

SECOND EDITION HOME CONNECTIONS


## Bridges in Mathematics Second Edition Grade 2 Home Connections Volumes 1 \& 2

The Bridges in Mathematics Grade 2 package consists of:

| Bridges in Mathematics Grade 2 Teachers Guide Units 1-8 | Number Corner Grade 2 Teachers Guide Volumes 1-3 |
| :--- | :--- |
| Bridges in Mathematics Grade 2 Assessment Guide | Number Corner Grade 2 Teacher Masters |
| Bridges in Mathematics Grade 2 Teacher Masters | Number Corner Grade 2 Student Book |
| Bridges in Mathematics Grade 2 Student Book | Number Corner Grade 2 Teacher Masters Answer Key |
| Bridges in Mathematics Grade 2 Home Connections Volumes $1 \& 2$ | Number Corner Grade 2 Student Book Answer Key |
| Bridges in Mathematics Grade 2 Teacher Masters Answer Key | Number Corner Grade 2 Components \& Manipulatives |
| Bridges in Mathematics Grade 2 Student Book Answer Key | Word Resource Cards |
| Bridges in Mathematics Grade 2 Home Connections Answer Key |  |
| Bridges in Mathematics Grade 2 Components \& Manipulatives |  |
| Bridges Educator Site |  |
| Work Place Games \& Activities |  |

## Digital resources noted in italics.

The Math Learning Center, PO Box 12929, Salem, Oregon 97309. Tel 1 (800) 575-8130
www.mathlearningcenter.org
© 2017 by The Math Learning Center
All rights reserved.
Bridges and Number Corner are registered trademarks of The Math Learning Center.
Prepared for publication using Mac OS X and Adobe Creative Suite.
Printed in the United States of America.
To reorder Home Connections, refer to number 2B2HC5 (package of 5 sets, Volumes 1 \& 2).
QBB2903 (1 \& 2)
Updated 2017-06-14.
The Math Learning Center grants permission to reproduce and share print copies or to share electronic copies of the materials in this publication for use in the classroom for which the publication was purchased. Licensed users may share print or electronic copies of the materials with other district staff and teachers and with students and their families in support of implementation in the classroom for which the materials were purchased. All other uses and distribution of the materials are expressly prohibited, and you may not make print or electronic copies of the materials available for public access. For usage questions, please contact The Math Learning Center.

Bridges in Mathematics is a standards-based K-5 curriculum that provides a unique blend of concept development and skills practice in the context of problem solving. It incorporates Number Corner, a collection of daily skill-building activities for students.

The Math Learning Center is a nonprofit organization serving the education community. Our mission is to inspire and enable individuals to discover and develop their mathematical confidence and ability. We offer innovative and standards-based professional development, curriculum, materials, and resources to support learning and teaching. To find out more, visit us at www.mathlearningcenter.org.

ISBN 978-1-60262-326-2

## Bridges Grade 2

## Home Connections Volumes 1 \& 2

Unit 1
Figure the Facts
Numbers \& Shapes ..... 1
Addition \& Subtraction Practice .....  3
Doubles \& More ..... 5
Thinking About Fives .....  7
Number Lines \& Patterns ..... 19
Searching for Pairs ..... 21
Finding the Difference ..... 23
More Story Problems ..... 25
Fact Strategy Practice ..... 27
Unit 2
Place Value \& Measurement with Jack's Beanstalks
These Beans Have Got To Go! ..... 29
Tens, Dollars \& Quarters ..... 35
Cubes \& Tens ..... 37
Add, Subtract \& Compare ..... 39
Place Value Showdown ..... 41
Addition \& Subtraction Practice ..... 53
Tens \& Time ..... 55
Facts \& Numbers ..... 57
Make Tens ..... 59
Twos \& More ..... 61
Unit 3
Addition \& Subtraction Within One Hundred
Steps \& Leaps ..... 63
Puzzles \& Shapes ..... 69
Subtracting on the Line \& Solving Story Problems ..... 71
Family Age Number Line ..... 73
Adding, Counting \& Solving Problems ..... 75
Tens \& Ones, Nuts \& Carrots ..... 77
Shopping \& Adding ..... 79
Solving Presents \& Parcels Story Problems ..... 81
Shopping \& Subtracting ..... 83
Sorting \& Graphing a Collection ..... 85
Unit 4
Measurement
Pencil Puppy \& Pal ..... 89
Subtraction \& Graphing Practice ..... 91
Inchworm's Garden \& Fives Practice ..... 93
Paths \& Piggybanks ..... 95
Adding, Subtracting \& Measuring ..... 97
Subtraction Facts \& Coin Problems ..... 99
Computation \& Story Problems ..... 101
Math with Pencil Puppy ..... 103
Two-Digit Subtraction \& Story Problems ..... 105
Patterns with Numbers \& Beads ..... 107
Unit 5
Place Value to One Thousand
Extra Facts ..... 109
Comparing \& Fact Family Practice ..... 111
Large Numbers ..... 113
Thinking About Place Value ..... 115
Tens, Nines, Clocks \& Coins ..... 117
Mr. Mole's Money ..... 119
Money \& Time Problems ..... 121
Numbers from 900 to 1,000 ..... 123
Lines, Buttons \& Adding Practice ..... 125
Numbers, Cubes \& Marbles ..... 127
Unit 6
Geometry
Place Value on Wheels ..... 129
Last Shape In Wins ..... 131
Facts \& Shapes ..... 133
Sorting Quadrilaterals ..... 135
Three-Dimensional Shape Hunt ..... 139
Missing Numbers ..... 141
Halves, Bowls \& Vans ..... 143
Half \& Half ..... 145
Halves \& Extra Facts ..... 147
Exploring Symmetry ..... 149
Unit 7
Measurement, Fractions \& Multi-DigitComputation with Hungry Ants
Different Ways to Look at the Same Number ..... 151
Ants \& Hotdogs ..... 153
Subtraction \& Measuring Practice. ..... 155
More Ant Stories ..... 157
Fraction Races \& More ..... 159
Twice as Big? ..... 161
Numbers \& Buttons ..... 165
Fractions \& Money ..... 167
Equations \& Story Problems ..... 169
Cleaning Desks \& Measuring Lines ..... 171
Unit 8Measurement, Data \& Multi-DigitComputation with Marble Rolls
Estimation Problems ..... 173
Riddles \& Toys ..... 175
Comparing Numbers \& Sharks' Lengths ..... 177
Meters \& Math ..... 179
Numbers, Clocks \& Crayons ..... 181
Combinations \& Crayons. ..... 183
Equations, Expressions \& Toys ..... 185
Addition, Subtraction \& Fraction Practice ..... 187
Comparing Animal Weights ..... 189
Number Patterns. ..... 191

## (次) Numbers \& Shapes page 1 of 2

1 Trace the words and numbers. Then draw a line to the matching set.


2 Fill in the missing numbers on the line below.


## Numbers \& Shapes page 2 of 2

3 There were 3 apples on the table. Jan put 6 more apples on the table. How many apples were on the table in all? Show your work.

There were $\qquad$ apples on the table in all.


4 CHALLENGE Make a picture that is worth 24 . You can use shapes like these. Label your picture. Prove that it is worth $24 \mathrm{\phi}$.

Square: 5¢


Circle: $4 \zeta$


Triangle: 3¢


## Addition \& Subtraction Practice page 1 of 2

1 Add. Count the dots to help.
$\begin{array}{r}5 \\ +0 \\ \hline 5\end{array}$ $\begin{array}{r}4 \\ +\quad 2 \\ \hline\end{array}$

$\begin{array}{r}3 \\ +\quad 2 \\ \hline\end{array}$

6

+1 | $\bullet \bullet$ | $\bullet$ |
| :--- | :--- |
| $\bullet \bullet \bullet$ |  |



$$
\begin{array}{r}
2 \\
+\quad 2 \\
\hline
\end{array}
$$


1

+4 $\quad \bullet$| $\bullet$ | $\bullet$ |
| :--- | :--- |



$$
\begin{array}{r}
1 \\
+\quad 5 \\
\hline
\end{array}
$$



$$
\begin{array}{r}
6 \\
+\quad 2 \\
\hline
\end{array}
$$



2 Subtract. Cross out the dots to help.


## Addition \& Subtraction Practice page 2 of 2

3 Marco has 6 dollars. How many more dollars does he need to have 10 dollars in all? Show your work.

Marco needs $\qquad$ dollars to have 10 dollars in all.


4 challenge Katy has 5 dollars. How many more dimes does she need to have 8 dollars in all? Show your work.

Katy needs $\qquad$ more dimes to have 8 dollars in all.

4

## Doubles \& More page 1 of 2

1 Add.


2 Find the sums. Make dots in the frames to show the answers.
$4+3=$ $\qquad$ $3+2=$ $\qquad$
$5+4=$ $\qquad$


$$
4+4=
$$

$\qquad$
$4+3=$ $\qquad$
$5+5=$ $\qquad$

$2+3=$ $\qquad$
$4+5=$ $\qquad$
$2+2=$ $\qquad$

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




Doubles \& More page 2 of 2
3 Gus had some fish. He got 6 more fish at the pet store. Now he has 11 fish. How many fish did Gus have to start with? Show your work.

Gus started out with $\qquad$ fish.


4 Challenge Mrs. Jones has ducks and sheep on her farm. The animals have a total of 6 heads and 16 legs. How many ducks does Mrs. Jones have? How many sheep does Mrs. Jones have? Show your work.

Mrs. Jones has $\qquad$ ducks and $\qquad$ sheep.


## Thinking About Fives page 1 of 8

## Note to Families

This assignment includes a game we just learned in class and a worksheet that provides more practice counting by, adding, and subtracting 5 s. Read the game instructions with your child, cut out the cards, and play the game several times. Then have your child complete the worksheet and return it to school.

## Materials

- Thinking About Fives pages 1-8
- paperclip and pencil for spinner


## Instructions

1 Cut out the 24 cards on pages 3,4 and 5 .
2 Mix the cards and stack them face-down.
3 Using the game board on page 6, play the game.

- Each player draws a card.
- Players count by 5 s and 1 s to determine the worth of the cards.
- Compare the cards and place them where they belong on the game board. If the cards are equal, put them in the middle of the game board. The player who wins the next spin gets to take them.
- Spin the spinner to determine who gets to take the cards.


Child The spinner landed on greater than! I got 25 and you only got 14-I get to take both cards this time!

## Thinking About Fives page 2 of 8

4 Continue playing until you are out of cards. The player with the most cards at the end wins.

5 Complete pages 7 and 8 and return them to your teacher.

Thinking About Fives page 3 of 8


$\vdash-\sim-\quad-\quad-\quad$

$\qquad$


(continued on next page)


Thinking About Fives page 4 of 8



Thinking About Fives page 5 of 8





## Thinking About Fives page 7 of 8

1 Write the 5 s counting pattern to 50 under the ten-frames below. The first 3 numbers have been done for you.


2 Solve these equations. Use the ten-frames above to help if you like.
$5+5=$ $\qquad$ $15+5=$ $\qquad$ $30+5=$ $\qquad$

$$
25+5=
$$

$\qquad$
$45+5=$ $\qquad$

$$
5-5=
$$

$15-5=$ $\qquad$ $30-5=$ $\qquad$
$25-5=$ $\qquad$
$45-5=$ $\qquad$
$20-5=$ $\qquad$
$35+5=$ $\qquad$

Thinking About Fives page 8 of 8
3 Answer the questions about fingers and toes.


How many fingers in all? $\qquad$

hands


How many fingers in all? $\qquad$
How many toes in all? $\qquad$


How many toes in all? $\qquad$

4 Challenge 35 toes-how many feet?
Hint Draw a picture to help.
$\qquad$ feet

## Number Lines \& Patterns page 1 of 2

1 Trace each number and then practice writing it twice.

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| ) | - | \% | \% | ) | $\cdots$ | \% | $\cdots$ | ¢ | \% |

2 Fill in the missing numbers on each number line below.

b


C

(continued on next page)

## Number Lines \& Patterns page 2 of 2

3 James had 13 baseball cards. He gave 6 to his brother. How many baseball cards does James have now? Show your work.

James has $\qquad$ baseball cards now.

4 ChaLlenge Mai threw 3 darts at the board. All 3 of them stuck in the board. What are all the different scores she could get? Show your work.


## Searching for Pairs page 1 of 2

## Note to Families

To practice the 2 s counting pattern and just have a little fun, work with your child to find and list some of the many things around your house that come in pairs. Then have your child complete the rest of the assignment and return it to school.

1 Search your home for things that come in pairs, like shoes and mittens. What else can you find? List some of your discoveries below.


2 Think about a pair of mittens.

How many mittens are there in 1 pair? $\qquad$

How many mittens are there in 2 pairs? $\qquad$

How many mittens are there in 3 pairs? $\qquad$
3 Fill in the missing numbers on the Mittens Chart below.


| Pairs of <br> Mittens | 1 | 2 |  | 4 |  | 6 | 7 |  | 9 | 10 | 20 | 30 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Individual <br> Mittens | 2 | 4 | 6 |  | 10 |  |  | 16 |  |  |  |  |  |

(continued on next page)

## Searching for Pairs page 2 of 2

4 Write the numbers from 1 to 30 in the grid below. Then color in just the even numbers, starting with 2 .

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

5 Solve these equations.
a $4+2=$ $\qquad$ $14+2=$ $\qquad$ $24+2=$ $\qquad$ $8+2=$ $\qquad$
$\qquad$ $28+2=$ $\qquad$
$16-2=$ $\qquad$
$26-2=$ $\qquad$
$10-2=$ $\qquad$
$20-2=$ $\qquad$
$30-2=$ $\qquad$
$14-2=$
$\qquad$
b CHALLENGE Sam says the answers to all of these problems are even. Do you agree with Sam? Why or why not?

6 Answer the questions about these insects.


How many spots in all? $\qquad$ in all? $\qquad$ in all? $\qquad$ in all? $\qquad$

## Finding the Difference page 1 of 2

1 Suzy Spider and Freddy Fly are playing another game of Battling Bugs. Fill in the sentence beside the strips to show the difference between their scores in each problem below. Write or complete a subtraction equation to match.


2 Add up each bug's points to find out who won the game.


3 Which bug won? $\qquad$ By how many points? $\qquad$ Show your work.

## Finding the Difference page 2 of 2

You can use ten-strips to show the difference between two numbers. You can also use bars like this.

| $\mathbf{8}$ |  |
| :---: | :---: |
| $\mathbf{5}$ | 3 | The difference between $\qquad$ 8 and $\qquad$ 5 is $\qquad$ .

$$
8-5=3
$$

4 Label the white piece on each of the bar drawings below. Then fill in the sentence and write a subtraction equation to match.


5 CHALLENGE Gretchen and her dad went to the football game last week. By the end of the second quarter, the Vikings had 6 points and the Ducks had 21 points. The Vikings scored 23 more points before the end of the game, and the Ducks scored 13 more points.
a Which team won the game?
b How many points did they win by? Use sketches, numbers, and/or words to explain your answer.

## (rix More Story Problems page 1 of 2

A story problem gives you some facts and asks a question. For each problem:

- Underline the facts.
- Put a box around the question.
- Solve the problem and show your work.
- Write the answer on the line.

ex There were 7 ladybugs on the leaf. Then 6 more landed on the leaf. How many ladybugs in all?

$$
7+6=13
$$

There were 13 ladybugs in all.
1 There were 10 ladybugs sitting on a leaf. A bird came and chased 4 of them away. How many ladybugs were left?
$\qquad$ ladybugs were left.
2 There are 4 ladybugs on the leaf. How many legs in all? (Ladybugs have 6 legs.)

There are $\qquad$ legs in all.

## More Story Problems page 2 of 2

3 There were 5 ladybugs on a leaf. Some more ladybugs came. Then there were 12 ladybugs on the leaf. How many ladybugs came?
$\qquad$ ladybugs came.

4 Mark has 3 dogs, 5 cats, and 8 fish. How many pets does he have in all? Show your work.

Mark has $\qquad$ pets in all.


5 challenge Here are two clues.

- Carly has 2 more nickels than dimes in her pocket.
- She has 40 cents.

How many nickels does Carly have? How many dimes does Carly have? Show your work.

Carly has $\qquad$ nickels. Carly has $\qquad$ dimes.


## Fact Strategy Practice page 1 of 2

1 Color the ten-strips to match each addition problem. Write the answer.


2 Find each difference.

| 10 | 11 | 8 | 9 | 6 | 7 | 4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-5}$ | $\underline{-5}$ | $\underline{-4}$ | $\underline{-4}$ | $\underline{-3}$ | $\underline{-3}$ | $\underline{-2}$ |
|  |  |  |  |  |  |  |
| 14 | 15 | 12 | 13 | 16 | 17 | 18 |
| $\underline{-7}$ | $\underline{-7}$ | $\underline{-6}$ | $\underline{-6}$ | -8 | $\underline{-8}$ | $\underline{-9}$ |

Fact Strategy Practice page 2 of 2
3 Color the ten-strips to match each addition problem. Write the answer.

a
b

C



g

4
$+9$


4 Find each difference.

| 16 | 16 | 12 | 12 | 15 | 15 | 18 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ |
|  |  |  |  |  |  |  |
| 18 | 14 | 14 | 13 | 13 | 17 | 17 |
| $-\mathbf{- 9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ |

## These Beans Have Got To Go! page 1 of 4

## Note to Families

Winning is not just a matter of luck in this game where players take turns spinning and adding. Certain sums are going to come up more often than others. It is easier to spin a total of 7 than a total of 2 , for instance, simply because there are more combinations for 7 on the spinners. You can get a 7 by spinning $1+6$ or $2+5$ or $3+4$. The only way to get a 2 is by spinning $1+1$. Your child will probably want to place a bean on every number "just to be safe," but will learn through experience that the middle numbers usually come up more often. The second part of the assignment will help them find out why.

## Materials

- These Beans Have Got To Go! pages 1-4
- 24 game pieces, 12 each in 2 different colors (e.g., 12 lima and 12 pinto beans, 12 red and 12 white buttons, 12 pennies and 12 dimes, 12 red and 12 yellow Legos)
- paperclip and pencil for spinner
- crayons or colored pencils


## Instructions

1 Each player should place his or her beans on the game board (page 2).


Note You can place more than 1 bean on a particular number.


2 Players take turns spinning two numbers, adding them, and removing a game piece.

- The first player spins both spinners and adds the two numbers.
- If the player has any beans on that total, she can remove one bean from that section of the board. Her turn is over.
- If there are no beans on that total, the player's turn is over.

3 Continue playing until one player moves all the beans from his or her board. This player is the winner.

4 Play the game several times and talk about ideas that would help someone win. (Hint: You might want to do pages 3 and 4 of this assignment first.)




## These Beans Have Got To Go! page 3 of 4

Are you wondering why the middle numbers keep winning on the the game you just played? Fill in the sums on the addition table shown below and follow the instructions for coloring them in-you might begin to see why it's a better idea to put your beans on the 6 and the 7 instead of the 2 and the 12 .

1 Fill in the sums on the addition table below.
2 Color in the table using the rules below.

- 6 s red
- 7s orange
- 8 s yellow

| $\mathbf{+}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | $\cdots$ | $\cdots$ |  |  |  |  |
| $\mathbf{2}$ |  |  |  |  |  |  |
| $\mathbf{3}$ |  |  |  |  |  |  |
| $\mathbf{4}$ |  |  |  |  |  |  |
| $\mathbf{5}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

(continued on next page)

These Beans Have Got To Go! page 4 of 4
3 Which sums came up the most often on the addition table?

4 Which came up the least often on the addition table?

5 Why do you think it worked this way?

## Tens, Dollars \& Quarters page 1 of 2

1 Circle the two numbers in each box that add up to 10 .

| $\mathbf{e x}$ |  | $\mathbf{a}$ |  | $\mathbf{b}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 3 | 5 | 4 | 7 | 2 | 2 | 8 |
| 5 | 1 | 6 | 2 | 3 | 0 | 5 | 3 |

2 Write two addition equations and two subtraction equations to match each ten-frame.

| ex | a |
| :---: | :---: |
|  |  |
| $\begin{array}{lll} 6+4=10 & & 10-4=6 \\ 4+6=10 & & 10-6=4 \end{array}$ |  |
| b | C |

3 Find each difference.
10
10
10
10
10
10
10
$-7$

- 5
- 6
$-3$
$-4$
- 9
$-2$

4 Fill in the missing numbers.
$3+$ $\qquad$ $=10$ $\qquad$ $+5=10 \quad 4+6=$ $\qquad$
$9+$ $\qquad$ $=10$
$10=7+$ $\qquad$
$10=8+$ $\qquad$
$\qquad$ $=10 \quad 1+4+5=$ $\qquad$

Tens, Dollars \& Quarters page 2 of 2
5 Jana has 7 dollars. How many more dollars does she need to have 14 dollars in all? Show your work.

Jana needs $\qquad$ dollars.


6 Challenge Timmy has 7 dollars. How many more quarters does he need to have 12 dollars in all? Show your work.

Timmy needs $\qquad$ more quarters.


## Cubes \& Tens page 1 of 2

1 Write a number to show how many tens and ones are in each box below.


2 Fill in the missing numbers on the number line below.


3 Find each sum.

| 20 | 10 | 30 | 40 | 50 | 15 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| +10 | $\underline{+5}$ | $\underline{+8}$ | $\underline{+6}$ | $\underline{+10}$ | $\underline{+5}$ |

## Cubes \& Tens page 2 of 2

4 Write an equation to match each cube train.
ex


$$
5+5=10
$$

b

a


C


5 Color in the cube train to match the equation.
ex $6+4=10$

b $3+7=10$

a $8+2=10$


C $1+2+3+4=10$

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

6 Find each difference.
$10-0=$ $\qquad$
$10-3=$ $\qquad$
$10-9=$ $\qquad$
$10-2=$ $\qquad$
$10-4=$ $\qquad$
$10-1=$ $\qquad$
$10-5=$ $\qquad$
$10-8=$ $\qquad$
$9-4=$ $\qquad$
$10-6=$ $\qquad$
$10-7=$ $\qquad$
$10-10=$ $\qquad$

7 Fill in the missing numbers.
$\qquad$
$5+$ $=10$ $\qquad$ $+7=10$
$10=6+$ $\qquad$ $10=1+$ $\qquad$

## Add, Subtract \& Compare page 1 of 2

1 Fill in the missing numbers on the addition tables. Some of the numbers have already been filled in for you.
a

| + | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 3 |  |  |  |  |  |
| 2 |  |  | 6 |  |  |  |
| 3 |  |  |  |  |  | 10 |
| 4 |  |  |  |  |  |  |
| 5 |  | 8 |  |  | 11 |  |
| 6 |  |  |  |  |  |  |

b

| + | 3 | 4 | 5 | 6 | 7 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | 6 |  |  |  |  |  |
| 4 |  |  | 9 |  |  |  |
| 5 |  |  |  |  |  | 13 |
| 6 |  |  |  |  |  |  |
| 7 |  | 11 |  |  | 14 |  |
| 8 |  |  |  |  |  |  |

2 Fill in the missing numbers on the subtraction tables. Some of the numbers have already been filled in for you.
a

b


## Add, Subtract \& Compare page 2 of 2

3 Here are six pairs of Unifix cube collections. For each pair, write a mathematical statement to show exactly how many cubes are in each collection, as well as which is greater and which is less.

$$
\text { < less than } \quad=\text { equal to } \quad>\text { greater than }
$$

| $60 \geqslant \quad 45$ | a $\qquad$ |
| :---: | :---: |
| b $\qquad$ |  |
| d $\qquad$ | $\qquad$ |

## Place Value Showdown page 1 of 6

## Note to Families

This game uses drawings to stand for numbers. The little square unit stands for 1 , the strip of ten stands for 10, and the mat of one hundred stands for 100. If you have a collection of 2 mats, 3 strips, and 4 units, you're looking at 234. Place Value Showdown will help your child become more comfortable reading, understanding, and comparing 2-and 3-digit numbers. After you have played the game once or twice, have your child use the game cards to complete the written assignment on the last page. Return the written portion to school, but keep the game at home to play again.

## Materials

- Place Value Showdown, pages 1-6
- Place Value Showdown cards, cut out from pages 2-5


## Instructions

1 Cut out the cards on the 3 attached sheets. Mix them thoroughly and place them in a stack, face-down.

2 Take turns drawing a card and reporting how many units you see. The person with the card that's worth more gets to take both.


Child I got 167. What did you get, Dad?
Adult I only got 130. You get this pair!

3 Continue until there are no cards left. The player with the most cards wins.
4 Shuffle the cards and play again.


Place Value Showdown page 2 of 6



Place Value Showdown page 3 of 6



Place Value Showdown page 4 of 6

© The Math Learning Center \| mathlearningcenter.org


Place Value Showdown page 5 of 6



## Place Value Showdown page 6 of 6

1 Take all the game cards you just used to play Place Value Showdown and put them in order from the lowest to the highest. Then record the numbers in order on the lines below. The first three have been done for you.
$13 \quad 15 \quad 19$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

2 Add.


| $\square$ |  |  |  |
| :--- | :--- | :--- | :--- |
| $\square$ |  |  |  |


$+10$


$$
\begin{array}{r}
21 \\
+\quad 10 \\
\hline
\end{array}
$$

18
$+10$
43

3 What happens every time you add 10 to a number?

## Addition \& Subtraction Practice page 1 of 2

1 Complete the problems below.
a Circle all the +2 facts in blue. Then find each sum.
b Circle all the +10 facts in red. Then find each sum.

| 2 | 10 | 2 | 5 | 7 | 9 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +6 | +1 + | +8 | + 2 | +2 | +10 | + 4 |
| 10 | 10 | 2 | 2 | 10 | 6 | 11 |
| +4 + | $\begin{array}{r} \\ +7 \\ \hline\end{array}$ | +8 | + 2 | + 3 | +10 | + 2 |

2 Complete the problems below.
a Circle all the -2 facts in blue. Then find each difference.
b Circle all the -10 facts in red. Then find each difference.

| 10 | 14 | 6 | 9 | 12 | 19 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -2 | $\underline{-10}$ | - 2 | -2 | $\underline{-10}$ | $\underline{-10}$ | -2 |
| 13 | 17 | 4 | 16 | 14 | 18 | 11 |
| -2 | $\underline{-10}$ | -2 | -10 | -2 | $\underline{-10}$ | -2 |
| 15 | 20 | 5 | 8 | 11 | 20 | 3 |
| -2 | $\underline{-10}$ | - 2 | -2 | $\underline{-10}$ | $\underline{-10}$ | -2 |

3 True or false? Circle one.
a $10+5=15$ T F
b $7+7=13 \quad$ T F
C $5+6=11$ T F
d $13-3=8 \quad$ T F
e $14-7=7$ T F
f $19-10=9 \quad$ T F
(continued on next page)

## Addition \& Subtraction Practice page 2 of 2

Sometimes story problems give you more facts than you need to solve the problem. In each problem below, cross out the information you don't need. Then solve the problem. Show your work.

4 Neena bought 7 red apples, 8 green apples, and 3 yellow apples. Neena is 12 years old. How many apples did Neena buy?

Neena bought $\qquad$ apples.

5 Pedro had 15 dollars. He spent 9 dollars on a book. His friend had 12 dollars. How much money did Pedro have left?

Pedro had $\qquad$ dollars left.


6 The gym teacher had 16 soccer balls. She had 14 footballs. She gave 8 of the soccer balls to the playground helper. How many soccer balls did she have left?

The gym teacher had $\qquad$ soccer balls left.

7 CHALLENGE The ladybug ate 28 aphids in the morning. Then she took a nap on a leaf for 3 hours. She ate 34 aphids in the afternoon. How many aphids did she eat in all?

The ladybug ate $\qquad$ aphids in all.


## 

1 Make Ten facts are pairs of numbers that add up to 10 , like $5+5,4+6$, and $8+2$.
a Circle all the Make Ten facts in red. Then find each sum.
b Circle all the facts that are not Make Ten facts in blue. Then find each sum.

| 4 | 6 | 3 | 5 | 4 | 9 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| + 6 | + 1 | $\begin{array}{r}+8 \\ \hline\end{array}$ | + 5 | + 3 | + 1 | + 4 |
| 5 | 3 | 2 | 7 | 6 | 5 | 10 |
| + 4 | $\begin{array}{r}7 \\ + \\ \hline\end{array}$ | $\begin{array}{r}\text { + } \\ \hline\end{array}$ | +2 | $\begin{array}{r}\text { + } \\ \hline\end{array}$ | $\begin{array}{r} \\ +3 \\ \hline\end{array}$ | $\begin{array}{r}\text { + } \\ \hline\end{array}$ |
| 6 | 6 | 5 | 3 | 1 | 2 | 3 |
| + 1 | + 4 | $\begin{array}{r}\text { + } \\ \hline\end{array}$ | $\begin{array}{r}+7 \\ \hline\end{array}$ | $\begin{array}{r}+9 \\ \hline\end{array}$ | +2 | +6 |

2 Find each sum. Use the Make Ten facts to help.

a $2+9+1+6=$ $\qquad$
b $3+4+8+2=$ $\qquad$

C $3+7+4+6=$ $\qquad$
d $3+3+5+5=$ $\qquad$
e $6+5+5+9+1=$ $\qquad$ f $7+2+3+7+1=$ $\qquad$

## Tens \& Time page 2 of 2

## Time Problems

We use the abbreviations a.m. and p.m. (or with capital letters as A.M. and P.M.).
People often say that times in the a.m. are morning times, but a.m. really indicates any time between midnight and noon.

People often say that times in the p.m. are times in the afternoon or night. But p.m. really indicates any time between noon and midnight.

When it's 3:00 a.m., it is so early in the morning that it's not even light yet. Most people are asleep. When it's 3:00 p.m. in the afternoon, that's just about the time school gets out. Most people are awake at 3:00 p.m.

3 Circle the time that people would probably do each of these things on a school day.

| Activity |  |  | a.m. | p.m. |
| :---: | :---: | :---: | :---: | :---: |
| a | Eat dinner |  | 6:00 a.m. | 6:00 p.m. |
| b | Eat breakfast |  | 7:00 a.m. | 7:00 p.m. |
|  | Watch TV |  | 5:00 a.m. | 5:00 p.m. |
| d | Do homework |  | 4:00 a.m. | 4:00 p.m. |
| e | Turn on a night-light |  | 8:30 a.m. | 8:30 p.m. |
| f | Ride a bike |  | 3:30 a.m. | 3:30 p.m. |

4 On another piece of paper, draw a picture of something you do at 10:00 a.m. on a school day.

## Facts \& Numbers page 1 of 2

1 Complete the problems below.
a Circle all the Doubles facts (e.g., $10+10$ ) in blue. Then find each sum.
b Circle all the Doubles Plus or Minus One facts (e.g., $4+5$ ) in red. Then find each sum.

| 2 | 2 | 5 | 5 | 4 | 4 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} \\ +2 \\ \hline\end{array}$ | $\begin{array}{r} \\ +3 \\ \hline\end{array}$ | $\begin{array}{r} \\ + \\ \hline\end{array}$ | +6 | $\begin{array}{r}+3 \\ \hline\end{array}$ | + 4 | +6 |
| 6 | 6 | 7 | 8 | 9 | 9 | 11 |
| + 5 | $\begin{array}{r}7 \\ + \\ \hline\end{array}$ | $\begin{array}{r}7 \\ + \\ \hline\end{array}$ | $\begin{array}{r}8 \\ + \\ \hline\end{array}$ | +9 | +10 | +11 |
| 3 | 3 | 8 | 12 | 12 | 13 | 13 |
| +3 | $\begin{array}{r} \\ +4 \\ \hline\end{array}$ | +8 | +12 | +13 | +13 | +14 |

2 Complete the problems below.
a Circle all the Half facts (e.g., 8-4) in blue. Then find each difference.
b Circle all the Take Away Ten facts in red. Then find each difference.

| 10 | 15 | 6 | 19 | 13 | 14 | 4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| -5 | -10 | -3 | -10 | $\underline{-10}$ | $\underline{-7}$ | $\underline{-2}$ |
|  |  |  |  |  |  |  |
| 16 | 20 | 12 | 40 | 60 | 100 | 80 |
| -8 | -10 | -6 | -20 | -30 | -50 | -40 |

3 True or false? Circle one.
a $6+7=13 \quad$ T F
b $9+8=17 \quad$ T F
C $5+5=9 \quad$ T F
d $14-7=8 \quad$ T $\quad$ F
e $16-8=10$ T F
f $12-6=6 \quad$ T F
(continued on next page)

## Facts \& Numbers page 2 of 2

## 4 Trace the numerals and the words.



5 Write words to label each set of base ten pieces with the correct number.
ex ninety-four

b

a


C


## Make Tens page 1 of 2

1 Make Ten facts are pairs of numbers that add up to 10 , like $9+1,4+6$, and $3+7$.
a Circle all the Make Ten facts in red. Then find each sum.
b Circle all the facts that are not Make Ten facts in blue. Then find each sum.

| 7 | 6 | 2 | 7 | 5 | 10 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +3 | +6 | +8 | $\begin{array}{r}+7 \\ \hline\end{array}$ | $\begin{array}{r}\text { + } \\ \hline\end{array}$ | $\begin{array}{r}\text { + } \\ \hline\end{array}$ | + 4 |
| 6 | 3 | 8 | 7 | 6 | 9 | 0 |
| $\begin{array}{r} \\ + \\ \hline\end{array}$ | $\begin{array}{r}\text { + } \\ + \\ \hline\end{array}$ | +8 | +8 | +4 + | $\begin{array}{r}+9 \\ \hline\end{array}$ | +10 |
| 10 | 1 | 4 | 3 | 4 | 2 | 10 |
| +10 | +9 | + 6 | +2 | +3 | +8 | + 9 |

2 Find each sum. Use the Make Ten facts to help.

a $3+7+9+1=$ $\qquad$

b $2+6+4+2=$ $\qquad$
C $9+5+5+3+7=$ $\qquad$
d $8+2+5+2+5=$ $\qquad$

3 Find each difference.

$$
\begin{array}{lll}
10-6=\ldots & 10-8= & 10-5= \\
10-9= & 10-3= \\
10-1=\ldots & 10-4= & 10-2=
\end{array}
$$

## Make Tens page 2 of 2

## Number Line Problems

DJ Hopper says you can use what you know about Making Tens to help subtract.
If the fact is $15-9$, you can think about making a ten $(9+1=10)$ and then adding 5 more to get to 15 . DJ likes to show his work on the number line, like this.
$15-9=6$


1 Make hops on the number line and label them to solve subtraction problems.

$$
\text { ex } 14-8=\underline{6}
$$


a $13-7=$ $\qquad$

b $15-7=$ $\qquad$


C $12-8=$ $\qquad$


## Twos \& More page 1 of 2

1 Fill in the missing numbers. Then color in the count-by-2s numbers, starting with 2 ( $2,4,6,8$, and so on).

|  |  |  | ! |  |  |  |  | \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% |  |  | $\cdots$ |  |  |  |  | \% |
|  |  |  | ! |  |  | \% |  |  |  |
|  |  | \% |  |  | अ |  | अ |  |  |

2 Find each sum.
$6+2=$ $\qquad$ $2+10=$ $\qquad$
$24+2=$ $\qquad$
$2+12=$ $\qquad$
$18+2=$ $\qquad$ $30+2=$ $\qquad$ $14+2=$ $\qquad$ $8+2=$ $\qquad$

3 Find each difference.
$\qquad$ $12-2=$ $\qquad$
$16-2=$ $\qquad$
$10-2=$ $\qquad$ $28-2=$
$36-2=$ $\qquad$ $24-2=$ $\qquad$ $40-2=$ $\qquad$

## 4 Fill in the blanks.


(continued on next page)

Twos \& More page 2 of 2
5 Rosa had 13 fish in the tank. She put some in her brother's fish bowl. Now Rosa has only 9 fish in the tank. How many did she give to her brother?

She gave her brother $\qquad$ fish.


6 ChALLENGE Find different ways to make 234. Finish the chart. Be sure to fill in every box.

|  | Dimes | Nickels | Pennies |
| :---: | :---: | :---: | :---: |
| ex | 2 | 0 | 3 |
| ex | 1 | 2 | 3 |
| a | 1 | 1 |  |
| b | 1 | 0 |  |
| C | 0 | 4 |  |
| d | 0 |  |  |
| e | 0 |  |  |
| f | 0 |  |  |
| g | 0 |  |  |

## Steps \& Leaps page 1 of 6

## Note to Families

This Home Connection is a game that students have been playing at school. In Steps \& Leaps, players work on separate sheets to try to be first to reach or cross the 100th space. They take turns rolling two dice to determine the number of small steps to take forward and spinning a spinner to leap forward by 10s. As you play, encourage your student to find ways to count by 5 s or 10 s to move forward on the board.

## Materials

- Steps \& Leaps pages 1-6
- pencil and paperclip to make a spinner
- 2 dice numbered or dotted 1-6
- 2 small objects (beans, buttons, etc.) for game markers


## Instructions

1 Give each player a game board (one of pages 3-6) and a game marker. Write your name on your game board and roll the dice to choose which player will go first.

2 Have the first player roll the dice and spin the spinner to move around his or her game board.

- Roll the dice. Move forward that many spaces, and record the number of the square on the space where you land.
- Spin the spinner on the next page using a pencil and paperclip. Leap forward by that many 10 s. Record the numbers of the squares where you land each time you take a leap of 10 .


I was on 31 . I rolled 11 and stepped to 42 . I spun 2 tens, so I took 2 jumps by 10 s and landed on 52 and 62.
3 After the steps and leaps are recorded, the other player rolls, spins, and records their steps and leaps on their own game board. The first player to reach or cross over 100 is the winner.

4 Using the other two game boards, play the game again. Then complete the problems on page 2 and return this sheet to school.

Steps \& Leaps page 2 of 6


Count by 10s to fill in the blanks.
1 10, 20, $\qquad$ , $\qquad$ , 50, $\qquad$ , 70, $\qquad$ , 90, $\qquad$
2 14, 24, $\qquad$ , $\qquad$ , 54, $\qquad$ , 74, $\qquad$ 94, $\qquad$ 114, 124

326, $\qquad$
$\qquad$ , 56, 66, $\qquad$ , $\qquad$ , $\quad$, 106, $\qquad$ ,

4 Challenge $\qquad$
$\qquad$ , , — , , $\qquad$ , 99, $\qquad$ , $\qquad$ , ,

5 Add to solve each combination below.

$$
43+10=
$$

$$
56+10=
$$

$87+10=$ $\qquad$ $72+10=$ $\qquad$
$24+20=$ $\qquad$
$21+20=$ $\qquad$
$45+30=$ $\qquad$

6 Subtract to solve each combination below.
$15-10=$ $\qquad$
$19-10=$ $\qquad$
$23-10=$ $\qquad$
$34-20=$ $\qquad$
$56-20=$ $\qquad$
$88-30=$ $\qquad$
$97+40=$ $\qquad$

7 CHALLENGE Solve the equations below.

$$
120+50+20-40=
$$

$330-20+50-60=$ $\qquad$
$500-50-40-20+120=$ $\qquad$
(continued on next page)

Steps \& Leaps page 3 of 6
Player 1 $\qquad$ Player 2 $\qquad$


60



30


| 1 |  |  |  |  |  |  |  |  | 10 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Steps \& Leaps page 4 of 6
Player 1 $\qquad$ Player 2 $\qquad$


60



30


| 1 |  |  |  |  |  |  |  |  | 10 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Steps \& Leaps page 5 of 6
Player 1 $\qquad$ Player 2 $\qquad$


60



30


| 1 |  |  |  |  |  |  |  |  | 10 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Steps \& Leaps page 6 of 6
Player 1 $\qquad$ Player 2 $\qquad$


60



30


| 1 |  |  |  |  |  |  |  |  | 10 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Puzzles \& Shapes page 1 of 2

1 Fill in the missing numbers to solve these equations. Use the pictures to help.

| a $\quad=5+5$ | b $10=2+4+$ |
| :---: | :---: |
|  |  |
|  | $95$ |
| C $10=\ldots+2$ | $\text { d } 7+\ldots=10$ |
|  |  |
| (3) (3) (3) | (3) (2) (2) (3) |
| e $10-\ldots=4$ | $\text { f } 10-\quad=7$ |
|  |  |
|  |  |
| g $4+5=\ldots+7$ | h $10-5=2+$ |
| $54545$ | $454545$ |
| $4545$ | 88 8 8 8 |

2 Fill in the missing numbers to solve these equations.
$5+4+1=$ $\qquad$ $6+4+$ $\qquad$ $=13$
$5+$ $\qquad$ $+9=19$ $=6$
14 - $\qquad$ $=7$
$12-6=$ $\qquad$
$10-3=2+$ $\qquad$ $12-6=2+$ $\qquad$ $16-8=$ $\qquad$ $+1$

3 CHALLENGE Fill in the missing numbers to solve these equations.

$$
90-30=20+\ldots \quad 143-11=127+\ldots \quad 160-18=\ldots \ldots \ldots+15
$$

## Puzzles \& Shapes page 2 of 2



4 How much does this shape picture cost? Circle the coins you could use to pay for it.


5 Draw a vehicle (car, boat, truck, plane, scooter, bike, skateboard) that costs 75\$. Label your picture with the prices. Add the numbers to check your work.

## Subtracting on the Line \& Solving Story Problems page 1 of 2

DJ Hopper says you can use what you know about making 10 to help subtract.
If the fact is $15-8$, you can think about making $10(8+2=10)$ and then adding 5 more to get to 15 . DJ likes to show his work on the number line, like this.


1 Make hops on the number line and label them to solve subtraction problems.
a $14-7=$ $\qquad$

b $16-9=$ $\qquad$


C $13-6=$ $\qquad$

d $14-8=$ $\qquad$

(continued on next page)

## Subtracting on the Line \& Solving Story Problems page 2 of 2

2 Jose, Matt, and Dani went to the library. They each checked out 5 books. How many books is that in all? Show your work.

Jose, Matt, and Dani checked out $\qquad$ books in all.


3 Challenge show your work on each problem. Four granola bars cost $\$ 2.00$.
a How much does 1 granola bar cost? $\qquad$
b How much do 2 granola bars cost? $\qquad$

C How much do 5 granola bars cost?


## Family Age Number Line page 1 of 2

## Note to Families

Students have been learning how to use the number line to solve subtraction problems. In this assignment, your child will use a length of adding machine tape to make a number line that shows the ages of some of the people in your family, and then use the number line to solve some problems.

## Materials

- Family Age Number Line, pages 1-2
- length of adding machine tape (brought home from school)
- pencil and crayons or colored markers


## Making the Number Line

1 In the table below, write the names and ages of 5 to 7 family members. This can include children, adults, grandparents, cousins, aunts, uncles, or even pets.

| Name | Age |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

2 Now write the ages you listed above in order, from youngest to oldest, on the lines below. (There are 7 lines, but you only have to use as many as you need.)
$\qquad$
$\qquad$ , $\qquad$ , $\qquad$
$\qquad$ , $\qquad$
least
$\qquad$
$\qquad$
$\square$
$\square$
$\square$
$\square$ greatest

3 Get the length of adding machine tape you brought home. Write a 0 at the far left side and the age of the oldest person you listed on the right side. Here is an example.
067

4 Now write the rest of the ages you listed where they belong on the adding machine tape.

## Family Age Number Line page 2 of 2

## Solving Problems on the Number Line

5 Use your adding machine tape number line to help figure out the difference between the oldest and youngest person on your list. Show the strategy you used on the open number line below. Then write your answer.

The oldest person on my family list is $\qquad$ years older than the youngest person on my family list.

6 Choose an adult in your family and use the adding machine tape number line to help figure out the difference between your age and the adult family member's age. Show the strategy you used on the open number line below. Then write your answer.


My family member is $\qquad$ years older than I am.

7 Timmy is 8 . His dad is 32 . Use hops on the open number line below to find out how much older Timmy's dad is than Timmy. Then fill in the missing numbers in the equations below.


8 CHALLENGE Why does the same number work in both of the equations above?

## Adding, Counting \& Solving Problems page 1 of 2

1 Fill in the missing numbers to complete the addition facts.
$5+5=$ $\qquad$ $4+4=$ $\qquad$ $2+2=$ $\qquad$
$8+$ $\qquad$ $=16$
$9+$ $\qquad$ $=18$
$\qquad$

$$
+6=12
$$

$\qquad$

$$
+3=6
$$

$$
10+2=
$$

$\qquad$

$$
6+10=
$$

$\qquad$
$3+$ $\qquad$ $=13$
$10+$ $\qquad$ $=18$
$8+$ $\qquad$ $=16$

2 Fill in the missing numbers to complete the pattern.
a Skip-count forward by 5 s
b Skip-count forward by 5 s

5, 10, 15, $\qquad$ , 25, $\qquad$ , 40, $\qquad$ , 50, $\qquad$ , $\qquad$ , 65

C Skip-count forward by 5 s
d Skip-count forward by 5 s
13, 18, 23, $\qquad$ , 33, $\qquad$ ,

$$
19,24, \ldots, 34,39,
$$

$\qquad$ , 49
e Skip-count backward by 5 s.
f Skip-count backward by 5 s.
30, 25, $\qquad$ , 15, $\qquad$ ,

27, 22, $\qquad$ , 12, $\qquad$ ,

3 ChaLlenge Skip-count by 5 s. Circle the word to show whether you went forward or backward each time.
a $143,138,133$, $\qquad$ , 123, $\qquad$ , 113, $\qquad$ , $\qquad$ , 98
forward backward
b $332,337,342$, $\qquad$ , 352, 357, $\qquad$ , $\qquad$ , 372, $\qquad$ forward backward

C $488,493,498$, $\qquad$
$\qquad$ , 513, $\qquad$ , $\qquad$ , $\qquad$ , 533 forward backward
d $267,262,257$, $\qquad$ , $\qquad$ , , 237, $\qquad$ , 227, $\qquad$ forward backward

## Adding, Counting \& Solving Problems page 2 of 2

4 Mrs. Brown is the gym teacher. She has 15 soccer balls and 8 footballs.
a How many more soccer balls than footballs does Mrs. Brown have? Show your work.

Mrs. Brown has $\qquad$ more soccer balls than footballs.
b How many soccer balls and footballs does Mrs. Brown have in all? Show your work.

Mrs. Brown has $\qquad$ soccer balls and footballs in all.


5 Challenge Jason had 2 quarters and 1 dime. He went to the school store to spend all his money. What 3 things could he buy? Find at least 2 different answers. Show your work.

| School Store Price List |  |
| :---: | :---: |
| Markers | $\$ 0.25$ each |
| Tablets | $\$ 0.30$ each |
| Erasers | $\$ 0.10$ each |
| Pencils | $\$ 0.20$ each |
| Folders | $\$ 0.15$ each |

## 

1 Tell how many tens and ones there are in each set of base ten pieces．Then write an equation to show the total．

| ex | 105 | is |
| :---: | :---: | :---: |
|  | 3 | 6 |
|  | Equa |  |
|  | $30+6=36$ |  |
| a | 105 | 15 |
| 日明 |  |  |
| 园 | Equation |  |
|  |  | 15 |
|  | 105 |  |
|  |  |  |
|  | Equation |  |
|  |  |  |
| c | 105 | 15 |
|  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | ${ }^{105}$ | 15 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

2 Tell how many dimes and pennies there are in each box．Then write an equation to show the total．

（continued on next page）

Tens \& Ones, Nuts \& Carrots page 2 of 2
3 The squirrels are hiding nuts for the winter. Three of the squirrels each got 4 nuts. Five of the squirrels each got 5 nuts. How many nuts do they have in all? Show your work.

The squirrels got $\qquad$ nuts in all.


4 ChALLENGE The zookeeper brought 9 bunches of carrots for the elephants. Each bunch had 5 carrots. He gave one of the elephants 24 carrots. How many carrots were left for the other elephants? Show your work.

There were $\qquad$ carrots left for the other elephants.


## Shopping \& Adding page 1 of 2

1 Erika went to the store. She got a pencil for 15 \& and a tablet for 25 \&. She gave the storekeeper 50¢. How much money did she get back? Show your work.

Erika got $\qquad$ back.


2 CHALLENGE Use the numbers in the box to solve the problems below.

| 15 | 24 | 6 | 8 | 3 | 17 | 4 | 20 | 32 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

a Find 2 numbers whose sum is 40 . $\qquad$
b Find 2 numbers whose sum is 18 . $\qquad$

C Find 2 other numbers whose sum is 18 . $\qquad$
d Find 2 numbers whose difference is 12 . $\qquad$
e Find 3 numbers that have the largest total. $\qquad$
f What is the total of those 3 numbers? Show your work.

## Shopping \& Adding page 2 of 2

3 Add. Use the pictures of base ten pieces to help. The second set of pieces for each problem is hidden, so you will have to draw them or imagine them.


## Solving Presents \& Parcels Story Problems page 1 of 2

## Note to Families

Your student has spent the last several days at school working to create and solve story problems about presents and groups of 10 presents called parcels. As students work on this Home Connection, ask them to show you how working in groups of 10 rather than counting by 1s can make their work faster. You may even choose to work alongside your student and share some of your strategies to arrive at the same answer.

## Solving Presents \& Parcels Story Problems

Read the presents and parcels story problems on this sheet and the next, and choose at least four you want to solve. Then go to work. Remember-the answer is not enough. You need to show how you solved each problem, using pictures, numbers, and/or words. Be sure to work in 10 s instead of 1 s whenever you can.
ex Emile is having a birthday party. There are 35 presents for Emile at the party. Some of the presents are in the closet, and 19 of the presents are on the table. How many presents are in the closet?


1 It was June 29, Vincent's birthday. There were 12 presents on the fireplace and 23 on the table. How many presents in all?

2 It was Jake and Sam's birthday. There were 26 presents. Jake and Sam wanted to split them evenly, but they didn't know how. Can you help them?

## Solving Presents \& Parcels Story Problems page 2 of 2

3 It was April 24, my sister's birthday. Six kids came to her party. She had it at Zippy's Pizza. Each kid brought 10 presents. My mom gave her 2 presents. How many presents did she get in all?

4 Today is Briana's 18th birthday. She knows there are 18 presents in the closet and also 23 presents under the table. Now Briana wants to know how many in all.

5 Dan was having a Valentine's party. There were 24 presents in the closet and 23 on the table. Then someone opened 12 of the presents. How many were not yet opened?

6 It was Jessie's big party. Jessie said to come at 5:00 PM. One of his friends peeked through the window. He saw only 13 presents. Jessie said there were supposed to be 42 presents. How many presents were in the closet?

7 challenge It was Taylor's 8th birthday and there were 47 presents. Each kid brought 10 presents, except for 3 kids who brought 5 presents each and 2 kids who brought 1 present each. How many kids came to Taylor's party?

## Shopping \& Subtracting page 1 of 2

1 Alex went to the store. She bought an orange for 25 d, an apple for 24 , and a banana for 234 . How much money did she spend in all? Show your work.

Alex spent $\qquad$ in all.


2 challenge Jake has 3 quarters and 4 nickels. An apple costs 20¢. How many apples can Jake buy? Show your work.

Jake can buy $\qquad$ apples.

(continued on next page)

Shopping \& Subtracting page 2 of 2
3 Subtract. Use the pictures of base ten pieces to help.


## Sorting \& Graphing a Collection page 1 of 3

## Note to Families

One of the mathematical topics we study in second grade is data analysis—collecting, graphing, and interpreting data. In this Home Connection, your child gets to organize and present information about one of his or her collections, or about a collection you have around the home. There are many sets of things that would work: rocks, shells, buttons, toy cars, stamps, books, cans of food, Legos, and so on. The only requirement is that there be 30 or more items in the collection and that there is enough variation in the items so they can be sorted in several different ways.

## Sorting a Collection

Find a collection of some type around your home. It can be almost anything-rocks, shells, action figures, buttons, nuts and bolts, crayons, sports cards, etc. The collection you use for this assignment should have somewhere between 30 and 100 items. Once you've decided on your collection, work with someone in your family to sort it in as many ways as you can. List your ideas on the next page.

Here's an example: Suppose I decide to sort my collection of toy cars. I could sort them by 2-door and 4-door, as I have in this picture. (I didn't have room to show all 30!) I could also sort them by color, size, make, or type. See if you can think of at least 5 different ways to sort your collection.


## Sorting \& Graphing a Collection page 2 of 3

Here's what I collected:

Here's how many there were in my collection:

Here are some ways we sorted the things in my collection:
$\left[\begin{array}{l}-2\end{array}\right.$

## Graphing a Collection

Look at all the ways you just sorted your collection. Now pick your favorite and make a graph about it on the back of this sheet. Here are some things to remember as you make your graph:

1 You don't have to mark all the columns if you don't need them, but be sure to label each column that you use.

2 If you have more than 10 items in any group, you'll have to make your graphing boxes stand for more than 1 . It's okay to have each box stand for 2,5 , or even 10 , depending on how many things you have to graph. Just remember to write your numbers in the boxes up the side so that we know how much each stands for.

3 Be sure to give your graph a title so that we understand what it's about.

Sorting \& Graphing a Collection page 3 of 3

© The Math Learning Center \| mathlearningcenter.org

## Pencil Puppy \& Pal page 1 of 2

1 Fill in the bubble next to the correct answer to each question.
a The number on Pencil Puppy's dog tag has a 6 in the tens place. It has a 4 in the ones place. What is the number
 on her tag?
○ 46
○ 64
○ 14
67
b The number on Pal's dog tag has a 7 in the tens place. It has a 3 in the ones place. What is the number on Pal's tag?

- 17
37
- 30
73

2 Fill in the correct answer.
a Pencil Puppy's house number has a 3 in the tens place.
It has a 5 in the ones place.
What is Pencil Puppy's house number? $\qquad$
b Pal's house number has a 7 in the ones place.
It has a 4 in the tens place.
What is Pal's house number? $\qquad$
3 Pencil Puppy has 43 pencils in her house. Pal has 29 pencils in his house. How many pencils do they have in all? Use numbers, pictures, and/or words to solve the problem and explain your answer.

Pencil Puppy and Pal have $\qquad$ pencils in all.
(continued on next page)

## Pencil Puppy \& Pal page 2 of 2

4 Add. Use the pictures of base ten pieces to help. The second set of pieces for each problem is hidden, so you will have to draw them or imagine them.


5 When Pencil Puppy does 2-digit addition, she adds the tens first. Next, she adds the ones. Then she adds the two numbers to get the answer. Try her strategy.

| ex |  |  | a |  |  | b |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| + | Tens | Ones | + | Tens | Ones | + | Tens | Ones |
|  | 3 | 7 |  | 4 | 8 |  | 5 | 8 |
|  | 2 | 7 |  | 3 | 4 |  | 2 | 8 |
| $\begin{aligned} & 30+20=50 \\ & 7+7=14 \\ & 50+14=64 \end{aligned}$$7+7=14 \operatorname{tg}$ |  |  | $\begin{aligned} & 40+30= \\ & 8+4= \\ & 70+12= \end{aligned}$ |  |  | $\begin{aligned} & 50+20= \\ & 8+8= \\ & 70+16= \end{aligned}$ |  |  |
| C |  |  | d |  |  | e |  |  |
|  | Tens | Ones |  | Tens | Ones |  | Tens | Ones |
|  | 2 | 5 |  | 3 | 4 |  | 4 | 5 |
| + | 6 | 9 | $+$ | 5 | 9 | + | 4 | 6 |
| $\begin{aligned} & 20+60= \\ & 5+9= \end{aligned}$ |  |  | $30+50=$$\qquad$$4+9=$ |  |  | $40+$ <br> $5+6$ |  |  |

## Subtraction \& Graphing Practice page 1 of 2

DJ Hopper makes hops on the number line to solve 2-digit subtraction problems.
Here's how he solved 53 - 26:

- Start at 26.
- Hop up to 30 .
- Now hop up to 50.
- Then hop up to 53 and add up all your hops. That tells how far it is from 26 to 53.


$$
4+20+3=27
$$

$$
\text { so } 53-26=27
$$

1 Try DJ's number line strategy to solve these subtraction problems.
a 45-17

$\qquad$
b 54-25

so $54-25=$ $\qquad$

C $57-18$

so $57-18=$

## Subtraction \& Graphing Practice page 2 of 2

## Favorite Pets

2 The second graders in Ms. Nelson's class made a graph with pictures to show their favorite pets. Each student put one picture on the graph to show his or her favorite pet. Use their graph to help answer the questions below.

| Our Favorite Pets |  |
| :---: | :---: |
| Fish | Mix Me |
| Birds | $\mathrm{Sem}_{\pi} \mathrm{SO}_{\pi} \mathrm{m}$ |
| Cats |  |
| Dogs |  |

a Which pet did most kids like the best? $\qquad$
b How many more kids like dogs than fish the best? $\qquad$
C How many fewer kids like birds than cats the best? $\qquad$
d Write an equation to show how many kids put pictures on this graph.

3 The kids in Ms. Nelson's class did a survey of all the second grades to find out about kids' favorite pets. Use their chart to help answer the questions below.
a How many more kids like fish than birds the best? Show your work.
b How many more kids like dogs than cats the best? Show your work.

| 2nd Grade Favorite Pets |  |
| :---: | :---: |
| Pets | Number of Kids |
| Fish | 17 |
| Birds | 8 |
| Cats | 45 |
| Dogs | 62 |

## Inchworm＇s Garden \＆Fives Practice page 1 of 2

Here is Little Inchworm＇s Garden．Use the inch side of your ruler to measure the path between each part of the garden．Write your answers on the chart below．


| From | To | How Many Inches？ |
| :---: | :---: | :---: |
| 1 | $i^{6}$ |  |
| 2 | 为 |  |
| 3 | 身 |  |
| 4 | \％ |  |
| 5 㫫 | 5 |  |
| 6 | 感 |  |

（continued on next page）

Inchworm's Garden \& Fives Practice page 2 of 2
7 Fill in the missing numbers. Then color in the count-by-5s numbers, starting with 5 ( $5,10,15,20$, and so on).


8 Find each sum.

$$
5+5=
$$

$$
15+5=
$$

$\qquad$ $21+5=$ $\qquad$ $34+5=$ $\qquad$
9 Find each difference.
$20-5=$ $\qquad$
$15-5=$ $\qquad$
$35-5=$ $\qquad$
$50-5=$ $\qquad$

10 Fill in the missing numbers on the number line below.


11 What's next in this skip-counting pattern?
$1,6,11,16$, $\qquad$ , $\qquad$ $+$

## Paths \& Piggybanks page 1 of 2

Little Inchworm wants to get from the house to the duck pond. She can use Path A, B, or C.


1 Which path looks shortest? (circle one)
Path A
Path B
Path C

2 Use the inch side of your ruler. Measure each path to find out which one is shortest.
a Path A is $\qquad$ inches long.
b Path $B$ is $\qquad$ inches long.

C Path C is $\qquad$ inches long.

3 Which path is shortest? $\qquad$
4 Which path is longest? $\qquad$
5 CHALLENGE Use a red pencil or marker. Draw the shortest path from the house to the duck pond. Measure your new path with the inch side of your ruler.

About how long is your new path? $\qquad$ inches

## Paths \& Piggybanks page 2 of 2

Ella took all the coins out of her piggy bank. She made a graph about them.


6 Does Ella have more dimes or more pennies? $\qquad$

7 Which coin does Ella have the most of? $\qquad$

8 How many fewer dimes are there than nickels? $\qquad$

9 How much money does Ella have in her bank? $\qquad$

10 ChALLENGE Ella wants to buy a binder for $\$ 1.00$. How much more money does she need? Show your work.

Adding, Subtracting \& Measuring page 1 of 2

## Hundreds Grid

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

1 Find each sum. Use the hundreds grid to help.

| 50 | 38 | 45 | 66 | 79 | 53 | 26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +10 | $\begin{array}{r}+10 \\ \hline\end{array}$ | +10 | +10 | +10 | +10 | +10 |
| 19 | 21 | 81 | 37 | 40 | 72 | 27 |
| +10 | +10 | +10 | +10 | +10 | +10 | +10 |

2 Find each difference. Use the hundreds grid to help.

| 75 | 55 | 42 | 99 | 87 | 18 | 21 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| -10 | -10 | -10 | $\underline{-10}$ | $\underline{-10}$ | $\underline{-10}$ | $\underline{-10}$ |
|  |  |  |  |  |  |  |
| 47 | 14 | 51 | 39 | 28 | 77 | 94 |
| -10 | -10 | -10 | $\underline{-10}$ | $\underline{-10}$ | -10 | $\underline{-10}$ |

## Adding, Subtracting \& Measuring page 2 of 2

3 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 |  |  |

4 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? $\qquad$
5 Rodney has a piece of rope that is 82 inches long. Simon has a piece of rope that is 27 inches long. How much longer is Rodney's piece of rope? Show all your work.

6 challenge Maria and Katy each have a piece of string. When they put the two 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.

## Subtraction Facts \& Coin Problems page 1 of 2

1 Complete the problems below.
a Circle all the Subtract 2 facts in blue. Then find each difference. (example 10-2 or 16-2)
b Circle all the Subtract Half facts in red. Then find each difference. (example 12-6 or 14-7)

C Circle all the Take Away Ten facts in green. Then find each difference. (example 14-10 or 19-10)
d Circle all the Back to Ten facts in purple. Then find each difference. (example 13-3 or 17-7)
e And now-see if you can use the facts you've circled and solved to help you figure out the rest!

| 15 | 14 | 13 | 10 | 14 | 14 | 19 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-2}$ | $\underline{-6}$ | $\underline{-3}$ | $\underline{-2}$ | $\underline{-7}$ | $\underline{-8}$ | $\underline{-9}$ |
|  |  |  |  |  |  |  |
| 15 | 17 | 17 | 11 | 16 | 18 | 19 |
| $\underline{-5}$ | $\underline{-8}$ | $\underline{-10}$ | $\underline{-2}$ | $\underline{-8}$ | $\underline{-8}$ | $\underline{-2}$ |
|  |  |  |  |  |  |  |
| 18 | 10 | 18 | 19 | 13 | 14 | 11 |
| $\underline{-9}$ | $\underline{-5}$ | $\underline{-4}$ | $\underline{-10}$ | $\underline{-2}$ | $\underline{-4}$ | $\underline{-5}$ |
|  |  |  |  |  |  |  |
| 16 | 14 | 12 | 16 | 14 | 12 | 20 |
| $\underline{-9}$ | $\underline{-10}$ | $\underline{-10}$ | $\underline{-10}$ | $\underline{-2}$ | $\underline{-4}$ | $\underline{-5}$ |
|  |  |  |  |  |  |  |
| 120 | 83 | 140 | 160 | 29 | 180 | 48 |
| $\underline{-60}$ | $\underline{-10}$ | $\underline{-70}$ | $\underline{-80}$ | $\underline{-2}$ | $\underline{-90}$ | $\underline{-8}$ |

## Subtraction Facts \& Coin Problems page 2 of 2

2 Sara has four coins in her right pocket. Together, they are worth 30 ¢. What four coins does Sara have in her right pocket? Show your work.

The four coins Sara has in her right pocket are

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

3 Sara has seven coins in her left pocket. Together, they are worth 24 . What seven coins does Sara have in her left pocket? Show your work.

The seven coins Sara has in her left pocket are

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

## (四) Computation \& Story Problems page 1 of 2

1 Find each sum.

| 9 | 9 | 10 | 9 | 10 | 9 | 9 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{+6}$ | $\underline{+9}$ | $\underline{+7}$ | $\underline{+7}$ | $\underline{+6}$ | $\underline{+10}$ | $\underline{+4}$ |
|  |  |  |  |  |  |  |
| 9 | 10 | 11 | 8 | 4 | 9 | 2 |
| +3 | $\underline{+7}$ | $\underline{+9}$ | $\underline{+9}$ | $\underline{+10}$ | $\underline{+5}$ | $\underline{+9}$ |
|  |  |  |  |  |  |  |
| 20 | 40 | 30 | 60 | 30 | 90 | 80 |
| $\underline{+9}$ | $\underline{+12}$ | $\underline{+8}$ | $\underline{+15}$ | $\underline{+17}$ | $\underline{+8}$ | $\underline{+14}$ |
|  |  |  |  |  |  |  |
| 20 | 32 | 58 | 62 | 40 | 70 | 75 |
| +29 | $\underline{+20}$ | $\underline{+30}$ | $\underline{+20}$ | $\underline{+39}$ | $\underline{+23}$ | +10 |

2 Find each difference.

| 16 | 16 | 13 | 13 | 18 | 18 | 20 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ |
|  |  |  |  |  |  |  |
| 50 | 40 | 30 | 60 | 70 | 90 | 80 |
| $\underline{-10}$ | $\underline{-20}$ | $\underline{-10}$ | $\underline{-40}$ | $\underline{-30}$ | $\underline{-40}$ | $\underline{-60}$ |
|  |  |  |  |  |  |  |
| 26 | 35 | 78 | 64 | 55 | 38 | 58 |
| $\underline{-10}$ | $\underline{-10}$ | $\underline{-20}$ | $\underline{-30}$ | $\underline{-40}$ | $\underline{-20}$ | $\underline{-20}$ |

## Computation \& Story Problems page 2 of 2

3 Sawyer is preparing a salad for dinner. He has 17 radishes and 8 tomatoes.
a How many more radishes than tomatoes does Sawyer have? Show your work.

Sawyer has $\qquad$ more radishes than tomatoes.
b How many radishes and tomatoes does Sawyer have in all? Show your work.

Sawyer has $\qquad$ radishes and tomatoes in all.


4 Chanel went to the craft store with 3 quarters and 2 dimes. She bought three different things from the list below. What three things might she have bought? Find at least two different answers. Show your work.

| Craft Store Price List |  |
| :---: | :---: |
| Brushes | $\$ 0.60$ each |
| Art Cards | $\$ 0.50$ each |
| Erasers | $\$ 0.10$ each |
| Mini-Pencils | $\$ 0.25$ each |
| Envelopes | $\$ 0.35$ each |

## Math with Pencil Puppy page 1 of 2

1 Add. Use the pictures of base ten pieces to help. The second set of pieces for each problem is hidden, so you will have to draw them or imagine them.
a

28
$+13$
b


2 Find each sum.

$$
70+8=
$$

$40+7=$ $\qquad$
$30+16=$ $\qquad$ $20+13=$ $\qquad$
3 Use Pencil Puppy's strategy for adding 2-digit numbers. Remember, she adds the tens first. Then she adds the ones. Then she finds the total.

(continued on next page)

## Math with Pencil Puppy page 2 of 2

4 Jen had some flowers. Her friend gave her 9 more flowers. Now she has 14 flowers. How many flowers did Jen have to start with? Show your work.

Jen had $\qquad$ flowers to start with.


5 CHALLENGE Jon had 4 oranges. He cut each orange into 8 slices. How many orange slices did he have in all? Show your work.
$\qquad$ orange slices in all.

## Two-Digit Subtraction \& Story Problems page 1 of 2

Use DJ's number line strategy to solve these subtraction problems.
ex 64-35

$\qquad$ so $64-35=$ $\qquad$

1 60-32

so $60-32=$ $\qquad$

2 54-27

$\qquad$ so $54-27=$ $\qquad$

3 71-26

$\qquad$ so $71-26=$ $\qquad$
(continued on next page)

## Two-Digit Subtraction \& Story Problems page 2 of 2

4 There were 15 cookies on the plate. The dog ate some of them. Now there are only 7 cookies on the plate. How many did the dog eat? Show your work.

The dog ate $\qquad$ cookies.


5 Ann had 4 apples. She cut each apple into 5 slices. Each slice had 3 seeds in it. How many seeds in all? Show your work.

There were $\qquad$ seeds in all.


## Patterns with Numbers \& Beads page 1 of 2

1 Fill in the missing numbers on this chart.

| 1 | 2 |  | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 |  | 15 | 16 |  | 18 | 19 | 20 |
| 21 |  | 23 | 24 | 25 |  | 27 | 28 | 29 | 30 |
|  | 32 | 33 | 34 | 35 | 36 | 37 | 38 |  | 40 |
| 41 | 42 |  | 44 | 45 | 46 | 47 |  | 49 |  |
| 51 |  | 53 | 54 |  | 56 | 57 | 58 | 59 | 60 |
|  | 62 | 63 | 64 | 65 |  | 67 | 68 |  | 70 |
| 71 | 72 |  | 74 | 75 | 76 |  | 78 | 79 |  |
| 81 | 82 | 83 |  | 85 | 86 | 87 |  | 89 | 90 |
| 91 |  | 93 | 94 |  | 96 | 97 | 98 | 99 | 100 |

a Color all the counting-by-2s numbers red.
b Color all the counting-by-5s numbers yellow.
C Color all the counting-by-10s numbers blue.
2 The numbers in the box are mixed up! Put them in order from least to greatest.

| 62 | 51 | 17 | 78 | 40 | 14 |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Patterns with Numbers \& Beads page 2 of 2

3 Trina has 17 beads. Nine of the beads are blue, and the rest are red.
a How many red beads does Trina have? Show your work.

Trina has $\qquad$ red beads.
b Trina wants to make a bracelet with her beads. How can she make a color pattern with her 17 blue and red beads? Draw a picture to show.

4 CHALLENGE Look for a pattern. Fill in the missing numbers that fit your pattern.
a $1,7,13,19$, $\qquad$ , $\qquad$
$\qquad$
b $2,7,12,17$, $\qquad$ , $\qquad$ , $\qquad$ , 37, $\qquad$ , $\qquad$ , 52

C $25,20,15$, $\qquad$ , $\qquad$ ,
d $24,20,16,12$, $\qquad$ , $\qquad$ , $\qquad$
e $1,2,4,7,11$, $\qquad$
$\qquad$ , 29, $\qquad$ , 46, $\qquad$
f $1,2,4,8$, $\qquad$ , $\qquad$ , $\qquad$ , 128, $\qquad$

## Extra Facts page 1 of 2

1 Find the sum.

| 80 | 30 | 44 | 50 | 70 | 51 | 60 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{+6}$ | $\underline{+43}$ | $\underline{+24}$ | $\underline{+38}$ | $\underline{+7}$ | $\underline{+17}$ | $\underline{+16}$ |
|  |  |  |  |  |  |  |
| 370 | 120 | 890 | 360 | 340 | 430 | 125 |
| $\underline{+8}$ | $\underline{+6}$ | $\underline{+4}$ | $\underline{+15}$ | $\underline{+50}$ | $\underline{+27}$ | $\underline{+25}$ |

2 Use pictures, numbers, and/or words to find the sum in each box. Show all your work.

| a $36+55$ | b | $129+133$ |
| :--- | :--- | :--- |
|  |  |  |

3 Find the difference.

| 86 | 39 | 48 | 56 | 35 | 55 | 50 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-6}$ | $\underline{-9}$ | $\underline{-7}$ | $\underline{-5}$ | $\underline{-15}$ | $\underline{-25}$ | $\underline{-25}$ |

4 Use pictures, numbers, and/or words to find the difference. Show all your work. $51-26=$

## Extra Facts page 2 of 2

Sometimes story problems give you more facts than you need to solve the problem. In each problem below, cross out the fact you don't need. Then solve the problem. Show your work.

5 Nick has 3 cats. He had 12 fish. He gave 4 of the fish to his friend. How many fish does he have left?

Nick has $\qquad$ fish left.


6 Lin's big sister is 15 . She listened to 8 songs on her music player in the morning. She listened to 9 more songs that night. How many songs did she listen to in all?

Lin's big sister listened to $\qquad$ songs in all.


7 Amber made 9 cupcakes. Then she made 12 more cupcakes. It took 2 cups of sugar to make the frosting. How many cupcakes did she make in all?

Amber made $\qquad$ cupcakes in all.


8 challenge The Green Dragon had 250 gold pieces. He is 18 feet tall. He is mad because the trolls took 60 of his gold pieces. How many gold pieces does he have left?

The Green Dragon has $\qquad$ gold pieces left.


## Comparing \& Fact Family Practice page 1 of 2

1 Count to find out which set of base ten pieces in each pair is greater and which is less. Write numbers and signs to show.


2 Read the numbers in the box. Then write them in order on the lines from least to greatest.

| 261 | 107 | 67 | 113 | 204 |
| :--- | :--- | :--- | :--- | :--- |

$\overline{\text { least }}$ ? $]_{\text {greatest }}$

## Comparing \& Fact Family Practice page 2 of 2

3 Match each Unifix train to its fact family triangle. Then write two addition and two subtraction sentences to match. Write them under the train.
a

b $\square$


C

d


## Large Numbers page 1 of 2

1 Trace the numerals and the words.


2 Label each set of base ten pieces with the correct number name.
ex

a

one hundred thirty-two

(continued on next page)
© The Math Learning Center \| mathlearningcenter.org

## Large Numbers page 2 of 2

3 Read each number. Then write it in expanded form.

| ex three hundred twenty-nine | a four hundred thirty-eight |  |
| :--- | :--- | :--- |
| $329=300+20+9$ |  |  |
| b $\quad$ two hundred sixteen | C five hundred seventy-three |  |
| d $\quad$ one hundred ninety-eight | e six hundred three |  |
| f $\quad$ nine hundred sixty-seven | $\mathbf{g}$ | eight hundred seventeen |

4 Find the sum.

| 300 | $5=$ | $500+40+5$ |  | $200+10+6=$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 400 | $9=$ | $100+10+8$ |  | $600+7=$ |  |  |
| 300 | 400 | 600 | 800 | 700 | 100 | 900 |
| 40 | 20 | 30 | 70 | 80 | 10 | 30 |
| +5 | + 6 | $\underline{+7}$ | +8 | +9 | $\underline{+5}$ | + 6 |

5 Circle one.

| a | The $\mathbf{4}$ in $\mathbf{5 7 4}$ is in the | ones place | tens place | hundreds place |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{b}$ | The $\mathbf{4}$ in $\mathbf{4 9 3}$ is in the | ones place | tens place | hundreds place |
| c | The $\mathbf{4}$ in $\mathbf{1 1 4}$ is in the | ones place | tens place | hundreds place |
| d | The $\mathbf{4}$ in $\mathbf{5 , 3 4 8}$ is in the | ones place | tens place | hundreds place |
|  |  |  |  |  |

## Thinking About Place Value page 1 of 2

1 Trace the numerals and the words.


2 Label each set of base ten pieces with the correct number name.


## Thinking About Place Value page 2 of 2



3 Tell what digit is in each place.

| a 643 $\qquad$ is in the tens place. $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. | b 286 | $\qquad$ is in the tens place. $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. |
| :---: | :---: | :---: |
| C 119 $\qquad$ is in the tens place. $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. | d 903 | $\qquad$ is in the tens place. $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. |
| e 2,643 $\qquad$ is in the tens place. $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. | f 5,502 | $\qquad$ is in the tens place. $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. |

4 challenge Solve these number riddles.
a I have a 9 in the tens place.
I have a 4 in the hundreds place.
The number in my ones
place is less than 3.
I am an even number.

What number am I? $\qquad$
b I have a 7 in the thousands place.
I have a 0 in the hundreds place.
I have a 3 in the tens place.
The number in my ones place is greater than 7.

I am an odd number.

What number am I? $\qquad$

## Tens, Nines, Clocks \& Coins page 1 of 2

1 Beckett had a quarter in his bank. His mom gave him another quarter for carrying in the groceries, and he found 2 nickels and 3 pennies in the car. How much money did he have in all? Show your work.

Beckett had $\qquad$ in all.


2 Willie, Donald, and Maya found a quarter, a dime, a nickel, and 2 pennies when they were cleaning the house. They traded their dad for some other coins that were worth the same amount of money and split up the money evenly. How much did they each get? Show your work.

Willie, Donald, and Maya each got $\qquad$ .


## Tens, Nines, Clocks \& Coins page 2 of 2

3 Find each sum.

| 400 | 400 | 550 | 550 | 780 | 780 | 670 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{+10}$ | $\underline{+9}$ | $\underline{+10}$ | $\underline{+9}$ | $\underline{+10}$ | $\underline{+9}$ | $\underline{+20}$ |
|  |  |  |  |  |  |  |
| 160 | 160 | 720 | 720 | 240 | 240 | 360 |
| $\underline{+10}$ | $\underline{+9}$ | $\underline{+10}$ | $\underline{+9}$ | $\underline{+30}$ | $\underline{+29}$ | $\underline{+40}$ |

4 Find each difference.

| 300 | 300 | 460 | 460 | 810 | 810 | 430 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-20}$ |
|  |  |  |  |  |  |  |
| 350 | 350 | 290 | 290 | 750 | 750 | 680 |
| $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-10}$ | $\underline{-9}$ | $\underline{-40}$ |

5 Read each of these clock faces and write the time on the digital clock.


## (可島 Mr. Mole's Money page 1 of 2

1 Mr. Mole digs tunnels every day. Sometimes he finds money buried in the ground. Count the money he found on Monday, Tuesday, and Wednesday.
Circle the correct amount in each box.

(continued on next page)

## Mr. Mole's Money page 2 of 2

2 Mr. Mole needs help! He is still a little mixed up about how to use the dollar sign, the cent sign, and the decimal point. Count the money in each box and write the amount correctly.


3 Put the amounts of money in order from least to greatest on the six lines below. Don't forget to use the dollar sign, the decimal point, and the cents sign wherever you need them.

| $\$ 2.50$ | $18 ¢$ | $37 \%$ | $\$ 0.72$ | $\$ 1.47$ | $\$ 0.03$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

$\qquad$
$\qquad$
$\qquad$ , $\qquad$ , $\qquad$ , $\qquad$
least
. greatest

4 On Sunday, Mr. Mole found 354. Draw three different collections of coins worth $\$ 0.35$ in the boxes below. (Hint: Use real or plastic coins to help.)

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

## Money \& Time Problems page 1 of 2

If you have an amount of money less than a dollar, you can write the amount with a cents sign or a dollar sign.

1 Count the money in each row, and write it in two different ways.

b

C

$\qquad$ or $\qquad$

2 Write the name of each coin. Show how to write it with a cents sign or a dollar sign. Then draw a different way to make the same amount of money with more than one coin.

| Coin Name | ex nickel | a | b |
| :---: | :---: | :---: | :---: |
| Written two ways | $5 ¢$ |  |  |
|  | \$0.05 |  |  |
| Different way to make it. |  |  |  |

(continued on next page)

## Money \& Time Problems page 2 of 2

3 Solve these coin problems. You can use quarters, dimes, nickels, and/or pennies.

| a | Draw 56\& using 4 coins. | Draw $66 \$$ using 5 coins. |
| :--- | :--- | :--- |
| C | Draw $29 \$$ using 5 coins. | dCHALLENGE <br> Draw $\$ 1.34$ using 10 coins. |

4 Fill in the bubble next to the correct time.
6:15
b
4:30

- 3:30
C
2:00
- 2:15

5 Draw the two hands on the clock to show the time.
a 6:45

b 3:30

C 7:15


## Numbers from 900 to $\mathbf{1 , 0 0 0}$ page 1 of 2

1 Fill in the missing numbers on the grid below. Use the patterns you know to help.

| 901 |  | 903 |  | 905 | 906 | 907 |  | 909 | 910 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 911 | 912 | 913 | 914 | 915 |  | 917 | 918 | 919 | 920 |
|  | 922 | 923 | 924 | 925 | 926 |  |  | 929 | 930 |
| 931 | 932 | 933 |  | 935 | 936 |  | 938 | 939 | 940 |
| 941 |  | 943 | 944 |  | 946 | 947 | 948 | 949 | 950 |
| 951 | 952 | 953 | 954 | 955 |  | 957 | 958 | 959 | 960 |
| 961 | 962 | 963 |  | 965 | 966 | 967 | 968 |  | 970 |
|  | 972 | 973 | 974 |  | 976 | 977 |  | 979 | 980 |
| 981 | 982 |  | 984 | 985 | 986 | 987 | 988 | 989 |  |
| 991 | 992 | 993 | 994 | 995 |  | 997 | 998 | 999 | 1,000 |

2 Describe at least three different patterns you see on the grid.

## Numbers from 900 to $\mathbf{1 , 0 0 0}$ page 2 of 2

3 The carnival in our town started last week. The chart below shows how many tickets they sold each day.

| Day | Number of Tickets |
| :---: | :---: |
| Saturday | 978 tickets |
| Sunday | 995 tickets |
| Monday | 932 tickets |
| Tuesday | 905 tickets |
| Wednesday | 937 tickets |


a Which day did they sell the most tickets? $\qquad$
b Which day did they sell the least tickets? $\qquad$
C Put the number of tickets they sold each day in order from least to greatest.
$\qquad$ , $\qquad$
$\qquad$ , least
$\qquad$
greatest
4 The people who came to the carnival bought 909 hot dogs on Saturday, 990 hot dogs on Sunday, 943 hot dogs on Monday, and 934 hot dogs on Tuesday.
a Which is greater, 909 or 990 ? $\qquad$
b How do you know?

C Which is less, 943 or 934 ? $\qquad$
d How do you know?


## Lines, Buttons \& Adding Practice page 1 of 2

1 Find each sum. Use the pictures of base ten pieces to help.

|  |  | 7 |
| :---: | :---: | :---: |
| ■ | 므미 |  |
|  | 믐 | $\underline{+25}$ |
| - | ם |  |
|  | ㅁㅁㅁ |  |


2 Find each sum.
$21+8=$ $\qquad$ $42+7=$ $\qquad$
$\qquad$ $24+13=$
$\qquad$

3 Use Pencil Puppy's strategy for adding 2-digit numbers. Remember, she adds the tens first. Then she adds the ones. Then she finds the total.

(continued on next page)

## Lines, Buttons \& Adding Practice page 2 of 2

4 Tami is standing in line. There are 3 other children in front of her.
There are 8 children behind her.
a How many children are standing in line? Show your work.

There are $\qquad$ children standing in line.
b Which strategy did you use to solve this problem? (Circle one.)

Draw a picture Make a chart Write a number sentence Other

5 challenge Frank's mom gave him 8 buttons. The buttons have 22 holes in all.
a How many of the 8 buttons have 4 holes? How many of the 8 buttons have 2 holes? Show your work.

$\qquad$ of the 8 buttons have 4 holes. $\qquad$ of the 8 buttons have 2 holes.
b Which strategy did you use to solve this problem? (Circle one.)

Draw a picture Make a chart Write a number sentence Other

## Numbers, Cubes \& Marbles page 1 of 2

1 Count by 10s, either forward or backward, to fill in the missing numbers.
a $10,20,30,40$, $\qquad$ , _ $\qquad$ , 80, $\qquad$ , 100, 110, $\qquad$
b $280,270,260$, $\qquad$ , $\qquad$ , 230, $\qquad$ , $\qquad$ , 200, $\qquad$ ,

C $203,213,223$, $\qquad$ , $\qquad$ , 253, $\qquad$ , $\qquad$ , $\qquad$ , 293, $\qquad$
d $567,557,547,537$, $\qquad$ , ——, , 507, $\qquad$ 487, $\qquad$ , 467

2 Count by 100s, either forward or backward, to fill in the missing numbers.
a 100, 200, 300, $\qquad$ , $\qquad$ , $\qquad$ , 700, $\qquad$ , $\qquad$
b $950,850,750$, $\qquad$ , $\qquad$ , $\qquad$ , 350, $\qquad$ , $\qquad$
C $203,303,403$, $\qquad$ , $\qquad$ , $\qquad$ , 803, $\qquad$ 1003
d $914,814,714$, $\qquad$ , , 414, $\qquad$ , ,

3 Find each sum.

$$
\begin{aligned}
& 400+70+2= \\
& 600+20+8= \\
& 800+50+5= \\
& 100+10+3=
\end{aligned}
$$

4 Circle the answer in each of the questions below.

| a | The 3 in 359 is in the | ones place | tens place | hundreds place |
| :--- | :--- | :--- | :--- | :--- |
| b | The 4 in 904 is in the | ones place | tens place | hundreds place |
| C | The 5 in 256 is in the | ones place | tens place | hundreds place |

## Numbers, Cubes \& Marbles page 2 of 2

5 Ebony put 10 cubes into two stacks. One stack has 4 more cubes than the other stack.
a How many cubes are in each stack? Show your work.

There are $\qquad$ cubes in one stack and $\qquad$ cubes in the other stack.
b Which strategy did you use to solve this problem? (Circle one.)

Draw a picture Act it out with cubes Make a list Other

6 ChALLENGE Jose has a bag of marbles. There are 8 red marbles in the bag. There are twice as many green marbles as red marbles. There are 2 fewer blue marbles than green marbles. There are half as many white marbles as blue marbles.
a How many marbles are in the bag? Show your work.

There are $\qquad$ marbles in the bag.
b Which strategy did you use to solve this problem? (Circle one.)


Draw a picture
Act it out with cubes
Make a list
Other

## Place Value on Wheels page 1 of 2

1 Read each number. Then write it in expanded form.

| exfifty-six <br> $56=50+6$ | a thirty-two | b seventy-five |  |
| :--- | :--- | :--- | :--- |
| c | eighteen | d seventy-four | e twenty-eight |
| f | ninety-three | $\mathbf{g}$ forty-five | h sixty-seven |

2 Find each sum.
$60+8=$ $\qquad$ $20+3=$ $\qquad$ $50+9=$ $\qquad$
$70+15=$ $\qquad$
$40+17=$ $\qquad$
$10+18=$ $\qquad$
$60+14=$ $\qquad$
$50+13=$ $\qquad$
$50+19=$ $\qquad$

| 30 | 60 | 20 | 40 | 80 | 40 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| +19 | +16 | +17 | +14 | +11 | +15 |

3 Circle the correct answer.

| a | The 5 in 581 is in the | ones place | tens place | hundreds place |
| :--- | :--- | :--- | :--- | :--- |
| b | The 5 in 358 is in the | ones place | tens place | hundreds place |
| C | The 5 in 205 is in the | ones place | tens place | hundreds place |
| d | The 5 in 502 is in the | ones place | tens place | hundreds place |

## Place Value on Wheels page 2 of 2

4 There are 10 bikes and 6 cars in the school parking lot. How many wheels in all? Show your work.

There are $\qquad$ wheels in the parking lot.


5 ChALLENGE Ben saw some wagons and trikes on the playground. In all, he saw 27 wheels. How many wagons and how many trikes did he see? There are two possible answers. Can you find both of them? Show your work.


## Last Shape In Wins page 1 of 2

## Note to Families

Last Shape In Wins is an easy and fun strategy game that gives children a chance to see the results of combining some familiar shapes. We play it at school with pattern blocks, but you'll be coloring in the shapes instead. Have fun!

## Materials

- Last Shape In Wins, pages 1-2
- crayons, markers, or colored pencils in the following colors: yellow, green, blue, and red


## Instructions

1 With your partner, decide who will go first and who will go second.
2 Take turns coloring in shapes on the first game board.
a You may color in one or more triangles to form one of the shapes shown below.

a triangle
color it green

a rhombus
color it blue

a trapezoid
color it red

a hexagon
color it yellow
b You can color in any one of the four shapes anywhere on the game board each time it's your turn. It is a good idea to outline the shape first before you start coloring.

C You must take your turn every time.
3 The winner is the player who gets to complete filling in the game board (the big hexagon) by coloring in the last shape.

4 challenge Try to use the fewest number of shapes to fill in the big hexagon. See if you can use even fewer the second time you play.

5 When you have time, play the game a second time.

## Last Shape In Wins page 2 of 2



## Shapes


a triangle
color it green

a rhombus color it blue

a trapezoid color it red

a hexagon color it yellow

## Facts \& Shapes page 1 of 2

1 Match each Unifix train to its fact family triangle. Then write 2 addition and 2 subtraction equations to match. Write them under the train.


C

d

(continued on next page)

## Facts \& Shapes page 2 of 2

2 Count the money to find out how much each shape is worth. Write the price on the shape.


3 Maria bought some shapes at the Shapes Shop. She used all her shapes to make this picture. How much money did she spend? Show your work.


4 Use squares, circles, and triangles to make a picture worth 48q. Label your work to prove it.

## Sorting Quadrilaterals page 1 of 2

## Note to Families

This Home Connection Activity involves sorting quadrilaterals. Although some of these shapes are pretty strangelooking, they're all related in that they each have 4 sides and 4 corners. Your child may have many different ideas about how to sort the quadrilaterals on the next page, but if he or she runs out of steam, it's okay for you to mention things like right angles, parallel lines, and symmetry. Have fun!

Cut out the shape cards on the next page. Some of the shapes may look a little strange to you, but they are all quadrilaterals. That is, they all have 4 sides. Look carefully and you'll find that it's true! Work with someone in your family to find as many ways to sort these shapes as possible, and list your ideas below.

"These all have at least 1 line of symmetry."

"None of these are symmetrical."

## -symmetrical-

$\qquad$

 -$\square-\square-\quad-\quad-\quad-\quad-\quad-\quad$ L $\mp-\quad=-\quad=-\quad=$ -
$\qquad$
$\qquad$


135


Sorting Quadrilaterals page 2 of 2



## Three-Dimensional Shape Hunt page 1 of 2

## Note to Families

We recently started a new unit on geometry. We are using pattern blocks, geoboards, and paper shapes to investigate many different two- and three-dimensional shapes. Besides learning to recognize and name these shapes, we'll explore how they're alike and different and what happens when we cut them up, put them together, and move them around by sliding, turning, and flipping them. We'll learn how to measure the area of some of them, and how to use others to create symmetrical designs. We'll also consider the shapes that are all around us, both human-made and those occuring in nature. This assignment reinforces what we are learning about geometry.

Have you ever thought about why things are the shape they are? Ever wondered why a cup is round and the rooms in most houses are square or rectangular instead of round? Why dice and ice are cube-shaped and why we eat ice cream out of cones instead of pyramids? Shapes are fun to find and fun to think about! This week, you're going to go on a three-dimensional shape hunt. All you have to do is search around your house for things that are shaped like cubes, spheres, cylinders, and rectangular prisms (boxes), and list them below. Happy hunting!

Here are some of things we found that are cylindrical:


Here are some of the things we found that are shaped like rectangular prisms:


Here are some of things we found that are spherical:


Here are some of the things we found that are shaped like cubes:


## Three-Dimensional Shape Hunt page 2 of 2

## Note to Families



## Materials

- Three-Dimensional Shape Hunt, page 2
- a cube, such as one of a pair of dice
- a rectangular prism, such as a cereal box


## Instructions

Take a good look at some of the shapes you found to answer the following questions.


How many faces does your cube have? $\qquad$
Are they all the same shape? $\qquad$
Make a sketch of each of the cube's faces right here:


How many faces does your rectangular prism have? $\qquad$
What shape(s) are they? $\qquad$
Please sketch each of the rectangular prism's faces here:

## Missing Numbers page 1 of 2

1 One number from each family is lost! Write the missing number in the triangle. Use the pictures to help. Then write 2 addition and 2 subtraction equations to match.


$$
\begin{array}{ll}
5+7=12 & 12-5=7 \\
7+5=12 & 12-7=5
\end{array}
$$


a


2 Fill in the missing numbers to solve these equations.
$6+7+3=$ $\qquad$
$8+1+$ $\qquad$ $=18$
$5+$ $\qquad$ $+2=13$
13 - $\qquad$ $=8$
12 - $\qquad$ $=7$
$12-4=$ $\qquad$

3 CHALLENGE Fill in the missing numbers to solve these equations.

$$
40+18+23=
$$

$$
60+47+\ldots=126
$$

$\qquad$ $+67+26=131$

## Missing Numbers page 2 of 2

4 Draw a line to match each problem with its equation. Then find the answers.

| The pet shop owner had 14 hamsters. She sold 5 <br> a of them on Monday and 3 of them on Tuesday. How many hamsters does she have left? | $9-2+8$ |
| :---: | :---: |
| There were 12 puppies in the pen. The pet shop b owner sold some of them. Now there are 7 puppies in the pen. How many puppies did she sell? |  |
| The pet shop owner got 9 rabbits yesterday. A family came in and bought 2 of them. Then the shop owner got 8 more rabbits. How many rabbits does she have now? | $6+$ |
| There were 16 fish in the big tank. The shop owner moved some of them. Now there are only 9 fish in the big tank. How many did the shop owner move? | 12 |
| The shop owner had 6 kittens. Then she got some <br> e more kittens. Now she has 13 kittens. How many kittens did she get? | 16 - |

5 Challenge Solve these equations.
$2+5-4+8=$
$8+12+34=$
$20+30-$
$=30-5$
$90+170+64=$
30-20 +
$=25$
$123+48-$
$=123-5$
$+5=21$
$250+48+2=$
$350+118+6=$

## Halves, Bowls \& Vans page 1 of 2

1 Circle the correct answer.
a If you cut this square in half, what two shapes will you get?

b If you cut this rectangle in half, what two shapes will you get?


C If you cut this hexagon in half, what two shapes will you get?


2 Find each difference.

| 10 | 16 | 20 | 12 | 14 | 18 | 6 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-5}$ | $\underline{-8}$ | $\underline{-10}$ | $\underline{-6}$ | $\underline{-7}$ | $\underline{-9}$ | $\underline{-3}$ |
|  |  |  |  |  |  |  |
| 40 | 60 | 24 | 30 | 80 | 100 | 22 |
| $\underline{-20}$ | $\underline{-30}$ | $\underline{-12}$ | $\underline{-15}$ | $\underline{-40}$ | $\underline{-50}$ | $\underline{-11}$ |
|  |  |  |  |  |  |  |
| 400 | 600 | 200 | 120 | 180 | 160 | 140 |
| $\underline{-200}$ | $\underline{-300}$ | $\underline{-100}$ | $\underline{-60}$ | $\underline{-90}$ | $\underline{-80}$ | $\underline{-70}$ |

(continued on next page)

## Halves, Bowls \& Vans page 2 of 2

3 Josh got 12 goldfish. He wants to put 3 goldfish in each little fishbowl. How many little fishbowls will he need? Show your work.

Josh will need $\qquad$ little fishbowls.


4 Challenge 36 kids are going to the park. Each van can hold 6 kids. How many vans will they need to take all the kids to the park? Show your work.

They will need $\qquad$ vans to take all the kids to the park.


## Half \& Half page 1 of 2

1 Circle the shape in each box that has been divided in half.
(as)

2 Circle the shapes that show two halves. Then color in half of each of them.


3 Color $\frac{1}{2}$ of the objects in each box.

(continued on next page)

## Half \& Half page 2 of 2

4 Rob had 16 shells. He gave half of them to his brother. How many shells does Rob have now? Show your work.

Rob has $\qquad$ shells now.


5 Jess had 28 marbles. She gave half of them to Eli. Then Jess gave half of the marbles she had left to her sister. How many marbles does Jess have now? Show your work.

Jess has $\qquad$ marbles now.

## Halves \& Extra Facts page 1 of 2

## Cutting Numbers in Half

1 Since we've been talking about halves, let's see what happens when we "cut" some numbers in half.

| What's half of $2 ?$ | What's half of $6 ?$ | What's half of $10 ?$ |
| :--- | :--- | :--- |
| What's half of 20? | What's half of $60 ?$ | What's half of $100 ?$ |
| What's half of 200? | What's half of $600 ?$ | What's half of $1,000 ?$ |

2 What makes it pretty easy to divide these numbers in half?


3 Solve these half facts.

| 10 | 100 | 8 | 80 | 12 | 120 | 40 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-5}$ | $\underline{-50}$ | $\underline{-4}$ | $\underline{-40}$ | $\underline{-6}$ | $\underline{-60}$ | $\underline{-20}$ |
|  |  |  |  |  |  |  |
| 14 | 18 | 16 | 20 | 6 | 60 | 200 |
| $\underline{-7}$ | $\underline{-9}$ | $\underline{-8}$ | $\underline{-10}$ | $\underline{-3}$ | $\underline{-30}$ | $\underline{-100}$ |

4 Now try these subtraction combinations.
12
13
12
16
15
16
16
$-6$

- 6
$-7$
$-8$
- 8
$-9$
$-7$
(continued on next page)


## Halves \& Extra Facts page 2 of 2

Sometimes story problems give you more facts than you need to solve the problem. In each problem below, cross out the fact you don't need. Then solve the problem. Show your work.

5 Jenny has 12 toy people. She is building a house for them. She used 12 blocks for the front gate and 48 blocks for the rest of the house. How many blocks did Jenny use in all?

Jenny used $\qquad$ blocks in all.


6 Juan had 56 crayons. He gave 23 of his crayons to his friend. Juan also gave his friend 15 marking pens. How many crayons does Juan have left?

Juan has $\qquad$ crayons left.


7 Challenge The Toy Factory made 90 robots on Tuesday. There are 23 workers at the factory. They sold 54 of the robots on Wednesday. How many robots did they have left?

The Toy Factory had $\qquad$ robots left.


## Exploring Symmetry page 1 of 2

1 Look at the shapes below.
a Circle the shapes that are symmetrical.
b Cross out the shapes that are not symmetical.


Square


Pentagon


Circle


Ellipse


Scalene Triangle


Right Triangle


Rectangle


Trapezoid

2 What is the name of each shape, and how many lines of symmetry does it have? Write the name of each shape on the line. Then use your ruler and a pencil to draw in the lines of symmetry, and write the number on the line below the shape name.


## Exploring Symmetry page 2 of 2

3 Draw the other half of each of these figures as carefully as you can so they're symmetrical when you're finished. (Hint: If you want to see what the whole figure looks like before you draw the other half, set a mirror upright down the midline and take a peek.)


4 Now, here comes the fun part. Have someone in your family draw half a picture of something symmetrical, like a pair of glasses, or a teddy bear, or a butterfly, or.... Then take your pencil and crayons and draw in the other half. When you're finished, you draw a half picture and let a family member draw in the other half.

## Different Ways to Look at the Same Number page 1 of 2

1 Use the pictures to help fill in the answers below.
a Sara built 300 with hundreds mats.




There are $\qquad$ 100 s in 300.
b Her brother traded in each mat for 10 strips of tens.


There are $\qquad$ 10 s in 300.

C If you traded in all the strips for units of one, how many 1 s would that be?


There are $\qquad$ 1 s in 300.

2 Check to make sure there are really 300 units. Loop groups of 10 s in different colors. Then label the groups of $10 .(10,20,30, \ldots)$

## Different Ways to Look at the Same Number page 2 of 2

3 Tell how many hundreds, tens, and ones there are in each number. Use the pictures to help.

| ex There are 2 $\qquad$ hundreds in 280. <br> There are $\qquad$ 28 tens in 280. <br> There are 280 ones in 280 . |  |
| :---: | :---: |
| a There are $\qquad$ hundreds in 310. <br> There are $\qquad$ tens in 310. <br> There are $\qquad$ ones in 310. | $\square$ |
| b There are $\qquad$ hundreds in 350. <br> There are $\qquad$ tens in 350. <br> There are $\qquad$ ones in 350 . | * |
| C There are $\qquad$ hundreds in 230. <br> There are $\qquad$ tens in 230. <br> There are $\qquad$ ones in 230 . |  |

4 Challenge Draw a line from the number on the left to its matching number on the right.

| 5 hundreds +2 tens +9 ones |
| :--- |
| 42 tens |
| 30 tens +9 ones |
| 1 hundred +20 tens +9 ones |


| 420 ones |
| :--- |
| 52 tens +9 ones |
| 12 tens +9 ones |
| 3 hundreds +9 ones |

## Ants \& Hotdogs page 1 of 2

1 How many centimeters does the army ant have to go to get to each bug? Use the centimeter side of your ruler to find out.
a On Path A the army ant has to travel $\qquad$ centimeters.
b On Path B the army ant has to travel $\qquad$ centimeters.

C On Path C the army ant has to travel $\qquad$ centimeters.


2 The army ants want to get the scorpion. They can use Path A, B, or C.

a Use the centimeter side of your ruler to measure each path. Write each length on the lines below.

Path A $\qquad$ Path B $\qquad$ Path C $\qquad$
b If you were an army ant, which path would you use? Path $\qquad$ Why?

## Ants \& Hotdogs page 2 of 2

3 Sam has a hot dog stand at the mall. The chart below shows how many hot dogs he sold last week. Use the chart to help answer the questions below.
a Which day did Sam sell the most hot dogs?
b Which day did Sam sell the fewest hot dogs?

C How many hot dogs did Sam sell on Tuesday and Wednesday put together? Show your work.

| Hot Dogs Sold |  |
| :---: | :---: |
| Day | Number of Hot Dogs |
| Monday | 119 |
| Tuesday | 125 |
| Wednesday | 163 |
| Thursday | 108 |
| Friday | 234 |
| Saturday | 345 |
| Sunday | 325 |

4 Use one of the signs below to compare the number of hot dogs Sam sold on different days.

$$
<\text { less than } \quad=\text { equal to } \quad>\text { greater than }
$$

| $125 \_$ | 345 | 325 | 108 | $108 \ldots$ |
| :--- | :--- | :--- | :--- | :--- | 119

5 Put the numbers from the chart (in problem 3) in order from least to greatest on the lines below.
$\overline{\text { least }} \longrightarrow \longrightarrow \longrightarrow \longrightarrow$ greatest

6 challenge How many hot dogs did Sam sell in all? Show your work.

## Subtraction \& Measuring Practice page 1 of 2

DJ likes to make hops on the number line to solve 2-digit subtraction problems, like this:


1 Solve each of the subtraction problems below. You can use DJ's number line strategy or some other way to solve the problem. Show your work each time.
a 56-29
$\qquad$ so $56-29=$ $\qquad$
b 70-36
$\qquad$ so $70-36=$ $\qquad$

C 63-19
$\qquad$ so $63-19=$ $\qquad$

## Subtraction \& Measuring Practice page 2 of 2

2 Measure the ladybugs' paths below. Use the centimeter side of your ruler. Write the length of each path on the correct line.


Bug A walked $\qquad$ cm

Bug B walked $\qquad$ cm

Bug C walked $\qquad$ cm

Bug D walked $\qquad$ cm

3 Which ladybug has the longest path? (circle one)
Bug A Bug B Bug C Bug D
4 How much longer is Bug A's path than Bug B's path? $\qquad$
5 How much shorter is Bug D's path than Bug A's path? $\qquad$
6 How far did the 4 ladybugs walk in all? Write an equation to show.

7 Draw a path from the ladybug to the flower. Measure it with the centimeter side of your ruler.

My path is $\qquad$ centimeters long.


## More Ant Stories page 1 of 2

1 There are 4 lines of ants. There are 5 ants in every line. The queen wants 30 ants for her parade.
a How many ants are lined up right now? Show your work.

b How many more ants need to line up? Show your work.

2 challenge Use the numbers in the box to fill in the blanks below.

| 18 | 11 | 3 | 5 |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
|  | 23 |  | 16 | 10 |  |
| 6 | 12 | 4 | 17 |  |  |

a Find 2 numbers whose sum is 21 . $\qquad$ , $\qquad$
b Find 2 numbers whose sum is 29 . $\qquad$ , $\qquad$
C Find 2 numbers whose difference is 10 . $\qquad$ ,
d Find 2 numbers whose difference is 14. $\qquad$ , $\qquad$
e Find 4 numbers that have the smallest total. $\qquad$ , $\qquad$ , $\qquad$

## More Ant Stories page 2 of 2

Hi! I am a worker army ant. I am 1 centimeter long.

$$
0
$$

My 10 army ant friends make a line that is 10 centimeters, or 1 decimeter, long.

3 List four different things on you or in your kitchen that are about the same length as a decimeter.

4 Use your ruler to help draw a line below that is exactly 15 centimeters long. How many of us army ants could stand on your line?

5 One hundred of my army ant friends would make a line that is 100 centimeters, or 1 meter long. That's about the same as the distance between the floor and the doorknob on a regular door.

List four different things in your home that are about the same length as a meter.


## Fraction Races \& More page 1 of 2

## Note to Families

Here are the rules for a new fraction game we learned in school. Please play this game with your child several times. Then have your child complete the exercise on the back of this sheet and return it to school.

1 Use the extra set of construction paper strips to fold, cut, and label another fraction kit. It should be just like the one you brought home with you.

2 Set your whole strip out in front of you and stack the other fraction pieces to the side so you're ready to play. Have your partner do the same.

3 Anchor a paperclip with a pencil and use it as a spinner arrow. Spin the spinner and take the fraction piece that it names and lay it on top of your whole strip. Then give your partner a turn. Continue taking turns back and forth until one of you has filled your whole strip. The tricky part is that you have to go out evenly. If you spin a fourth and then a half, so that three-fourths of your whole strip is covered, and then spin another half, you can't use it. In this case, you lose your turn and have to wait until your next turn to try again.


Oh no! I have a fourth left to go and I just spun a half! I can't use it. What I need is a fourth or an eighth.

4 When one person has won by filling his or her entire strip with fraction pieces, clear them off and play again.

5 When this seems easy, play backward. That is, start by covering your whole strip with fraction pieces. (You can do this using any combination of pieces you want-2 halves, 4 fourths, a half, a fourth, and 2 eighths, etc. You may have to do some trading along the way.) Then take turns spinning the spinner and removing the pieces it names. The first person to remove all of his or her pieces from the strip is the winner.


Well, look at me. I still need three-eighths. Or I could get a fourth and an eighth to win.

(continued on next page)

## Fraction Races \& More page 2 of 2

## Comparing Fractions

Use your fraction pieces to do the exercises below.
1 Circle the larger of the two fractions in each pair. The first one is done for you.

## ex

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

a $\frac{1}{2}$
b
$\frac{3}{8}$
C $\frac{3}{8}$
$\frac{1}{2}$

2 Circle the smaller of the two fractions in each pair.
a $\frac{1}{8}$
$\frac{1}{4}$
b $\quad \frac{1}{4} \quad \frac{3}{8}$
C $\quad \frac{3}{8} \quad \frac{1}{2}$

3 Lay out each combination of fractions shown below and find one fraction piece that is the same length. The first one is done for you.
ex

$$
\frac{1}{8}+\frac{1}{8}=\quad \frac{1}{4}
$$



Well, that's pretty easy. If I lay 2 eighths end to end,
I can see that the one-fourth piece is exactly the same length.
a $\frac{1}{4}+\frac{1}{4}=$ $\qquad$
b $\frac{1}{2}+\frac{1}{2}=$ $\qquad$
C $\frac{2}{8}+\frac{1}{4}=$ $\qquad$
d $\frac{1}{4}+\frac{1}{4}+\frac{1}{4}+\frac{1}{4}=$ $\qquad$
e $\frac{1}{4}+\frac{1}{4}+\frac{1}{2}=$ $\qquad$
f $\frac{1}{8}+\frac{1}{8}+\frac{1}{4}=$ $\qquad$

## Twice as Big? page 1 of 3

## Note To Families

This Home Connection activity will give your child an opportunity to measure and compare length and circumference in centimeters. If you don't have a cloth centimeter tape measure at home, you'll need to cut and tape the paper strips on the next page together to make one. Although this won't be the sturdiest measuring device in the world, it will probably hold together long enough to complete this activity.

Many kids your age think that they're probably about half as big as the adults in their family. Do you think this is true for you? Let's do some measuring and find out. First, you'll need to find a cloth centimeter tape measure around your house, or tape the paper strips on page 3 together to make one. Now you're all set! Use your tape measure to help answer the following questions:


1 How long is your hand and forearm, from the tip of your middle finger to your elbow? $\qquad$ cm

2 How long is the adult's hand and forearm? $\qquad$ cm

3 How much longer is the adult's hand and forearm than yours? $\qquad$ cm

4 Circle the words that make this a true sentence: The adult's hand and forearm is $\qquad$ the length of mine. exactly twice more than twice less than twice

5 How big around is your wrist? $\qquad$ cm

6 How big around is the adult's wrist? $\qquad$ cm

7 How much bigger around is the adult's wrist than yours? $\qquad$ cm

## Twice as Big? page 2 of 3

8 Circle the words that make this a true sentence:
The adult's wrist is $\qquad$ big around as mine.
exactly twice more than twice less than twice

9 How long is your foot? $\qquad$ cm

10 How long is the adult's foot? $\qquad$ cm

11 How much longer is the adult's foot than yours? $\qquad$ cm

12 Circle the words that make this a true sentence:
The adult's foot is $\qquad$ as big as mine.
exactly twice more than twice less than twice

13 Now, see if you can find one measurement on the adult that is very close to twice as big as the same measurement on you.

The adult's $\qquad$ is about twice the length/circumference as mine.

14 Would you say, overall, that the adult is $\qquad$ as big as you?more than twiceless than twiceabout twice

Twice as Big? page 3 of 3



## Numbers \& Buttons page 1 of 2

1 Read each number. Then write it in expanded form.

| ex | four hundred fifteen | a | two hundred eighty-six |
| :--- | :--- | :--- | :--- |
| $415=400+10+5$ |  |  |  |
| b | seven hundred fifty-three | C | six hundred twenty-one |
|  |  |  |  |
| d | three hundred forty-seven | e | nine hundred seventeen |
|  |  |  |  |
| f | one hundred sixty |  |  |

2 Find each sum.

| $500+$ |  | $200+20+2=$ |  | $100+70+1=$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $700+10+9=$ |  | $800+40+7=$ |  | $500+3=$ |  |  |
| 200 | 300 | 200 | 400 | 900 | 300 | 400 |
| 90 | 10 | 20 | 50 | 90 | 40 | 10 |
| +1 | +9 | + 6 | +2 | +9 | $+1$ | + 8 |

3 Circle the number that has the same value as the expanded form.
a $300+6$
b $200+10+7$

## Numbers \& Buttons page 2 of 2

Dylan's grandma has a box of buttons. One day Dylan sorted the buttons into different groups and counted how many in each group. He made a chart to show his work.

4 Help Dylan make a bar graph to show his work. Give the graph a title and color in the columns to show how many buttons of each color he found.

| Kind of Button |  | How Many |
| :---: | :--- | :---: |
| Red | Red | 14 |
|  | Gold | 25 |
| © | White | 26 |
|  | Blue | 10 |
|  | Purple | 5 |

5 How many buttons were in the box in all? Show your work.


There were $\qquad$ buttons in the box in all.

## Fractions \& Money page 1 of 2

1 What part of each rectangle is colored? Circle the correct fraction.


2 Read each fraction and color in that part of the shape.
(two-fourths $\frac{2}{4}$ three-fourths $\frac{3}{4}$

## Fractions \& Money page 2 of 2

3 Breanna has a pair of shorts with 4 pockets. She has money in each pocket. Finish the chart below to see how much.

| Pocket | Quarters | Dimes | Nickels | Pennies | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a | 2 | 2 | 1 | 2 | 77¢ |
| b | 1 | 0 | 5 | 9 |  |
| C | 3 | 0 | 1 | 3 |  |
| d | 0 | 4 | 3 | 1 |  |

4 In which pocket does Breanna have the most money? $\qquad$
5 In which pocket does Breanna have the least money? $\qquad$
6 Breanna wants to buy a toy for $\$ 3.00$. She thinks she has enough money in her pockets. Do you agree? Explain your answer.

7 How much money does Breanna really have in her 4 pockets? Show your work.

8 CHALLENGE Breanna bought 3 pencils at the school store. They each cost 294. How much money did she have left in her pockets after she paid for the pencils? Show your work.


## Equations \& Story Problems page 1 of 2

1 Fill in the missing numbers.


2 Fill in the missing numbers.
$40+50=$
$30+\ldots=60$
$\ldots+70=90$
$25+35=$
$25+$ $\qquad$
$\ldots+40=85$
$80-40=$ $\qquad$

$$
70-
$$

$-\quad-30=30$
$95-40=$ $\qquad$
55 - $\qquad$ $=35$
$\qquad$ $-25=25$

3 challenge Fill in the missing numbers.
$250=$ $\qquad$ $+6$
$90+70=$ $\qquad$ $+17$
$140-60=30+$ $\qquad$
(continued on next page)

## Equations \& Story Problems page 2 of 2

Fill in the blanks with words that make sense and seem interesting. Solve each problem. Show your work.

| Fill in the blanks. | Work Space |
| :---: | :---: |
| 4 Kendra has 57 $\qquad$ in her top drawer. <br> She has 28 $\qquad$ in her bottom drawer. <br> How many are there in all? $\qquad$ |  |
| 5 Lin spent 39 dollars for a $\qquad$ <br> He spent 18 dollars for a $\qquad$ <br> How much did he spend in all? $\qquad$ |  |
| 6 Akiko had 72 $\qquad$ <br> She gave 26 of them to her friend. <br> How many does she have left? $\qquad$ |  |
| 7 Mr . Smith baked 48 $\qquad$ <br> The dog ate 19 of them. <br> How many are left? $\qquad$ |  |
| 8 Frank saw 51 $\qquad$ <br> Then 24 of them flew away. <br> How many were left? $\qquad$ |  |

## Cleaning Desks \& Measuring Lines page 1 of 2

1 Finish the graph on the right. Give it a title. Color in the columns to show what the kids found in their desks.

| Number | Extra Things |
| :---: | :--- |
| 44 | Extra pencils |
| 18 | Extra pair of scissors |
| 12 | Extra glue sticks |
| 15 | Extra erasers |
| 9 | Overdue library books |

2 How many more pencils than erasers did the kids find? Show your work.

3 Challenge How many extra things did they find in all? Show your work.


(continued on next page)

## Cleaning Desks \& Measuring Lines page 2 of 2

1 Here are two lines. Put an X on the one you think is shorter.
$\qquad$
a Measure each line. Use the centimeter side of your ruler.
Line $A$ is $\qquad$ centimeters long.

Line B is $\qquad$ centimeters long.
b Which line is shorter? (Circle one.)
Line A Line B

C How much shorter is it? Show your work. Mark the answer clearly.

2 Here are two crooked lines. Put an x on the one you think is longer.

a Measure each crooked line. Use the centimeter side of your ruler.
Crooked line C is $\qquad$ centimeters long.

Crooked line D is $\qquad$ centimeters long.
b Which crooked line is longer? (Circle one.)

$$
\text { Crooked Line C } \quad \text { Crooked Line D }
$$

C How much longer is it? Show your work. Mark the answer clearly.

## Estimation Problems page 1 of 2

1 For each problem below, circle the estimate you think is best. On the last two, explain why you chose the estimate you did. Hint: Make your own pictures to help.


2 For each problem below, circle the estimate you think is best. On the last two, explain why you chose the estimate you did. Hint: Make your own pictures to help.

| Problem \& Picture |  | Estimate | Problem \& Picture |  | Estimate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a |  | $\begin{aligned} & 15 \\ & 20 \\ & 25 \end{aligned}$ | b $\begin{array}{r} 52 \\ -\quad 18 \\ \hline \end{array}$ |  | $\begin{aligned} & 30 \\ & 40 \\ & 50 \end{aligned}$ |
|  | $\begin{array}{r} 50 \\ -\quad 24 \\ \hline \end{array}$ | $\begin{aligned} & 25 \\ & 30 \\ & 35 \end{aligned}$ | $\begin{array}{\|l} \hline \text { d } \quad 60 \\ -29 \\ \hline \end{array}$ |  | $\begin{aligned} & 30 \\ & 40 \\ & 50 \end{aligned}$ |
| Why? |  |  | Why? |  |  |

© The Math Learning Center \| mathlearningcenter.org

## Estimation Problems page 2 of 2

3 Dora went to the mall yesterday. She got a T-shirt for $\$ 9.99$ and a new CD for \$6.99. About how much money did she spend in all? Circle the estimate you think is best.
\$15.00
\$16.00
\$17.00
\$20.00

4 Max got $\$ 50.00$ for his birthday. He bought 2 video games for $\$ 14.00$ each. About how much money does he have left? Circle the estimate you think is best.
\$10.00
\$20.00
\$30.00
$\$ 40.00$

5 Janel is making a quilt. She needs 100 squares of fabric in all. She cut 29 squares this morning and 39 more squares this afternoon. About how many squares does she have left to cut? Circle the estimate you think is best.

10 squares 20 squares 30 squares 40 squares

6 Gerald wants to read 75 books by the end of the year. So far, he has read 18 fantasy books and 21 science books. About how many books does he have left to read? Circle the estimate you think is best.

15 books 25 books 35 books 45 books

7 The second graders at King School are recycling cans.

| Day | Number of Cans |
| :---: | :---: |
| Monday | 57 |
| Tuesday | 98 |
| Wednesday | 45 |
| Thursday | 105 |

About how many cans have they recycled so far? Circle the estimate you think is best. 200 cans 300 cans 400 cans 1,000 cans

## Riddles \& Toys page 1 of 2

1 Tell what digit is in each place.

| a 289 $\qquad$ is in the tens place. $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. | b 945 $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. $\qquad$ is in the tens place. |
| :---: | :---: |
| C 316 $\qquad$ is in the tens place. $\qquad$ is in the hundreds place. $\qquad$ is in the ones place. | d 405 $\qquad$ is in the ones place. $\qquad$ is in the tens place. $\qquad$ is in the hundreds place. |
| 5,687 $\qquad$ is in the tens place. $\qquad$ is in the ones place. $\qquad$ is in the thousands place. $\qquad$ is in the hundreds place. | f 4,301 $\qquad$ is in the ones place. $\qquad$ is in the hundreds place. $\qquad$ is in the tens place. $\qquad$ is in the thousands place. |

2 challenge Solve these number riddles.

I have a 4 in the tens place.
I have a 1 in the hundreds place.
The number in my ones place is more than 6 and less than 9 .

I am an odd number.

What number am I? $\qquad$

I have a 7 in the hundreds place.
I have a 0 in the tens place.
I have a 3 in the thousands place.
The number in my ones place is less than 3.

I am an even number.

What number am I? $\qquad$

Riddles \& Toys page 2 of 2

| Toy Store Price List (prices include tax) |  |  |  |
| :---: | :---: | :---: | :---: |
| Doll $\$ 8.00$ | Skates $\$ 29.00$ | Puppet $\$ 6.00$ | Hat $\$ 13.00$ |
|  |  |  |  |

3 Ezra got $\$ 50.00$ for his birthday. He bought a hat at the toy store. How much money did he have left? Show your work. Mark the answer clearly.

4 ChALLENGE Maya went into the toy store with $\$ 50.00$. She bought three different toys and got $\$ 2.00$ back in change. Which three toys did she buy? Show your work. Mark the answer clearly.

## Comparing Numbers \& Sharks' Lengths page 1 of 2

1 Circle the place value of the underlined digit. Then write its value.
$\left.\begin{array}{|cc|c|c|c|c|c|}\hline \text { Number } & \text { Place Value } & \text { Value } & \text { Number } & \text { Place Value } & \text { Value } \\ \hline \text { ex } & 2 \underline{3} 8 & \begin{array}{c}\text { tens } \\ \text { hundreds }\end{array} & 30 & \text { ex } & 10 \underline{9} & \begin{array}{c}\text { ones }\end{array} \\ \hline \text { a tens } \\ \text { hundreds }\end{array}\right]: 9$

2 Write one of these signs on each line to make the equation true.

$$
<\text { less than } \quad=\text { equal to } \quad>\text { greater than }
$$



85 $\qquad$ 58

327 $\qquad$ 372

106 $\qquad$ 610

218 $\qquad$ 218

735 $\qquad$ 573

204 $\qquad$ 240

483 $\qquad$ 438

3 Fill in the missing digits to make each equation true. There is more than one right answer for each one.
3_2 $7<347$
$235>$ $\qquad$ 35
$307<$ $\qquad$ $135<13$ $\qquad$
4
__3>463

$$
1 \_\ldots 9<139
$$

$182>1 \_\ldots 2$
$514<51$ $\qquad$
(continued on next page)

## Comparing Numbers \& Sharks' Lengths page 2 of 2

There are many different types of sharks. Some are longer than others. This chart shows how long some of the different sharks are. Use it to help answer the questions below.

Shark Lengths

| Shark Name | Average Length <br> (in centimeters)* |  |
| :---: | :---: | :---: |
| White Shark | 204 centimeters |  |
| Bignose Shark | 174 centimeters |  |
| Night Shark | 154 centimeters |  |
| Bigeye Thresher | 312 centimeters |  |
| Tiger Shark | 247 centimeters |  |
| Thresher Shark | 373 centimeters |  |
|  |  |  |

4 Which shark on the chart is the longest? $\qquad$
5 Which shark on the chart is the shortest? $\qquad$
6 Write one of these symbols on each blank to make the sentence true.

$$
<\text { less than } \quad=\text { equal to } \quad>\text { greater than }
$$

a Length of a Tiger Shark $\qquad$ Length of a White Shark
b Length of a Bignose Shark $\qquad$ Length of a Tiger Shark

7 Put the lengths of the sharks in order from least to greatest.
$\qquad$
$\qquad$ , , $\qquad$ , $\qquad$ least
$\qquad$
$\qquad$ greatest

8 How much longer is a Thresher Shark than a Tiger Shark? Show your work. Mark the answer clearly.

## Meters \& Math page 1 of 2

A meter is about the same as the distance between the floor and the doorknob of your front door. Look at your front door, or a meter stick if you have one. Now think about how long 20 meters would be, and answer these questions:

1 If you walked across the biggest room in your home, would you go more or less than 20 meters?


2 Is it more or less than 20 meters from your bed to your front door?
3 How long would it take you to run 20 meters? Circle the answer that makes the most sense.

$$
10 \text { seconds } \quad 10 \text { minutes } \quad 10 \text { hours }
$$

4 List at least two different animals that might take 10 minutes to travel 20 meters.

5 Which unit would you use to measure the length of a soccer field? (Circle one.) centimeters meters inches miles

6 The kids measured the distance across their classroom twice. First, they measured it in centimeters. Then they measured it in meters. Fill in the bubble below the answers they most likely got.

1000 centimeters/ 10 meters 10 centimeters/ 1000 meters 100 centimeters/ 100 meters

7 CHALLENGE The circumference, or distance around, a soccer ball is 68 centimeters. Is that longer or shorter than one meter? By how much? Show your work.


## Meters \& Math page 2 of 2

8 Jamal is doing his math homework. He just got 24 for an answer. What was the question? Write down at least three different ideas below.

9 CHALLENGE Write at least 10 different equations for 120 . You can use addition, subtraction, multiplication, or division.

## Numbers, Clocks \& Crayons page 1 of 2

1 Read each number. Then write it in expanded form.

| eX one hundred thirty-eight | $\mathbf{a}$ three hundred forty-two | $\mathbf{b}$ two hundred seventy-three |
| :---: | :---: | :---: |
| $138=100+30+8$ | $342=$ | $273=$ |


| C two hundred twenty-nine | d four hundred sixty-one | e six hundred eighteen |
| :--- | :--- | :--- |
| $229=$ | $461=$ | $618=$ |


| $\mathbf{f}$ one hundred fifty-seven | $\mathbf{g}$ nine hundred ninety-nine | $\mathbf{h}$ eight hundred thirty-five |
| :---: | :---: | :---: |
| $=$ | $=$ | $=$ |

2 Write the numbers in the box in order on the lines from least to greatest.

| 138 | 342 | 273 | 229 | 461 | 618 |
| :--- | :--- | :--- | :--- | :--- | :--- |

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ least ,
$\square$
$\square$ greatest

3 Read each of these digital clocks and show the time on the clock face.

(continued on next page)

## Numbers, Clocks \& Crayons page 2 of 2



Small 79¢


Medium 99¢


Large $\$ 1.50$

You can get boxes of crayons in three different sizes at the store. Use the pictures above to help solve these problems.

4 Miguel bought a small box of crayons. He gave the clerk a $\$ 1.00$ bill. How much money did he get back? Show your work. Mark the answer clearly.

5 Emma wants to get a medium box of crayons for her sister and a large box of crayons for herself. How many crayons will that be in all? Show your work. Mark the answer clearly.

6 Emma only has $\$ 2.00$ in her pocket. Is that enough money to buy a medium and a large box of crayons? Explain your answer.

## Combinations \& Crayons page 1 of 2

1 Circle all the combinations that make 100 in red. Then take a pencil and go back and do them. Circle all the combinations that do not make 100 in blue. Then take a pencil and go back and solve them.

| 70 | 60 | 20 | 75 | 50 | 100 | 50 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +30 | $\underline{+60}$ | $\underline{+80}$ | $\underline{+25}$ | $\underline{+50}$ | $\underline{+0}$ | $\underline{+40}$ |
| 60 | 96 | 95 | 70 | 60 | 93 | 0 |
| +70 | $\underline{+4}$ | $\underline{+5}$ | $\underline{+80}$ | $\underline{+40}$ | $\underline{+7}$ | $\underline{+100}$ |
| 100 | 10 | 40 | 25 | 92 | 20 | 100 |
| +100 | +90 | $\underline{+60}$ | $\underline{+75}$ | $\underline{+8}$ | $\underline{+80}$ | +90 |

2 Add these strings of numbers. Use combinations of 100 to help.

| $\mathbf{e x} 30+60-20+40=150$ | $\mathbf{b} 20+60+40+20=$ |
| :--- | :--- |
| a $30+70+90+10=\ldots$ | d $80+20+50+20+50=\ldots$ |
| C $90+50+50+30+70=$ |  |
| e $20+98+80+2+43=$ | $\mathbf{f} 96+92+4+8+59=$ |

## Combinations \& Crayons page 2 of 2



You can get boxes of crayons in 3 different sizes at the store. Use the pictures above to help solve these problems.

3 Sam bought two small boxes of crayons. He gave the clerk $\$ 2.00$. How much change did he get? Show your work.

4 Challenge Ms. Fernandez bought 10 medium boxes of crayons for her second graders. Then she bought a large box of crayons for herself. She gave the clerk a $\$ 20$ bill. How much change did she get? Show your work.

## Equations, Expressions \& Toys page 1 of 2

1 Fill in the missing numbers to solve these addition equations.
$50+40+10=$ $\qquad$ $60+4+$ $\qquad$ $=74$
$50+$ $\qquad$ $+9=79$
$80=40+30+$ $\qquad$ $20+\ldots+20=60$ $\qquad$ $+30+20=100$

2 Fill in the missing numbers to solve these subtraction equations.
60 - $\qquad$ $=40$
75 - $\qquad$ $=25$
$120-60=$ $\qquad$
$100-30=20+$ $\qquad$
$90-40=25+$ $\qquad$
$\ldots-40=20+30$

3 Write a story problem to match this expression. Then solve the problem. Show your work. $83-25=$

My Story Problem:

My Work:

## Equations, Expressions \& Toys page 2 of 2

| Toy Store Price List (prices include tax) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Frisbee \$3.50 | Hat \$4.99 | Ball \$4.50 | Yo-yo \$5.00 | Kite \$2.99 |
|  |  |  |  |  |

4 Lani has twin brothers. Their birthday is tomorrow. Lani bought a hat for one of the boys and a kite for the other. How much did she spend in all? Show your work.

Lani spent $\qquad$ in all.

5 ChALLENGE Sam is having a birthday party. Sam's dad bought a kite for each of the children coming to the party. He spent $\$ 14.95$. How many children did Sam invite? Show your work.

Sam invited $\qquad$ children.

## Addition, Subtraction \& Fraction Practice page 1 of 2

1 Find each sum.

| 40 | 20 | 57 | 50 | 75 | 34 | 35 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +3 | +38 | +31 | +16 | +25 | $\begin{array}{r}+34 \\ \hline\end{array}$ | +35 |
| 290 | 340 | 562 | 225 | 325 | 325 | 450 |
| +9 | +20 | +35 | +15 | +25 | +26 | +50 |

2 Use pictures, numbers, and/or words to add the numbers. Show all your work.
a $47+47$
b $148+122$

3 Find each difference.

| 49 | 50 | 67 | 50 | 45 | 30 | 100 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\underline{-9}$ | $\underline{-10}$ | $\underline{-23}$ | $\underline{-25}$ | $\underline{-15}$ | $\underline{-15}$ | $\underline{-75}$ |

4 Choose one of the problems in the box. Circle it. Then solve it. Use pictures, numbers, and/or words to help. Show all your work.

| $35-15$ | $80-25$ | $123-99$ |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |
|  |  |  |

## Addition, Subtraction \& Fraction Practice page 2 of 2

5 What part of each set of circles is colored? Circle the correct fraction.

|  | a | $\begin{aligned} & \bigcirc \bigcirc \\ & \bigcirc \bigcirc \end{aligned}$ |  |  | $\frac{2}{2}$ | b |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{1}{4}$ | $\frac{2}{4}$ | $\frac{1}{3}$ |  |  | $\frac{3}{4}$ | $\frac{2}{3}$ | $\frac{1}{3}$ | $\frac{3}{2}$ |
|  | C |  |  |  |  | d |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  | $\frac{3}{4}$ | $\frac{4}{3}$ | $\frac{1}{3}$ | $\frac{4}{4}$ |  | $\frac{3}{3}$ | $\frac{4}{6}$ | $\frac{1}{2}$ | $\frac{1}{3}$ |

6 Follow the directions to complete each picture and then fill in the fraction.

| Color $\frac{1}{6}$ of the hexagon yellow. | Color $\frac{2}{4}$ of the square red. <br> Color $\frac{2}{6}$ of the hexagon purple. <br> Color the rest of the hexagon green. $\frac{1}{4}$ of the square blue. <br> Color the rest of the square brown. |
| :--- | :--- |
| Write a fraction below to show what |  |
| part of the hexagon is green. | Write a fraction below to show what |
| part of the square is brown. |  |

## Comparing Animal Weights page 1 of 2

1 Have you ever wondered how much a tiger weighs? Have you ever thought about how heavy a grizzly bear is compared to an alligator? The chart below shows the weights of 7 different animals in kilograms. (A kilogram is a little more than 2 pounds.) Use the information to answer the questions below.

| Animal | Weight |
| :---: | :---: |
| Siberian Tiger | 230 kilograms |
| Alligator | 270 kilograms |
| Harbor Seal | 170 kilograms |
| Camel | 725 kilograms |
| Grizzly Bear | 680 kilograms |
| Emperor Penguin | 30 kilograms |
| Gray Wolf | 36 kilograms |

a Put the weights of these animals in order from least to greatest.
$\qquad$ , $\qquad$ , $\qquad$
$\qquad$
$\qquad$ , $\qquad$ , least
b Which animal on the chart weighs the most? $\qquad$

C Which animal on the chart weighs the least? $\qquad$
d Which animal weighs more, a Siberian tiger or an alligator? $\qquad$
e Which animal weighs less, a grizzly bear or a camel? $\qquad$

## Comparing Animal Weights page 2 of 2

2 Use numbers, pictures, or words to show how you got the answer.
a Which would weigh more, 3 harbor seals or 2 Siberian tigers?
b Which would weigh less, 5 emperor penguins or 1 harbor seal?

3 Which animal on the chart would you most like to have for a pet? Why?


## Number Patterns page 1 of 2

1 Fill in the missing numbers in these skip-counting patterns.
a $15,25,35$, $\qquad$ , 55, $\qquad$ , 75, $\qquad$ , $\qquad$ , $\qquad$ 115, 125
b $6,12,18$, $\qquad$ , $\qquad$ , 36, $\qquad$ , $\qquad$
$\qquad$ , 60, 66, $\qquad$
C $105,110,115$, $\qquad$ , $\qquad$ , 130, $\qquad$ , $\qquad$ 145, $\qquad$ , 155
d $13,113,213$, $\qquad$ , 413 $\qquad$ , 613, $\qquad$ , ——, ,

2 DJ and Hopper are jumping from stone to stone to get across the stream. There are 9 stones in all. There is exactly 1 foot between each stone, and there are 12 inches in a foot. Finish the table below to see how many inches the frogs have to jump to get all the way across the stream.


| Feet | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inches | 12 | 24 |  |  | 60 |  |  |  |  |

3 challenge The path from DJ's house to the stream is 27 feet long. There are 3 feet in a yard. How many yards is it from DJ's house to the stream? Show your work.

Number Patterns page 2 of 2
4 Fill in the missing numbers on the grid below. Use the patterns you know to help.

| 10 | 20 |  | 40 | 50 | 60 |  | 80 | 90 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 120 | 130 | 140 |  | 160 | 170 | 180 | 190 |  |
| 210 |  | 230 | 240 | 250 |  | 270 | 280 |  | 300 |
| 310 | 320 | 330 |  | 350 | 360 |  | 380 | 390 | 400 |
|  | 420 | 430 | 440 |  | 460 | 470 | 480 | 490 |  |
| 510 | 520 |  | 540 | 550 |  | 570 |  | 590 | 600 |
| 610 |  | 630 | 640 | 650 |  | 670 | 680 | 690 | 700 |
| 710 | 720 | 730 |  | 750 | 760 | 770 | 780 |  | 800 |
| 810 |  | 830 | 840 |  | 860 |  | 880 | 890 | 900 |
| 910 | 920 |  | 940 | 950 | 960 | 970 | 980 |  | 1000 |

5 Describe at least three different patterns you see on the grid.

