{array}{r} 687 \\ +\quad 654 \end{array}$ | 9 $\begin{array}{r} 7,689 \\ +\quad 8,584 \end{array}$ |

2 Solve each subtraction problem using the standard algorithm.

| $\begin{array}{\|cc} \text { ex } & 29 \\ & 1,295 \\ -648 \\ \hline & 657 \end{array}$ | a $\begin{array}{r} 745 \\ -\quad 382 \end{array}$ | $b$ $\begin{array}{r} 687 \\ -\quad 278 \end{array}$ | C $\begin{array}{r} 402 \\ -\quad 367 \end{array}$ |
| :---: | :---: | :---: | :---: |
| d $\begin{array}{r} 3,213 \\ -\quad 935 \end{array}$ | e $\begin{array}{r} 2,063 \\ -1,347 \end{array}$ | f $\begin{array}{r} 2,560 \\ -1,698 \end{array}$ | $\begin{array}{\|ll} \mathbf{8} & \\ & 2,502 \\ -\quad 873 \end{array}$ |

## CHALLENGE

3 Fill in the missing number to make each equation true.
a $146+($ $\qquad$ $\times 5)=186$
b (6 $\times$ $\qquad$ ) $+50=74$
C $(15 \times$ $\qquad$ ) $+45=90$
d 270-( $\qquad$ $\times 7)=207$
$\qquad$

## Too Much Homework?

Mrs. Flowers' fourth graders complained that they were spending too much time on their homework, so she asked them to collect information about how many minutes they spent on their homework each night. The table below shows the results.

| Time Spent <br> Each Night <br> (minutes) | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> Students | $\\|$ | $\\|\\|$ | $\mid$ | $\\|H\\| \\|$ | $\\|\\|$ | $\\|\\|$ | $\\|$ |  |  | $\mid$ |

1 Use the information from the table to complete the line plot below.
Minutes Spent on Homework Each Nisht

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | $X$ |  |  |  |  |  |  |  |  |  |
|  |  |  | $X$ |  |  |  |  |  |  |  |  |  |

2 What does each X stand for on the line plot?

3 How many students said they spend 40 minutes on their homework each night?

4 Mrs. Flowers says she thinks her students should spend between 30 and 40 minutes on homework each night. Do you think she is giving her students the right amount of homework? Use information from the line plot and table to back up your answer.
$\qquad$
$\qquad$

## Fraction Fill \& Compare

1 Fill in the shapes to show each fraction.


2 Look at the fractions you shaded in above. Use them to help complete each number sentence by writing <, >, or $=$.

| ex $\frac{1}{3}$ | $>$ | $\frac{1}{9}$ | a $\frac{1}{5}$ | $\frac{1}{3}$ | b $\frac{1}{3}$ | $\frac{2}{9}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C $\frac{2}{10}$ | $\frac{2}{9}$ | d $\frac{1}{5}$ | $\frac{2}{10}$ | e $\frac{2}{5}$ | $\frac{2}{10}$ |  |

## CHALLENGE

3 Use what you know about fractions to complete each number sentence by writing <, >, or $=$.

| a $\frac{1}{100}$ | $\frac{1}{50}$ | b $\frac{2}{100}$ | $\frac{1}{50}$ | C $\frac{1}{4}$ | $\frac{1}{16}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

## The 18¢ Problem

1 What are all the different ways can you make $18 \phi$ with pennies, nickels, and dimes?
a Choose the strategy you will use to solve this problem.
Odraw a picture
guess and checkmake an organized list
b Why does this strategy make the most sense to you?

C Solve the problem with the strategy you picked. Show all your work.

$\qquad$

## Division \& Fractions

1 Complete the division facts. They may help you with the next problem.
a $20 \div 5=$
b $20 \div 10=$ $\qquad$ C $18 \div 2=$
d $18 \div 3=$ $\qquad$
e $18 \div 6=$ $\qquad$
f $18 \div 9=$ $\qquad$

2 Divide each set into equal groups. Shade in some circles as directed.

| ex Shade in $\frac{3}{5}$ of the circles. | a Shade in $\frac{2}{10}$ of the circles. Hint: Divide |
| :--- | :--- |
| the set into 10 equal groups. |  |

3a Find two fractions above that are equal. Write them here:
b How do you know these fractions are equal?
$\qquad$

## The Third Graders' Garden Plot

1 Last year, the third graders at Jackson Elementary had a garden plot that was 12 feet by 33 feet. This year the third graders made the plot bigger by making it 16 feet by 38 feet. How much bigger was the perimeter of the plot this year?
a Choose the strategy you will use to solve this problem.
draw a pictureguess and check
make an organized list
b Why does this strategy make the most sense to you?

C Solve the problem with the strategy you picked. Show all your work.

$\qquad$
$\qquad$

## Addition \& Subtraction with the Standard Algorithm

1 Solve each addition problem using the standard algorithm.

| example $\begin{array}{r} 1 \\ 457 \\ +\quad 392 \\ \hline 849 \end{array}$ | a | $\begin{array}{r} 403 \\ +\quad 238 \\ \hline \end{array}$ | b | $\begin{array}{r} 573 \\ +\quad 348 \\ \hline \end{array}$ | C | $\begin{array}{r} 226 \\ +\quad 901 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| d $\begin{array}{r} 2,740 \\ +\quad 342 \end{array}$ | e | $\begin{array}{r} 3,029 \\ +\quad 1,452 \end{array}$ | f | $\begin{array}{r} 4,098 \\ +\quad 3,429 \end{array}$ | 9 | $\begin{array}{r} 5,768 \\ +\quad 7,431 \end{array}$ |

2 Solve each subtraction problem using the standard algorithm.

| $\begin{array}{\|r} \hline \text { example } \\ 1,305 \\ -\quad 648 \\ \hline 657 \end{array}$ | a | $\begin{array}{r} 638 \\ -553 \end{array}$ | b | $\begin{array}{r} 503 \\ -229 \end{array}$ | C | $\begin{array}{r} 1,800 \\ -925 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{d}$ $\begin{array}{r} 4,309 \\ -526 \end{array}$ | e | $\begin{array}{r} 6,005 \\ -1,347 \end{array}$ | f | $\begin{array}{r} 5,078 \\ -5,019 \end{array}$ | 8 | $\begin{array}{r} 2,455 \\ -1,990 \end{array}$ |

## CHALLENGE

3 Fill in the missing number to make each equation true.
a $700=670+($ $\qquad$ $\times 5)$
b $842=(7 \times \ldots)+800$
C $(9+3)+(3 \times$ $\qquad$ ) $=36$
d $(\ldots \quad \times 25)-42=33$
$\qquad$

## Sandwich Fractions

1 Wanda and her sister Lola were eating sandwiches. The sandwiches were the same size. Wanda ate $\frac{1}{2}$ of her sandwich. Lola ate $\frac{3}{4}$ of her sandwich. Who ate more of her sandwich, Wanda or Lola? Explain how you know using pictures, numbers, and/or words.

2 Lucy and her brother Bob were eating sandwiches at a picnic. The sandwiches were all the same size. Lucy ate $\frac{1}{2}$ of a peanut butter sandwich and $\frac{1}{4}$ of an egg salad sandwich. Bob ate $\frac{1}{4}$ of a tuna sandwich and $\frac{3}{4}$ of a turkey sandwich. Who ate more, Lucy or Bob? Explain how you know using pictures, numbers, and/or words.


## More Division \& Fractions

1 Complete the division facts. They may help you with the next problem.
a $20 \div 5=$
b $20 \div 10=$ $\qquad$ C $18 \div 2=$ $\qquad$
d $18 \div 3=$ $\qquad$
e $18 \div 6=$ $\qquad$
f $18 \div 9=$ $\qquad$

2 Divide each set into equal groups. Shade in some circles to show each fraction. (Hint: The denominator (bottom number) shows how many equal groups. The division problems above will help you think about how many circles should be in each equal group.)

| ex Shade in $\frac{2}{5}$ of the circles. <br> 5 equal groups. 2 groups are shaded in. | a Shade in $\frac{4}{10}$ of the circles. |
| :---: | :---: |
| Shade in $\frac{3}{6}$ of the circles. <br> $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ <br> $0 \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ <br> $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ | C Shade in $\frac{5}{6}$ of the circles. <br> 000000 <br> $0000 \bigcirc 0$ <br> $\bigcirc 0 \bigcirc \bigcirc \bigcirc 0$ |
| Shade in $\frac{2}{3}$ of the circles. $\begin{aligned} & 000000 \\ & 000000 \\ & 000000 \end{aligned}$ | Shade in $\frac{8}{9}$ of the circles. $\begin{aligned} & 000000 \\ & 000000 \\ & 000000 \end{aligned}$ |

3 Which fraction or fractions above are less than $\frac{1}{2}$ ?

4 Write $<,>$, or $=$ to compare two fractions. Use the pictures above to help.

| a $\frac{2}{5}$ | $\frac{2}{3}$ | b $\frac{5}{6}$ | $\frac{8}{9}$ | C $\frac{3}{6}$ | $\frac{2}{3}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

$\qquad$

## Sophie's Marbles \& Ricky's Fish

1a Sophie had a big bag of marbles. $\frac{1}{4}$ of them were blue, $\frac{1}{8}$ of them were red, $\frac{1}{2}$ of them were green, and $\frac{1}{8}$ of them were yellow. Were there more blue, red, green, or yellow marbles? Use numbers, pictures, and/or words to explain how you know.
b Were there more blue or red marbles? Use numbers, pictures, and/or words to explain how you know.


2 Ricky had 20 small fish in his fish tank. $\frac{2}{5}$ of them were blue and $\frac{1}{4}$ of them were purple. Did he have more blue fish or purple fish? Use numbers, pictures, and/or words to explain how you know.
$\qquad$

## True or False?

1 An equation is true if both sides are equal. It is false if both sides are not equal. Circle true or false for each equation. You do not need to explain all your answers.

| Equation | Circle One |  | Optional Explanation |  |
| :--- | :--- | :--- | :--- | :---: |
| ex $32 \div 4=3 \times 3$ | true false | $32 \div 4=8$ | $3 \times 3=9 \quad 8$ and 9 are not equal. |  |
| a $4 \times 3=360-348$ | true | false |  |  |
| b $0 \times 3,471=674 \times 0$ | true | false |  |  |
| C $9 \times 3=40-23$ | true | false |  |  |
| d $36 \div 4=64 \div 8$ | true | false |  |  |
| e $40 \div 8=35 \div 5$ | true | false |  |  |

2 Use <, >, or = to complete each number sentence.
ex $32+876$
$>870+24$
a $400 \div 10$
$400 \div 5$
b $8 \times 2$
$4 \times 4$
C 845-208
845-32

3 Pick the equation that will help you solve the problem. Then solve the problem.
a Sara got 5 packs of baseball cards from each of her 3 cousins. She gave 2 packs to her brother. How many packs of baseball cards did she have left?
〇 $5-3=$ ?
$5-3+2=$ ?
$(5 \times 3)-2=$ ?
$(5-2) \times 3=?$

Sara has $\qquad$ packs of baseball cards.
b The pet shop got 84 fish. They sold 34 of the fish right away. They divided the rest of the fish into 2 tanks. How many fish were in each tank?
O $84-34=$ ?
$(84-34) \div 2=$ ?
$(84+34) \times 2=?$
$84+34+2=?$

There are $\qquad$ fish in each tank.
$\qquad$
$\qquad$

## Fractions on the Number Line

1 Fill in the missing numerators on the number line below.


2 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 tables below.

| Circle the fraction that is greater than $\frac{1}{2}$. | Write a number sentence showing <br> which fraction is greater. |
| :--- | :--- |
| example $\frac{3}{5}$ or $\frac{3}{10}$ | $\frac{3}{5}>\frac{3}{10}$ |$|$| a $\frac{2}{5}$ or $\frac{8}{10}$ |  |
| :--- | :--- |
| C $\frac{4}{5}$ or $\frac{4}{10}$ |  |
| Circle the fraction that is greater. | Write a number sentence showing |
| which fraction is greater. |  |

$\qquad$

## Working with Equations

1 Fill in the missing numbers to make each equation true.
example $35 \div 7=20 \div \underline{4}$
a $8 \times 3=40-$ $\qquad$
b $8 \times \ldots=36+28$
C $0 \times 67=$ $\qquad$ $\times 45$
d $19+$ $\qquad$ $=9 \times 5$
e $9 \times$ $\qquad$ = 668-587
f $3 \times 9=68-$ $\qquad$ S $42 \div 6=63-$ $\qquad$

2 Use $<,>$, or $=$ to complete each number sentence.

| example $54 \div 6<54 \div 2$ | a $32 \times 10$ | $13 \times 100$ |  |
| :--- | :--- | :--- | :--- |
| b $125+230$ | $100+255$ | c $144 \div 12$ | $144 \div 6$ |
| d $197+326$ | $284+139$ | e $300-250$ | $350-300$ |

## CHALLENGE

3 Fill in the missing number to make each equation true.

| $\mathbf{a}(20 \times \ldots) \div 4=25$ | $\mathbf{b}(36 \div 4) \times \ldots=81$ |
| :--- | :--- |
| $\mathbf{C} 350=(\ldots \times 50)-50$ | $\mathbf{d} 1,826=(10 \times \ldots)-100-74$ |
| $\boldsymbol{e}(245+\ldots) \times 3=900$ | $\mathbf{f}(1,008-508) \div \ldots=5$ |

4 Use $<,>$, or $=$ to complete each number sentence.

| $\mathbf{a}(25 \times 4) \div 10$ | $81 \div 9$ | $\mathbf{b}(514-489) \times 6$ | $50 \times 3$ |
| :--- | :---: | :--- | :--- |
| $\mathbf{C}(75 \times 2)-51$ | $(100 \div 2) \times 4$ | $\mathbf{d}(328+22)-150$ | $500 \div 2$ |
| $\boldsymbol{e}(739+261) \div 10$ | $20 \times 5$ | $\mathbf{f} 5 \times 5 \times 5$ | $(200 \div 2)+50$ |

$\qquad$
$\qquad$

## Fraction Problems

1 Fill in the missing numerators on the number line below.


2 Use the number line above to help answer the questions below.
a Chris ran $\frac{8}{10}$ of a mile. Dan ran $\frac{3}{5}$ of a mile. Who ran farther?
b Jenny has $\frac{4}{10}$ of a meter of yarn. Sue has $\frac{4}{5}$ of a meter of yarn. Who has more yarn?

C Lewis and his brother Sam were walking to their grandma's house. Lewis walked $\frac{7}{10}$ of the way and then stopped to rest. Sam walked half the way there and then stopped to rest. Who walked farther before stopping to rest?

3 Use the number line above to compare the fractions below. Use the symbols $<,>$, or $=$ to complete each number sentence.

| ex $\frac{7}{10}>\frac{3}{10}$ | a $\frac{1}{5}$ | $\frac{4}{5}$ | b $\frac{7}{10}$ | $\frac{4}{5}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| C $\frac{3}{5}$ | $\frac{5}{10}$ | d $\frac{2}{5}$ | $\frac{4}{10}$ | e $\frac{1}{5}$ | $\frac{3}{10}$ |

## CHALLENGE

4 Fill in the missing numerals below.

| a $\frac{1}{10}=\overline{20}$ | b $\frac{1}{5}=\overline{20}$ | C $\frac{3}{5}=\overline{20}$ |
| :--- | :--- | :--- |

$\qquad$

## Thinking About Fractions

1 Marty ordered a small milk at lunch. His brother Bob ordered a large milk. They each drank three-fourths of their milk. Who drank more milk, Marty or Bob? Explain how you know.


2 At the movies Laura got a large popcorn. Her sister Susan got a small popcorn. They each ate half their popcorn. Who ate more popcorn, Laura or Susan? Explain how you know.


3 At lunch Steven ate a third of a jumbo burger. His mother ate a third of a regular burger. Who ate more, Steven or his mom?


## CHALLENGE

4 Jim drank $\frac{2}{3}$ of a bottle of juice that was 24 ounces. Frank drank $\frac{3}{4}$ of a bottle of juice that was 16 ounces. Who drank more juice? Use pictures, numbers, and/ or words to explain how you know.

$\qquad$
$\qquad$

## Fruit Fractions

1 A farm stand was selling 2-pound boxes of strawberries. Noah's family ate $\frac{2}{5}$ of a box. Zach's family ate $\frac{3}{4}$ of a box. Which family ate more strawberries? Use pictures, numbers, and/or words to explain how you know.


2 Ronda and Shawna bought a bunch of grapes. Ronda ate $\frac{5}{16}$ of the grapes and Shawna ate $\frac{1}{2}$ of the grapes. Who ate more grapes? Use pictures, numbers, and/or words to explain how you know.


3 Violet's mom got a melon at the store and cut it into 8 equal pieces. Violet ate $\frac{3}{8}$ of the melon. Her mom ate $\frac{1}{4}$ of the melon. Who ate more melon? Use pictures, numbers, and/or words to explain how you know.
$\qquad$
$\qquad$

## Pizza Problems

1 Jim and Emma were eating pizza for lunch. Jim ate $\frac{2}{6}$ of the pizza. Emma ate $\frac{3}{6}$ of the pizza. How much pizza did they eat altogether? Use pictures, numbers, and/or words to explain how you got the answer.


2 Rosa and Carmen made two mini-pizzas for lunch. They cut both pizzas into fourths. Rosa ate $\frac{3}{4}$ of a pizza. Carmen ate $\frac{3}{4}$ of a pizza. Altogether, how much pizza did they eat? Use pictures, numbers, and/or words to explain how you got the answer.


3a Carl and his brother Noel ordered a pizza. Carl ate $\frac{1}{4}$ of the pizza. Noel ate $\frac{3}{8}$ of the pizza. How much of the pizza did they eat altogether? Use pictures, numbers, and/or words to explain how you got the answer.

$\mathbf{b}$ How much of the pizza was left after Carl and Noel were done eating? Use pictures, numbers, and/or words to explain how you got the answer.

## Money \& Chair Problems

1 Jasmine's neighbor paid her \$32 for helping with some yard work. Jasmine gave her brother $\$ 8$ because he helped her with some of the work. Then she went shopping with the rest of the money. She bought 3 books that were $\$ 6$ each and a bottle of juice for $\$ 1.89$. How much money did she have left? Show all your work.


2a The third graders are putting on a play for the fourth and fifth graders. They need to set up chairs in the gym for the fourth and fifth graders to sit on. There are 86 fourth graders, 79 fifth graders, 3 fourth grade teachers, and 3 fifth grade teachers. How many chairs will the third graders need to set up? Show all your work.
b The third graders can put no more than 20 chairs in a row. How many rows of chairs will they need? Show all your work.

$\qquad$

## Multiplication, Division \& Perimeter Practice

1 Complete the multiplication facts.

$$
\begin{array}{r}
10 \\
\times \quad 8 \\
\hline
\end{array}
$$



9
$\times 2$


2 Complete the division facts.
$40 \div 5=$ $\qquad$
$12 \div 2=$ $\qquad$
$90 \div 10=$ $\qquad$
$8 \div 1=$ $\qquad$
$25 \div 5=$ $\qquad$
$14 \div 2=$ $\qquad$

3 Find the perimeter of each rectangle.


4 What is the difference between the perimeters of rectangles above?
$\qquad$

## Curtains \& Movies

1 Maddie is making 6 curtains for her room. She wants to put a strip of ribbon at the bottom of each curtain. She needs 36 inches of ribbon for each one. The ribbon she wants to use costs $60 \phi$ per foot. How much will it cost it her to buy enough ribbon for all 6 curtains? Show all your work. Remember that there are 12 inches in 1 foot.


2 Ralph's mom said he and his brother could go to a movie while she went shopping. She dropped them off at the theater at 1:45 and said she would be back at 4:00 to get them. They had three choices of movies. Which movie could they see and be done by the time their mom came to get them? Show all your work.

| Movie | Start Time | Length <br> (Including Previews) |
| :---: | :---: | :---: |
| Beetle Goes <br> to Town | $1: 55$ | 130 minutes |
| Arctic <br> Adventure | $2: 00$ | 125 minutes |
| Rainy Day Dos | $2: 15$ | 100 minutes |

$\qquad$
$\qquad$

## Multiplying \& Dividing

1 Complete the multiplication facts.

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

2 Complete the division facts.
$100 \div 10=$ $\qquad$
$16 \div 2=$ $\qquad$
$25 \div 5=$ $\qquad$
$12 \div 2=$ $\qquad$
$3 \div 1=$ $\qquad$
$20 \div 2=$ $\qquad$

## CHALLENGE

3 Use what you know about basic fact strategies to solve these multiplication problems.

| 24 | 42 | 329 | 13 | 1,946 | 500 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $\times \quad 5$ |  |  |  |  |  |
| $\times \quad 5$ | $\times \quad 0$ | $\times 10$ |  |  |  |

4 Answer these questions.

| a Would the product of these two <br> numbers be odd or even? <br> $3,407 \times 10$ | b How do you know? |
| :--- | :--- |
|  |  |

$\qquad$

## Larger Multiplication

You can break a two-digit number into tens and ones to multiply it by another number.
Use this method to solve the multiplication problems below.

| Problem | Break larger numbers into tens and ones. Then multiply. | Add the two products. | Your Answer |
| :---: | :---: | :---: | :---: |
| $\begin{array}{rr} \text { ex } \\ \\ 16 \\ \times 4 \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ \times 4 \\ \hline 40 \end{array} \quad \begin{array}{r} 6 \\ \hline 24 \end{array}$ <br> Break 16 into 10 and 6. Multiply both by 4 | $40+24=64$ | $\begin{array}{r} 16 \\ \times 4 \\ \hline 64 \end{array}$ |
| $\begin{array}{\|rr} \hline 1 & \\ & 14 \\ \times \quad 4 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 14 \\ \times \quad 4 \\ \hline \end{array}$ |
| $\begin{array}{rr} \mathbf{2} & \\ & 13 \\ \times 6 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 13 \\ \times \quad 6 \\ \hline \end{array}$ |
| $\begin{array}{\|r} \hline 3 \\ \\ \\ \times \quad 7 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 15 \\ \times 7 \\ \hline \end{array}$ |
| 4 $\begin{array}{r} 18 \\ \times 8 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 18 \\ \times 8 \\ \hline \end{array}$ |

$\qquad$

## Operations Review Add, Subtract, Multiply \& Divide

1 Complete the multiplication facts.

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

2 Complete the division facts.
$40 \div 5=$
$10 \div 2=$ $\qquad$ $35 \div 5=$ $\qquad$ $14 \div 2=$ $\qquad$

3 Solve the addition and subtraction problems.

| 357 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $+\quad 88$ | | 208 |
| ---: | ---: | ---: |
| $+\quad 153$ |

## Even More Multiplication Story Problems

1 Jose and his three cousins helped their grandma work in her garden on Saturday. She gave them each $\$ 16$ to thank them for their help. How much money did she give them altogether? Show all your work.


2 Laura and her four sisters went apple picking. They each picked 14 apples. How many apples did they pick altogether? Show all your work.

## CHALLENGE

3a Gregory's mom said to him, "You drink too much soda!" Gregory said, "I only drink 3 cans of soda a day." His mom said that was way too much. If there are 12 ounces of soda in each can, how many ounces of soda does Gregory drink every week? Show all your work.
b Gregory's mom said, "You drink gallons of soda each week!" There are 128 ounces in a gallon. Was his mom correct? Explain your answer.
$\qquad$
$\qquad$

## Fractions of a Circle

1 Fill in the circle to show each fraction.

| example $\frac{1}{4}$ | $\square$ | $\left\lvert\, \begin{gathered} \mathbf{a} \\ \frac{1}{3} \end{gathered}\right.$ |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \mathbf{b} \\ & \frac{2}{3} \end{aligned}$ |  | $\begin{gathered} \text { C } \\ \frac{1}{5} \end{gathered}$ |  |
| $\begin{aligned} & \hline \mathbf{d} \\ & \frac{2}{10} \end{aligned}$ |  | $\begin{aligned} & \hline \boldsymbol{e} \\ & \frac{2}{5} \end{aligned}$ |  |

2 Look at the fractions you shaded in above. Use them to help complete each number sentence by writing <, >, or $=$.

| ex $\frac{1}{3}$ | $>$ | $\frac{1}{5}$ | a $\frac{2}{5}$ | $\frac{2}{3}$ | b $\frac{2}{3}$ | $\frac{2}{10}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| c $\frac{2}{10}$ | $\frac{1}{5}$ | d $\frac{2}{5}$ | $\frac{2}{10}$ | e $\frac{1}{4}$ | $\frac{2}{10}$ |  |

## CHALLENGE

| $f \frac{1}{18}$ | $\frac{1}{9}$ | $\mathbf{S} \frac{2}{18}$ | $\frac{1}{9}$ | h $\frac{1}{9}$ | $\frac{2}{20}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Liters \& Quarts

1 Use this information to answer the questions below.

- A liter is about equal to a quart.
- A liter is a little bit more than a quart.

a Soda comes in 2-liter bottles. About how many quarts are in a 2-liter bottle of soda?
b There are exactly 4 quarts in a gallon. Are there more than 4 liters or fewer than 4 liters in a gallon? Use pictures, numbers, and/or words to explain how you know.

2 Complete the addition and subtraction problems.

| 347 | 904 | 6,078 | 803 | 347 | 4,843 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| +826 | +148 | $+2,989$ | -416 | -252 | $-\underline{-2,176}$ |

3 John read 176 pages last month. This month he read 483 pages. Frannie read 245 pages last month. This month she read 861 pages. Who made a bigger jump in the number of pages they read, John or Frannie? Without doing the subtraction, explain how you can tell.

## Lemonade \& Bracelets

1a Philipe is making lemonade with his dad to serve at their party. Their recipe makes 6 glasses of lemonade. The recipe calls for 4 lemons, 1 cup of sugar, and 6 cups of water. If they want to make enough lemonade for 30 people to drink a glass, how many lemons will they need to buy?
b Use words, numbers, or pictures to explain how you know your answer above makes sense.


2a Lisa is making bracelets for four of her friends. She needs 18 beads for each bracelet. How many beads does she need altogether?
b Use words, numbers, or pictures to explain how you know your answer above makes sense.

## CHALLENGE

C If each bead costs 15¢, how much would it cost for Lisa to buy all those beads? Show your work.

$\qquad$

## Pencils \& Cupcakes

1a Mr. Sutton bought 36 mechanical pencils to give away as prizes for his students. $\frac{1}{4}$ of the pencils were red and $\frac{1}{3}$ of the pencils were purple. Were there more red or purple pencils? Use pictures, numbers, and/or words to explain how you know.
b The rest of the pencils were yellow. How many yellow pencils did Mr. Sutton buy? Use pictures, numbers, and/ or words to explain your answer. or

2a Ellie made 24 cupcakes to take to her friend's party. She put vanilla icing on them all. Then she put chocolate sprinkles or red sugar on some of them. She put chocolate sprinkles on $\frac{1}{4}$ of them. She put red sugar on $\frac{1}{2}$ of them. She left the rest of them plain. What did most of her cupcakes have on them?


## CHALLENGE

b What fraction of Ellie's cupcakes had no sprinkles or sugar on top? How many cupcakes was that? Use pictures, numbers, and/or words to explain your answers.
$\qquad$

## Shopping Problems

1 Serena bought 3 T-shirts for $\$ 13$ each. She also bought a skirt for $\$ 42$ and a jacket for $\$ 76$. Her sister Lisa got a pair of jeans for $\$ 34$ and a pair of sneakers for $\$ 46$. Who spent more money? Exactly how much more money did she spend? Show all your work.


2 It is Rick's turn to bring oranges for his soccer team to eat at half-time. There are 15 people on his team. He wants each person to be able to eat 2 oranges. Oranges cost $\$ 1.20$ per pound, and each orange weighs about half a pound. About how much will it cost for Rick to get enough oranges for the team? Show all your work.

$\qquad$

## Feet, Yards \& Miles

1a When Danny gets wild, his mom tells him to do laps around the block. His block is 66 yards wide and 80 yards long. How many yards are in one lap around Danny's block? Show all your work.


## CHALLENGE

b There are 1,760 yards in a mile.
How many full laps would Danny have to run around the block to run a mile? Show all your work.

2 Danny and his mom are building a fenced area for their dog in the backyard. The area measures 18 ft . by 27 ft . The gate they plan to put in is 3 feet wide. How many feet of fencing will they need? Show all your work.


## Expanded Form \& Rounding Review

1 Fill in the table below by writing each number in standard form, expanded form, or words.

| Standard Form | Expanded Form | Words |
| :--- | :---: | :---: |
| example 8,603 | $8,000+600+3$ | eight thousand six hundred three |
| a 1,427 |  |  |
| b | $3,000+200+50+1$ |  |
| C |  | seven thousand sixty-two |
| d 6,845 |  |  |

2 Fill in the table by rounding each number to the nearest ten, hundred, or thousand.

| Round this number to <br> the nearest... | Ten <br> (Look at the ones.) | Hundred <br> (Look at the tens.) | Thousand <br> (Look at the hundreds.) |
| :--- | :---: | :---: | :---: |
| example 842 | 840 | 800 | 1,000 |
| a 3,425 |  |  |  |
| b 8,186 |  |  |  |
| C 374 |  |  |  |
| d 6,538 |  |  |  |

## Morning Math Games \& Breakfast

1 Ms. Suarez and her third grade students are planning morning math games and breakfast for their families. Ms. Suarez wanted to know what kind of food to serve, so she asked her students what they and their families like to eat in the morning. The table shows the third graders' answers. Show the information from the table on the bar graph. Title the graph and label the y-axis.

| Food | Number of <br> Students |
| :---: | :---: |
| Bagels | 13 |
| Muffins | 6 |
| Doughnuts | 5 |

Title $\qquad$


2 What was the most popular food?

3 How many students did Ms. Suarez survey?

4 Ms. Suarez estimates that about 20 people will join her students for morning math games and breakfast. What kind of food and how much of it should she serve? Use information from the table and bar graph to explain your answer.
$\qquad$
$\qquad$

## Fraction Review

1 On each square, fill in a fraction of the square that is less than $\frac{1}{2}$. Then write a number sentence comparing your fraction to $\frac{1}{2}$.


2 On each square, fill in a fraction of the square that is greater than $\frac{1}{2}$. Then write a number sentence comparing your fraction to $\frac{1}{2}$.


3 Write each of the following fractions where they belong on the number line below.

| $\frac{9}{10}$ | $\frac{1}{4}$ | $\frac{2}{5}$ | $\frac{2}{3}$ |
| :--- | :--- | :--- | :--- |


$\qquad$

## The Soccer Field

1 Jake and his mom run laps around the soccer field in their neighborhood. The field is 100 yards by 60 yards, and they run 4 laps around the field each time. When they went to visit Jake's uncle, they did laps around the kids' soccer field in his neighborhood. The field was 30 yards by 55 yards, and they ran 8 laps around it. Did they run more at Jake's uncle's house or in their own neighborhood? Exactly how much more? Show all your work.


## CHALLENGE

2 A rectangle has a perimeter of 36 feet. It is twice as long as it is wide. What are the dimensions of the rectangle? Show all your work.
$\qquad$
$\qquad$

## Basic Multiplication \& Division Review

1 Complete the multiplication facts.

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

2 Complete the division facts.
$10 \div 5=$ $\qquad$
$9 \div 1=$ $\qquad$
$20 \div 10=$ $\qquad$
$50 \div 5=$ $\qquad$
$30 \div 5=$ $\qquad$
$18 \div 2=$
$\qquad$

## CHALLENGE

3 Charlie says that if the sides of a rectangle are all whole numbers, it is impossible for the rectangle's perimeter to be odd. Is he correct? Use pictures, numbers, and/or words to explain your answer.
$\qquad$

## Sandwiches \& Mini-Chip Cookies

1a Rosa and Clarice are making sandwiches for all the students in their class and their teacher. There are 23 students in their class. Each loaf of bread has 16 slices. They don't want to use the slices on the end of the bread, because most students don't like them. If they make 1 sandwich for each student and for the teacher, how many loaves of bread will they need? Show all your work.
b Rosa and Clarice realized they would have some bread leftover (not including the end pieces), so they decided to make sandwiches for the librarian, office staff, and custodian. How many sandwiches will they be able to make?


2 Frank, Joe, and Carl went with their grandma to the bakery. She said that they could use the change she got back to buy mini-chip cookies to share equally. She bought a cake for $\$ 11$ and two loaves of bread for $\$ 2.70$ each. She paid with a $\$ 20$ bill. The mini-chip cookies cost $40 \phi$ each. How many cookies did each boy get? Show all your work.


