## Addition Fact Review page 1 of 2

## Note to Families

As a classroom teacher, I appreciate the ways in which families contribute to their children's success in school. When you take the time to review your child's schoolwork, talk about your child's day, and practice concepts and skills, you play an important role in your child's education.

In math class, we have been reviewing patterns in basic addition facts. We have reviewed helpful strategies and identified facts we already know. This assignment is intended to be a review and will give students an opportunity to share strategies with you that will later be used with larger numbers.

1 Complete these Doubles and Make Ten facts.

| 4 | 6 | 9 | 8 | 7 | 5 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| +4 | +4 | $\underline{9}$ | $\underline{2}$ | $\underline{+7}$ | $\underline{+5}$ |

## 2 Complete these Doubles Plus or Minus One facts.

| 5 | 7 | 3 | 4 | 8 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| +4 | +8 | +2 | +3 | +9 | +10 |

$36+1$ and $7+2$ are examples of Count On facts. Write three more Count On facts.

4 Kallie thinks that every Doubles problem will have an even sum. Do you agree or disagree? Explain why.

5 The sum of two numbers is 12. List three possible equations.
$\qquad$ $+$ $\qquad$ $=12$
b ___ $\qquad$ $=12$
$\qquad$ $+$ $\qquad$ $=12$

6 Write an equation that could represent this picture.


## Addition Fact Review page 2 of 2

7 Emma says that she can prove that $8+3=7+4$. How could she use a number rack to prove her thinking? Draw a number rack or explain in writing.

8 CHALLENGE Solve the problem in the easiest way you can. Show your work. (Hint: Change the order in which you add the numbers.)
$60+50+40+70+30=$

9 ChALLENGE Sage wants to buy board games for some of her friends. Board games cost $\$ 9$ each. She has $\$ 6$ and one coupon for $\$ 3$ off. Her Aunt Barbara gave her $\$ 7$ and another coupon for $\$ 3$ off.
a How many games can Sage buy if she uses the coupons? Show your work.
b Will Sage have any money left over? If so, how much? Show your work.

## Addition \& Subtraction Review page 1 of 3

## Note to Families

Students have reviewed and explored addition facts and strategies, and they are now investigating subtraction facts. Naming, categorizing, and identifying strategies will help your child not only understand and solve basic subtraction facts but also solve larger subtraction problems. These strategies help students develop a better understanding of the relationship between numbers and operations. Encourage your child to share with you the fact strategies we have used in the classroom. If your child is having trouble remembering the names of the strategies, the chart at the bottom of page 5 will help.

1 Complete these subtraction facts.
$5-2=$ $\qquad$
$8-3=$ $\qquad$
$6-1=$ $\qquad$
$9-2=$ $\qquad$

2 Complete these subtraction facts.
$12-6=$ $\qquad$
$8-4=$ $\qquad$
$16-8=$ $\qquad$
$14-7=$ $\qquad$

3 What do the facts in Problem 2 have in common?

4 Complete these subtraction facts.

| 9 | 11 | 12 | 13 | 12 | 11 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| -4 | $\underline{-4}$ | $\underline{-7}$ | $\underline{-8}$ | $\underline{-4}$ | $\underline{-5}$ |

5 Complete these subtraction facts.

$$
19-9=
$$

$12-2=$ $\qquad$
$17-7=$ $\qquad$
$14-4=$ $\qquad$

6 What is the name for facts like those in Problem 5?

## Addition \& Subtraction Review page 2 of 3

7 There are 13 blue marbles and 7 red marbles in a bag. How many more blue marbles than red marbles are in the bag? Keona says this is a subtraction problem. Tamron says it is an addition problem. What do you think? Why?

8 Complete these addition facts.

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

9 Complete each equation with a different pair of numbers whose difference is 6 .
a $\qquad$ - $\qquad$ $=6$
b $\qquad$ - $\qquad$ $=6$

## Addition \& Subtraction Review page 3 of 3

10 Lisa and her dad are peeling apples to make some apple pies. The pies need 14 apples. Lisa and her dad have peeled 5 apples.
a Is there an odd or even number of apples left to peel? How do you know?
b How many apples are left to peel? Show your work.


11 challenge Lisa has 32 clean dishes to put away after emptying the dishwasher. After she put away 4 dishes, she helped her mother bring groceries in from the car. Then she put away 7 more dishes. How many dishes still need to be put away? Show your work.

| Subtraction Strategy | Example |
| :--- | :--- |
| Zero facts | $5-0=5,18-0=18$ |
| Count Back facts | $9-1=8,7-2=5,14-3=11$ |
| Take All facts | $6-6=0,15-15=0$ |
| Take Half facts | $8-4=4,12-6=6$ |
| Back to Ten facts | $14-4=10,18-8=10$ |
| Take Away Ten facts | $19-10=9,16-10=6$ |
| Up to Ten facts | For $17-8$, start at 8, add 2 to get to 10, add 7 to get to $17.2+7=9.17-8=9$. |

## Of Mice \& Moles page 1 of 2

For problems $1-3$, show your work using numbers, words, or labeled sketches.
1 Xavier watched a mouse walk this path. How far did the mouse travel?


2 A mole was burrowing in a field. First, the mole went 6 meters in one direction, then 8 meters in another direction, and then 4 meters in another direction. How far did the mole burrow?

3 a Charlie T. Mole ate 16 insects. Anabel H. Mole ate 26 insects. How many more insects did Anabel eat?

b Peter says this is a subtraction problem. Gladys says it is an addition problem. What do you think? Why?

4 The difference of two numbers is 7 . List three possible equations that have a difference of 7.
$\qquad$
$\qquad$ $=7$ $\qquad$
$\qquad$ $=7$ $\qquad$
$\qquad$ $=7$

5 Write an equation that could represent this picture.


Of Mice \& Moles page 2 of 2
6 challenge Abel S. Mouse searched for food for 28 minutes. He found a snack and spent 10 minutes eating his snack. How much longer did it take Abel S. Mouse to find his snack than it took him to eat it? Which of the following represents this situation?

- $28+s=10$
- $10+28=s$
$38-s=28$
- $28-10=s$

7 Jana practiced the piano 10 minutes longer than her brother, Grant. Jana practiced for 35 minutes. How long did Grant practice? Show your work.

8 Challenge Lulu practiced the piano for 45 minutes, and then she practiced the violin for 30 minutes.
a How much time did Lulu spend practicing her instruments? Show your work.
b Is that more or less than an hour? How do you know?


C How many minutes more or less than an hour did Lulu practice? Show your work.

## Sums \& Differences page 1 of 2

1 The sum of three numbers is 12 . What could those three numbers be? Think of three different solutions.
$12=$ $\qquad$ $+$ $\qquad$ $+$ $12=$ $\qquad$ $+$ $\qquad$
$\qquad$
$\qquad$
$\qquad$

2 The difference between two numbers is 12 . What could those numbers be?
$12=$ $\qquad$ $12=$ $\qquad$ - ___ $12=$ $\qquad$ $-$

3 Look at this picture and think about the many different equations you could write to represent it.

a Write an addition equation to represent the picture above.
b Write a subtraction equation to represent the picture above.

4 a Add each pair of numbers.

| 8 | 10 | 78 | 10 | 168 | 28 | 10 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +10 | +38 | +10 | +118 | +10 | +10 | +58 |

b What pattern do you see in the combinations above?

## Sums \& Differences page 2 of 2

Use numbers, pictures, or words to show your work when you solve these problems. Use additional paper if you need more room.

5 Jack is 36 inches tall. Mary is 6 inches taller than Jack. Cameron is 4 inches taller than Mary.
a How many inches tall is Cameron?
b How many inches tall is Mary?

6 Challenge You and your friend are talking about your solutions to problem 2. Your friend said that there are exactly 12 different pairs of numbers with a difference of 12 and that he had found them all. How would you respond to him?

7 ChALLENGE You and your friend were thinking about pairs of whole numbers that have a sum of 12 . How many pairs of whole numbers can you find that have a sum of 12? (Note: A whole number is equal to or greater than 0 and does not include a fraction. 2 is a whole number. $21 / 2$ is not a whole number.)

8 CHALLENGE How many pairs of whole numbers have a sum of 40 ?

9 CHALLENGE How many pairs of whole numbers have a sum of 110 ?

10 challenge how many pairs of whole numbers have a sum of 99 ?

## Adding Tens page 1 of 2

1 Count on by 10s to fill in the blanks below.


2 Solve each problem below. Show your work for each.
a The book measures 40 centimeters and the paper measures 120 centimeters. How long are they together if you line them up end-to-end?
b The paper measures 120 centimeters and the pen measures 30 centimeters. How long are they together if you line them up end-to-end?

C The photo measures 30 centimeters and the frame measures 250 centimeters. If you lined them up end-to-end, how long would they be together?

## Adding Tens page 2 of 2

3 Albert rode his bike for 14 minutes. Ally rode her bike for 8 minutes.
a How much longer did Albert ride?
b Which equation could you use to represent this problem:

- $14+8=b$
- $14+b=8$$8-b=14$
$14-b=8$

4 Show your thinking when you solve these problems:
a Bobby is supposed to be at school at 8:30 but on Monday he was 17 minutes late. What time did Bobby get to school?
b challenge Steve was also late to school on Monday, but he got there 8 minutes before Bobby. What time did Steve get to school?

## More Adding Tens page 1 of 2

1 Count on by 10 s to fill in the blanks below.


2 Solve the problems below. Show your work for each.
a The book measures 45 units and the paper measures 23 units. How long are they together if you line them up?
b The pencil measures 20 units and the pen measures 32 units. How long are they together if you line them up?

C The photo measures 95 units and the frame measures 25 units. If you lined them up, how long would they be together?
d You line up a paper, pencil, and pen and they measure 43 units end to end. The paper measures 23 units, the pencil measures 10 units. What does the pen measure?

## More Adding Tens page 2 of 2

3 Alex's goal this month is to ride 20 miles on his bike. One week he rode 5 miles, the next week he rode 6 miles, and this past week he rode 8 miles.
a How many miles has Alex ridden so far?
b How many miles does Alex still need to ride to meet his goal of riding 20 miles this month?

4 Alex's sister Hazel also likes to bicycle a lot. In three weeks, she rode a total of 20 miles. How many miles did she ride each week? Find at least four solutions to the problem.


5 Steve and Henry rode their bikes completely around Brightwood Park. The distances are marked on the map. How many kilometers (km) did they ride? Show your work.


6 Logan's dog, Chief, likes to patrol along the fence of Logan's backyard to make sure everything is as it should be. How many feet does Chief walk every time he patrols the yard? Show your work.


## Making Ten page 1 of 2



1 Complete each equation.
$7+$ $\qquad$ $=10$
$10=2+$ $\qquad$
$\qquad$ $+5=10$
$10=$ $\qquad$ $+6$

2 Complete each equation.
$27+$ $\qquad$ $=30 \quad 30=2+$ $\qquad$
$\qquad$ $+5=30$
$30=$ $\qquad$ $+26$
$27+$ $\qquad$ $=40 \quad 40=2+$ $\qquad$
$\qquad$ $+5=40$
$40=$ $\qquad$ $+26$
$27+$ $\qquad$ $=80$
$80=2+$ $\qquad$
$\qquad$ $+5=80$
$80=$ $\qquad$ $+26$

3 Show your thinking when you solve these problems.
a Fiona's team had 27 points and the other team had 40 points. The team with the most points wins the game. If the other team scored no more points, how many more points would Fiona's team need to win?
b Mark has $\$ 35$. He needs $\$ 80$ to buy the bike he really wants. How much more money does Mark need to buy the bike?

## Making Ten page 2 of 2

4 Show your thinking when you solve these problems.
a Terilyn and Mark are on a fishing trip. Terilyn caught 13 fish. She has to catch 10 more to have as many fish as Mark. How many fish has Mark caught?
b Terilyn has some grapes in her lunch. She gave 20 grapes to Mark, and now she has 28 grapes left. How many grapes did Terilyn have to start with?


## Double-Digit Addition page 1 of 2

1 Add each pair of numbers. Show all your work. Try to use different methods to add the numbers.

| a $20+20=$ | b $40+30=$ | C $30+60=$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |

2 Victor had 120 baseball cards. His cousin gave him 40 more cards. Then his brother gave him 50 more cards. How many baseball cards does Victor have now? Show all your work.

(continued on next page)

## Double-Digit Addition page 2 of 2

Show all your work when you solve these problems.
3 The toy store is having a special on board games. If you buy two games for $\$ 17$ each, you get $\$ 5$ off the total. How much would you end up paying for those two games?


4 Action figures that usually cost $\$ 12$ are on sale. During the sale you can get two action figures for $\$ 15$. How much do you save when you buy two for $\$ 15$ ?


5 ChALLENGE Jaime has 38 marbles. If Jorge had 14 more marbles, he would have twice as many marbles as Jaime. How many marbles does Jorge have now?


## Patterns \& Sums page 1 of 2

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

| a $30+65=$ | b $42+35=$ | C $46+38=$ |
| :---: | :---: | :---: |
| d 53 | e 67 | f 94 |
| $\underline{+82}$ | $\underline{+85}$ | +76 |

2 Victor had 126 Lego pieces. His cousin gave him 20 more Lego pieces. Then his brother gave him 58 more. How many Lego pieces does Victor have now? Show all your work.

## Patterns \& Sums page 2 of 2

Show your work when solving these story problems.
3 Some of the third graders and fourth graders started a new kickball game at recess. The third graders scored 8 runs in the first inning and 4 runs in the second inning. The fourth graders scored 5 runs in the first inning and 16 runs in the second. How many more runs do the fourth graders have?


4 ChALLENGE Barbara has three chickens. Last week they each laid 4 eggs, and this week they each laid 5 eggs. Barbara gave 8 eggs away and used 7 of the eggs for making breakfasts and cookies. How many eggs does she have left?


## The Pet Store page 1 of 2

## Note to Family

At school, we have started looking for efficient ways to find the total number of items in a group. We studied a picture of a pet store that was full of packages and containers. We worked to figure out how many items were in each package and then how many were in all the packages together. Sometimes, the arrangement of items was helpful-for example, a package of cat food had 2 rows of cans with 5 cans in each one. This made it easier to count by 2 s or 5 s to find the total. Watch how your child makes use of each of the arrangements in this assignment to help find the total.

Use the pictures to find the total for each problem below. Show your thinking with numbers, sketches, or words.
ex How many cans of dog food are there? How do you know?

$4+4+4=12$

1 How many cans of cat food are there? How do you know?


2 How many balls are there in all? How do you know?


3 How many chew toys are there? How do you know?


The Pet Store page 2 of 2
4 Fill in the blanks.
$17-8=$ $\qquad$
$6+7=$ $\qquad$
$13-9=$ $\qquad$
$3+$ $\qquad$ $=10$
16 - $\qquad$ $=8$
$5+$ $\qquad$ $=15$
$4+4+4+4=$ $\qquad$ $8+8+8=$ $\qquad$ $6+6+6=$ $\qquad$

5 Challenge Molly's kitten weighed 3 pounds when she got her. Now the kitten has gained 4 pounds, and Molly's dog weighs 4 times as much as her kitten.
a How many pounds does the kitten weigh now? Write equations to show your thinking.
b How many pounds does the dog weigh? Write equations to show your thinking.


## Stamp Challenges page 1 of 2

Use the images to find the total for each problem below. Show your thinking with numbers, sketches, or words.
ex How many stamps do you see? What is the total cost of the stamps?


1 How many stamps do you see? What is the total cost of the stamps?

| $4{ }^{4}$ | $4^{¢} 4^{\frac{8}{4}}$ | $4^{\text {¢ }}$ |
| :---: | :---: | :---: |
| $4^{\text {¢ }}$ | $4^{\text {¢ }}$ | $4^{\text {d }}$ |
| $4^{\text {¢ }}$ | $4^{¢} 4^{\text {¢ }}$ | $4^{\text {d }}$ |

2 How many stamps do you see? What is the total cost of the stamps?

| $3^{\text {¢ }}$ | $3^{\text {¢ }}$ | $3^{\text {¢ }}$ | $3^{\text {¢ }}$ | J |
| :---: | :---: | :---: | :---: | :---: |
| $3^{\text {b }}$ | $3^{\text {¢ }}$ | $3^{\text { }}$ | $3^{\text {¢ }}$ | Z |

## Stamp Challenges page 2 of 2

3 How many stamps do you see? What is the total cost of the stamps?


4 Explain your thinking with sketches, words, and equations.
a Stevie has 4 cards with 8 stamps on each card. Cindy has 8 cards with 4 stamps on each card. Who has more stamps, Stevie or Cindy?
b Challenge Liz bought sixteen $3 \$$ stamps and used them to mail two letters to her grandparents. If each letter used the same number of stamps, how much did it cost to mail each letter?

C ChALLENGE Create a new set of stamps. Decide how many stamps you want in the array and how much each stamp costs. (They should all cost the same amount.) Then find the total cost of the stamps.

## Leaves \& Flower Petals page 1 of 2

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

| Answer the question. | Write an equation. |
| :---: | :---: |
| There are 3 flowers. How many leaves? $6$ | $2+2+2=6$ <br> or $3 \times 2=6$ |
| There are 3 flowers. How many petals? |  |
| $2$ <br> There are 7 flowers. How many leaves? |  |
| There are 4 flowers. How many petals? |  |

(continued on next page)

## Leaves \& Flower Petals page 2 of 2

Complete the following problems. Show your work using numbers, sketches, or words.
4 Mrs. Foley picked 27 flowers from her garden so her 3 children could each give a bouquet to their teachers. If each bouquet had the same number of flowers, how many flowers did each teacher get?

5 Which equation describes the situation in problem 4 above?

- $27+3=n$
- $3 \times n=27$
- $n+3=27$
- $27 \times 3=n$

6 ChALLENGE Terry had 14 tulips and twice as many daffodils. How many flowers did Terry have in all?


## Skip-Counting \& More page 1 of 2

1 Skip-count forward from each number. A few of the numbers have been filled in for you.

| 3 | 6 | 9 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 4 | 8 |  |  |  |  | 28 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 5 |  |  |  |  | 30 |  |  | 45 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2 a Solve the following problems.
$2 \times 10=$ $\qquad$
$4 \times 10=$ $\qquad$
$8 \times 10=$ $\qquad$
b What do you notice about these problems?

3 a Solve the following problems.
$4 \times 6=$ $\qquad$
$3 \times 8=$ $\qquad$
$2 \times 12=$ $\qquad$
b What do you notice about these problems?

## Skip Counting \& More page 2 of 2

4 Solve the following problems. Show your thinking using equations, sketches, or words.
a The greater roadrunner bird can run 14 miles per hour. That's 7 times faster than an ostrich can walk. How fast does an ostrich walk?
b ChALLENGE The body of a greater roadrunner is 16 inches long. Its tail is another 8 inches. The total length of a greater roadrunner is 4 times longer than a lovebird. How many inches long is the lovebird?

## Story Problems \& Number Line Puzzles page 1 of 2

## Story Problems

1 Solve each problem. Use pictures, numbers, or words to show your thinking. Then write an equation for the problem.
a Roza is 4 years old. Her sister Elsa is twice as old as Roza. How old is Elsa?

Equation: $\qquad$
b Theo's baby brother, Thomas, is 24 inches tall. Theo is twice as tall as Thomas. How tall is Theo?

Equation: $\qquad$
C Savannah has read 4 pages in her new book. Carlos has read 4 times as many pages as Savannah. How many pages has Carlos read?

Equation: $\qquad$

## Story Problems \& Number Line Puzzles page 2 of 2

## Number Line Puzzles

2 Here is a number line puzzle. Use what you know about multiplication to fill in the blanks.


3 Use pictures, numbers, and words to solve the problem. Then select the equations that represent the problem.
a Tim saw some monkeys sitting in trees at the zoo. There were 6 monkeys sitting in each tree. There were 24 monkeys in all. How many trees were there?
b Which two equations describe the situation in problem 3a?

- $24+6=n$
$6 \times n=24$
- $24-6=n$
- $24 \div 6=n$

4 challenge The Turner family went bike camping at a state park near their city. It took them 4 hours of riding to get there from their house. For the first 2 hours they rode 12 miles per hour. For the last 2 hours they rode 9 miles per hour. How far is the state park campground from their house?


## More Windows page 1 of 2

1 Figure out how many windowpanes are in each window. Show your thinking with words, numbers, and pictures. Write an equation for each problem.


2 Solve each equation below.
$\qquad$ $\times 4=24$
$8 \times$ $\qquad$ $=24$
$6 \times 4=$ $\qquad$
$10 \times$ $\qquad$ $=40$
$5 \times 8=$ $\qquad$
$\qquad$

$$
\times 5=40
$$

$3 \times 9=$ $\qquad$
$9 \times$ $\qquad$ $=27$
$\qquad$ $\times 3=27$
(continued on next page)

## More Windows page 2 of 2

3 Fill in the blanks in the skip-counts below.

|   12 16   28   40 |
| :--- |
| b |

4 Complete the problems below.
$2 \times 3=$ $\qquad$
$4 \times 3=$ $\qquad$

$$
8 \times 3=
$$

$10 \times 3=$ $\qquad$ $9 \times 3=$ $\qquad$

5 Complete the Number Line Puzzle below.


6 Solve each problem. Show your thinking with equations, sketches, or words.
a Carl can wash 8 windows in an hour. How many windows can he wash in 3 hours?
b challenge sarah can wash 7 windows in an hour. Lilja can wash 4 windows in an hour. How many windows can Sarah and Lilja wash in 4 hours if they work together?

## Mixed Practice page 1 of 2

## Number Puzzles

1 Find the missing numbers in the equations below.
$5 \times \ldots=20$
$4+$ $\qquad$ $=14$
$4 \times$ $\qquad$ $=28$

16 - $\qquad$ $=9$
$8 \times 2=$ $\qquad$
$\qquad$ $\times 3=24$
$9 \times 3=$ $\qquad$
-$-7=8$
$8 \times 4=$ $\qquad$
-_ $\times 6=36$
$9+$ $\qquad$ $=12$

2 Are the following true or false? Why?
a $9+5=10+4$ True False Explain:
b $9-5=10-4$ True False Explain:

C $9 \times 5=10 \times 4$ True False Explain:

Solve each problem. Show your thinking with equations, sketches, or words.
3 Suzie studies multiplication fact cards at home every Monday through Friday for 7 minutes on each of those days. How many minutes does she study the multiplication facts in a week?

4 Jim paid $\$ 48$ to buy a package of 6 flea treatments for his dog. How much does one flea treatment cost?

## Mixed Practice page 2 of 2

5 CHALLENGE Each flea treatment usually lasts for about 4 weeks, but one year the fleas were especially bad. Jim's dog needed to be treated for fleas every 3 weeks until the weather cooled off.
a How many weeks of flea treatments would Jim's dog get from one package if each treatment only lasted 3 weeks?
b In a normal year, when a flea treatment lasts 4 weeks, how many more weeks of treatments would Jim's dog get from one package?

6 CHALLENGE Bobby's favorite cupcakes come in packages of 4. He asked his grandma to buy them for a class party. She had to go to two grocery stores to get enough cupcakes for all the kids in the class. She bought 5 packages at the first store and 2 packages at the second store. How many cupcakes did Bobby's grandmother buy in all?


## Grocery Shopping page 1 of 2

1 Fill in the tables below.

| Grapes $\$ 3.00$ per pound |  |
| :---: | :---: |
| Number of <br> Pounds | Cost |
| 1 | $\$ 3.00$ |
| 2 |  |
| 4 |  |
| 10 | $\$ 15.00$ |
| 20 |  |


| Potatoes |  |
| :---: | :---: |
| Number of <br> Pounds | Cost |
| 1 | $\$ 1.25$ |
| 2 |  |
| 4 |  |
| 10 | $\$ 6.25$ |
| 12 |  |

## Missing Numbers

2 Find the missing numbers in the equations below.
$3 \times \ldots=12$ $\qquad$ $\times 3=18$
$7 \times 3=$ $\qquad$
$5 \times$ $\qquad$ $=25$
$7 \times 4=$ $\qquad$
$\qquad$

$$
\times 6=30
$$

$6 \times 4=$ $\qquad$
$6 \times \ldots=36$ $\qquad$ $\times 2=12$

## Grocery Shopping page 2 of 2

3 Solve each problem. Show your thinking with equations, sketches, or words.
a A 10-pack of instant oatmeal costs $\$ 2.00$. How much does each pack cost?
b Challenge Oranges are 2 pounds for $\$ 1.00$. Apples are $\$ 2.00$ per pound. Chris bought 5 pounds of oranges and 3 pounds of apples. How much did Chris pay for all the fruit?


## Favorite Pets page 1 of 2

1 Look at the two graphs below and then answer the following questions.


a Do the picture graph and the bar graph above represent the same data?
b Why or why not?

C Using the picture graph, tell how many students are in the class. Explain how you know.
d Using the bar graph, tell how many students are in the class. Explain how you know.

2 CHALLENGE Mr. Neon's class took a survey to find out everyone's favorite fruit. The number of votes for each fruit is listed below. On a separate sheet of paper, draw a picture graph that shows the information. Be sure your graph has a title and labels. Bananas: 3 Apples: 7 Grapes: 6 Watermelon: $4 \quad$ Strawberries: 4 (continued on next page)

## Favorite Pets page 2 of 2

## Review

3 Conrad says that $8 \times 7$ is the same as $8 \times 5$ plus $8 \times 2$. Do you agree or disagree? Explain your thinking.

4 Alexis says that $6 \times 9$ is the same as $6 \times 9$ plus $6 \times 9$. Do you agree or disagree? Explain your thinking.

5 CHALLENGE Melea needs to provide 200 pieces of fruit for the local elementary school. Melea has 15 baskets. Each basket has 9 pieces of fruit in it. Does Melea have enough fruit? Show your thinking with numbers, pictures, or words.


## The Pencil Survey page 1 of 2

One day last spring, Ms. Brown asked her third graders to clean out their desks. She couldn't believe how many pencils most of the kids pulled out. "So that's where all the pencils have been!" she thought.

Ms. Brown decided to take a survey to find out how many pencils had been hiding in the kids' desks. The table below shows the survey results.

| Number of <br> Pencils | Number of <br> Students |
| :---: | :---: |
| 1 | 2 |
| 2 | 7 |
| 3 | 8 |
| 4 | 5 |
| 7 | 3 |
| 8 | 2 |
| 10 | 1 |
| 12 | 1 |

1 a Record the data on the line plot below.

b What was the most common number of pencils for a student to have in their desk in the spring?

## The Pencil Survey page 2 of 2

2 a The next year, Ms. Brown thought, "I will ask the students to clean out their desks earlier this year so we don't run out of pencils so fast." The line plot below shows how many pencils the kids found in their desks that time.

b What was the most common number of pencils for a student to have in their desk in the fall?

3 Were there more pencils hiding in the students' desks last spring (see problem 1) or in the fall (see problem 2)? Explain how you figured it out.

4 Challenge Exactly how many pencils were hiding in students' desks when Ms. Brown did the fall survey? (Hint: Be careful! The answer is not 24 pencils.)

## (通 Multiplying \& Dividing page 1 of 2

1 Complete the multiplication facts.

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

2 Complete the division facts.

$$
100 \div 10=
$$

$16 \div 2=$ $\qquad$ $25 \div 5=$ $\qquad$
$12 \div 2=$ $\qquad$
$3 \div 1=$ $\qquad$
$20 \div 2=$ $\qquad$
3 CHALLENGE Use what you know about basic fact strategies to solve these multiplication problems.

| 24 | 42 | 329 | 13 | 1,946 | 500 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $\times \quad \times \quad \times 10$ | $\times \quad 1$ | $\underline{1}$ | $\underline{6}$ |  |  |

4 a Would the product of $3,407 \times 10$ be odd or even? $\qquad$
b How do you know?

## Multiplying \& Dividing page 2 of 2

5 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.
a How many jars can he fill? Show all your work.
b How many flowers did Will have left over?


6 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 $\$ 3$.
a How much money will she spend in all? Show all your work.
b Write an equation to represent this problem. Use the letter $m$ to stand for the amount of money Mai spent in all.


7 CHALLENGE 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 994. How much money did she spend in all? Show all of your work.

## Rounding to the Nearest Ten page 1 of 2

You can use a number line to help round to the nearest ten. If a number is closer to the next larger multiple of 10 , round up. If it is closer to the next smaller multiple of 10 , round down.

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.
ex Round 127 to the nearest ten. Use the number line to help.

$127 \underline{130}$

1 Round each number to the nearest ten. Use the number line to help.

a 78 $\qquad$
b 75 $\qquad$
C 74 $\qquad$

2 Round each number to the nearest ten. Use the number line to help.

a 267 $\qquad$
b 262 $\qquad$
C 265 $\qquad$

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 43 $\qquad$
b 85 $\qquad$
C 18 $\qquad$
d 282 $\qquad$
e 617 $\qquad$
f 539 $\qquad$

## Rounding to the Nearest Ten page 2 of 2

4 The third and fourth graders at Fernwood School are going on a field trip. They will fill 3 school buses. Each bus holds 52 passengers. How many people will be going on the field trip? Show your work.


5 ChALLENGE Mr. Kelly bought 8 dozen hot dogs for the third grade picnic. His pet dog broke into the groceries and ate 14 hot dogs. If each picnic guest eats one hot dog, how many people can still have a hot dog? Show your work.


## Round \& Round page 1 of 2

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

| Numbers to Add | Rounded to the Nearest Ten | Estimated Sum |
| :---: | :---: | ---: |
| ex $237+349$ | $240+350$ | 240 |
|  |  | +350 |
| 590 |  |  |

The sum of 237 and 349 is about equal to 590 .

| Numbers to Add | Rounded to the Nearest Ten | Estimated Sum |
| :---: | :---: | :---: |
| a $168+122$ |  |  |
| The sum of 168 and 122 is about equal to |  |  |


| Numbers to Add | Rounded to the Nearest Ten | Estimated Sum |  |
| :--- | :--- | :--- | :---: |
| b $\quad 147+618$ |  |  |  |
| The sum of 147 and 618 is about equal to |  |  |  |

2 Estimate for each story problem below. Explain your estimation using numbers, sketches, or words.
a Ravi likes to ride on the merry-go-round. Each ride lasts for 49 seconds. If Ravi takes 2 rides, about how long does he spend on the merry-go-round?
b Each ride on the merry-go-round costs 97 cents. If Ravi rides the merry-goround 4 times, about how much does he have to pay?

## Round \& Round page 2 of 2

Show all your work when you solve these story problems.
3 Midge is a tiger shark and Bruce is a great white shark. Midge is 396 centimeters long and Bruce is 609 centimeters long. How many centimeters longer is Bruce than Midge?

4 Which equation does NOT describe the situation in problem 3?

- $609-396=c$
- $396+609=c$
$396+c=609$
- $609-c=396$

5 CHALLENGE The greater roadrunner (a bird that runs better than it flies) can run 16 miles per hour. A frightened ostrich can run 3 times faster.
a How fast can a frightened ostrich run?
b How far can a frightened ostrich run in half an hour?

C Fill in the boxes to complete an equation to represent problem 5 b.

$$
16 \times \quad \div \quad=m
$$

## Rounding to Tens \& Hundreds page 1 of 2

## Note to Families

This worksheet gives students practice rounding to the nearest ten and hundred. Round numbers to the nearest ten by checking the digit in the ones place. If that digit is 5 or greater, round up to the next ten. If the digit is 4 or less, the digit in the tens place stays the same. When you round to the nearest hundred, check the digit in the tens place. If that digit is 5 or greater, round up to the next hundred. If that digit is 4 or less, the digit in the hundreds place stays the same.

1 Round the following numbers to the nearest 10.

| 32 | 378 | 87 |
| :--- | :--- | :--- | :--- |
| 1,055 | 63 |  |

2 Round the following numbers to the nearest 100.

| 213 | 347 | 59 |
| :--- | :--- | :--- | :--- |
| 408 | 2,665 |  |

3 Round the following:

|  | to the nearest $\mathbf{1 0}$ | to the nearest $\mathbf{1 0 0}$ |
| :--- | :--- | :--- |
| 26 |  |  |
| 493 |  |  |
| 1,845 |  |  |
| 802 |  |  |
| 199 |  |  |

## Rounding to Tens \& Hundreds page 2 of 2

Show all your work for these problems.
4 Andy's class wants to help poor families in Guatemala grow their own food. A \$35 donation to a relief organization will provide a family with the seeds and tools they need to build a vegetable garden.
a Mark the most reasonable estimate for how much it would cost to help 4 families build vegetable gardens:

- $\$ 75.00$
- $\$ 100.00$
- $\$ 150.00$
- $\$ 200.00$
b What is the exact cost of seeds and tools for 4 family gardens through the relief organization?

C If Andy's class raises $\$ 167$, how much money will be left over?

5 CHALLENGE A donation of $\$ 75$ to the relief organization can bring a health counselor to a poor neighborhood in Indonesia to help mothers improve their children's health. Ms. Murray and Mr. Austin both have 30 students in their classes. If each child gives $\$ 5$, how many neighborhoods can they provide health counselors for?

## Two-Digit Addition, Card Collecting \& Shopping page 1 of 2

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

| a $30+65=$ | b $42+35=$ | C $46+38=$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

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

Two-Digit Addition, Card Collecting \& Shopping page 2 of 2
Show your work when you solve these problems.
3 DVD players are on sale for $\$ 84$. That's $\$ 35$ off the regular price. What is the regular price?

4 ChALLENGE MP3 players cost $\$ 85$ each. Mark has a coupon that will take $\$ 15$ off the total if he buys two. If he uses his coupon, how much will Mark pay for two MP3 players?

## Construction Paper, Scooters \& Snails page 1 of 2

1 Solve the subtraction problems. Show all your work.

| a $67-28=$ | b $83-37=$ |
| :--- | :--- | :--- |
| C $92-54=$ | d $500-199=$ |

2 Mr. Jones needs 126 pieces of construction paper to do an art project with his students. He has a full pack with 50 sheets of paper and an open pack with some more sheets. How many more sheets 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.
O 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.

## Construction Paper, Scooters \& Snails page 2 of 2

3 Angela wants to buy a scooter. She has saved $\$ 57$ from birthday money and $\$ 19$ more by doing gardening jobs for neighbors. The scooter costs $\$ 125$. How much more money does Angela need?
a Estimate the amount of money Angela still needs, and explain your thinking. How did you get your estimate?
b Which equation does not represent this problem? (The letter $m$ stands for money.)

$$
\$ 57+\$ 19+m=\$ 125
$$

- $\$ 125-\$ 57-\$ 19=m$
. $\$ 125+\$ 57+\$ 19=m$
. $\$ 125-m=\$ 57+\$ 19$
C Figure out how much more money Angela actually needs to buy the scooter. Show your work.

4 Challenge Lucy, a garden snail, laid 4 batches of eggs one summer. Each batch had 53 eggs, but 17 eggs from each batch didn't survive. How many of Lucy's eggs hatched into baby snails?
a Write an equation to represent this problem. Use the letter $s$ to stand for baby snails.
b Solve the problem. Show all of your work.

## Estimates \& Exact Answers page 1 of 2

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 Estimate and solve.
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 |
| :---: | :---: | :---: |
| a $\begin{array}{r} 487 \\ -\quad 309 \\ \hline \end{array}$ |  |  |
| b $\begin{array}{r} 1,825 \\ -\quad 643 \\ \hline \end{array}$ |  |  |

## Estimates \& Exact Answers page 2 of 2

Show all your work when you solve these problems.
3 Angie's grandma lives in Cleveland, Ohio, and is going to drive to Minneapolis, Minnesota, to visit Angie and her family. The two cities are 752 travel miles apart, and it takes 12 hours to drive that far.
a Angie's grandma wants to do the drive in two days. If she drives the same amount each day, how many miles will she drive each day?
b How many hours will she spend driving each day?

4 challenge Christy's family is driving from St. Louis, Missouri, to Boston, Massachusetts, to visit her cousins. The distance is 1,162 miles, and the driving time is 17 hours and 38 minutes. Christy's mother wants to do the drive in 3 days, going about the same number of miles each day.
a About how many miles will they drive each day?
b About how many hours will they spend driving each day?


## 命 Jump Rope for Charity page 1 of 2

1 Solve each problem below. You may use any strategy that is efficient for you. Be sure to show your work.
a Tyson and Amanda are jumping rope to raise money for charity. Amanda jumped rope 295 times. Tyson jumped 316 times. How many times total did they jump?
b Beck and Sam are also jumping rope for charity. Beck jumped 345 times. Sam jumped 255 times. How many times did they jump in all?

C Loretta and Claire are shooting baskets to raise money for field trips. Loretta made 123 baskets. Claire made 128 baskets. How many baskets did they make together?

## Jump Rope for Charity page 2 of 2

2 Solve the two problems below, using any strategy you choose. Be sure to show your work.

| 275 |  |
| :--- | :--- |
| +336 |  |
|  |  |

3 CHALLENGE Stella and Colette are jumping rope to raise money for the local Children's Hospital. Every time they jump 100 times, they earn one dollar. Stella jumped 487 times. Collette jumped 464 times. Did Stella and Colette jump enough times to raise $\$ 10$ for the Children's Hospital? Show all your work.

