> 0 $\stackrel{0}{J}$
$\square$


## HOME LINK <br> $5 \cdot 1$

## Tens－and－Ones Riddles

Family We have begun to work on place value using base－10 blocks．The blocks shown in the tens Note columns are called longs and the blocks shown in the ones columns are called cubes．It takes 10 cubes to make 1 long．On this page，your child is writing numbers shown with longs and cubes．
Please return this Home Link to school tomorrow．

## Example：

| Tens$\begin{gathered} \text { 㬰 } \\ \text { 㬰 } \\ \hline \end{gathered}$ | Ones |
| :---: | :---: |
|  |  |

What number am I？ 28
2.

| Tens | Ones |
| :---: | :---: |
|  | 000 |

What number am I？ $\qquad$
1.

| Tens$\square$ | Ones |
| :---: | :---: |
|  |  |
|  | 8日 <br> 日旬是 |

What number am I？


What number am I？

1. Think of a 2-digit number. Write it in a "secret" place.
2. Ask your partner to guess your number.
3. Record each guess.
4. Use an $X$ to give clues about your number.


## HOME LINK $5 \cdot 2$

## Frames-and-Arrows Diagrams



Family Children continue to work with place value and base-10 blocks. In this lesson, children Note counted up and back by 10 s from any number. On this page, your child will continue to explore what happens to the digits in a numeral when counting by 10 s.
Please return this Home Link to school tomorrow.

Fill in the missing numbers.
1.

2.

3.


## Practice

4. Show 224 .

Use ${ }^{(D)}, \mathbb{®}$, and $\oplus$.
5. Show 35¢.

Use $\mathbb{D}, \mathbb{}(\mathbb{}$, and $\oplus$.

HOME LINK
$5 \cdot 3$

## Relation Symbols

Family The relation symbols < and > were introduced in this lesson. The symbol < means is less Note than, and the symbol > means is more than. These symbols will be used in the same way we use the symbol = for is equal to or equals. For example, instead of writing 5 is less than 8, we will write $5<8$.

It takes time for children to learn the correct use of these symbols. One way to help your child identify the correct symbol is to draw two dots near the larger number and one dot near the smaller number. Then connect the dots as shown below.

$$
5<8
$$

Another way is to think of the open end of the symbol as a mouth eating the larger number.

## 58

Write $<,>$, or $=$.

## Example:

$18>12$

$$
\begin{aligned}
& <\text { is less than } \\
& >\text { is more than } \\
& =\text { is the same as } \\
& =\text { is equal to }
\end{aligned}
$$

1. 11
7
2. 21
25
3. 37 $\qquad$ 37

## 4. 29 <br> $\qquad$ <br> Practice

 425. 35 $\qquad$ 15
6. 48 $\qquad$ 128

## 7. Write some even numbers below.

## 8. Write some odd numbers below.

$\qquad$

## Completing Number Models

Write numbers that make these number sentences true.

1. $164>$ $\qquad$ 2. $<105$
2. $76=$ $\qquad$
3. $\qquad$ $<97$
4. $\qquad$ $>127$
5. $146>$ $\qquad$
6. $132<$ $\qquad$
7. $116>$ $\qquad$
8. 

$$
\ldots=85
$$

$$
\text { 10. } 100>
$$

$\qquad$

Make your own.

$$
\text { 11. } \quad \ll
$$

12. $\qquad$ $>$

Try This
Write $<,>$, or $=$.

| 14. $20+15$ | $30+25$ | 15. 67 | $53+14$ |
| :--- | :--- | :--- | :--- |
| 16. $40+12$ | $30+11$ | 17. 90 | $30+15$ |
| 18. 37 | $17+20$ | 19. 77 | $40+45$ |

Materials $\square$ "units," such as same-size blocks, paper, large floor tiles, or same-size books
$\square$ a flat surface
Work with the children in your group.

1. Draw the surface you will cover.
2. Choose 2 different units to cover the surface. Then estimate about how many of each unit you will need to cover the surface.
3. Cover the surface with units. Count the number of units.

| Unit 1: _ Unit 2: __ | Estimate: _-_ |
| :--- | :--- |
| Estimate: -About how many <br> About how many <br> units did it take? <br> units | unit take? |

4. Which of the two units is larger?

Did you need more of the larger units or more of the smaller units?
$\square$ sets of objects, such as pennies, base-10 cubes, pattern blocks, paper clips, new pencils, or dice
Place objects in the pans to make them balance.
1.


1 pencil __ pennies
2.


2 dice

3.


3 pattern blocks __ paper clips

Choose your own objects.
4.

5.

6.


Materials $\quad \square$ all of your pennies and about 50 extra pennies
$\square$ slate

1. Count your pennies. Write the number on your slate.
2. Work with the children in your group. Put all of your pennies in a pile.
3. Make a plan to count all of the pennies.

- How will you keep track of the pennies as you count?
- Make sure everybody gets to count some pennies. How will you do that?
- How will you check that your count is correct?

4. Record the final total on a quarter-sheet of paper.
5. Take back your pennies, and put them in your tool kit.

Record the total number of pennies. Then draw or write how your group counted the pennies.

## HOME LINK

$5 \cdot 4$

## Counting Coins



Family Children continue finding the values of groups of coins. Before doing the problems, it may Note be helpful for your child to sort real coins into groups (all of the dimes together, all of the nickels together). Many children are still learning to write amounts of money using dollars-and-cents notation. We will continue to practice this skill during the year.
Please return this Home Link to school tomorrow.

| $(P 1$ cent | (N) 5 cents | (D) 10 cents |
| :---: | :---: | :---: |
| $\$ 0.01$ | $\$ 0.05$ | $\$ 0.10$ |
| penny | nickel | dime |
| (in |  |  |

How much? Write each answer in cents and in dollars-and-cents notation.

1. $(\operatorname{D})(\mathbb{N} \mathbb{( 1 )} \mathbb{( 1 ) ( P )}$ $\qquad$ 4 or $\qquad$
2. 

(D) (N) (N) (N) (ㄹ $\qquad$ c or $\qquad$
3. (D) (D) $(\mathbb{1} \mathbb{( 1 ) ( 1 ) ~}(P$ (P) $\qquad$ $\phi$ or $\qquad$

## Practice

4. Make a tally for 30.

Odd or even?

Place objects in the pans to make them balance.


1 die $=$ $\qquad$
2.


10 cubes $=$ $\qquad$ pennies


2 dice and 10 cubes $=$
pennies


4 square pattern blocks = $\qquad$ pennies
5. Use what you found out from the other problems.

Fill in the blanks below.
2 square pattern blocks = $\qquad$ pennies

1 die and 2 square pattern blocks = $\qquad$ pennies
Use the pan balance to check your answers.

Cat
7 lb


## Porpoise 98 lb

Cheetah 120 lb


# Koala 

19 lb

## Raccoon 23 lb



Fox
14 lb


Rabbit
6 lb

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15 lb

Penguin 75 lb

HOME LINK 5.5

## Domino Addition

Family Children continue practicing basic addition facts. Notice that we are emphasizing Note $\quad+0,+1$, and double facts like $6+6$.

Please return this Home Link to school tomorrow.

Add.

$1+5=$ $\qquad$

$3+3=$ $\qquad$


$$
ـ^{=}=0+9
$$

Fill in the missing dots and the missing numbers.


8. | $\because \cdots$ |  |
| ---: | ---: |
| $\vdots$ | 8 |
|  |  |



$$
5+\ldots=10
$$

## Practice

10. Circle the ones place.
44
31
17
69

## Solving Parts-and-Total Problems

Solve. Record the total on the parts-and-total plate.
Example:
May had 13 marbles.
Jack had 14 marbles.
How many marbles did they have altogether?
marbles


1. There were 16 birds in the tree.

There were 11 birds in the pond.
How many birds were there altogether?
$\qquad$ birds

2. There are 24 red flowers. There are 15 blue flowers. How many flowers are there altogether?
flowers

3. Fred had 21 baseball cards. Jen had 31 baseball cards. How many cards did they have altogether?
cards


## LESSON $5 \cdot 6$

## Ordering Animals by Weight

Order your animal cards from heaviest to lightest weight. Record the results below.


1st Cheetah
2nd $\qquad$
3rd $\qquad$
4th $\qquad$
$\qquad$ lb

5th 7-year-old boy 6th $\qquad$
$\qquad$
7th $\qquad$
$\qquad$
8th $\qquad$
9th $\qquad$
$\qquad$ lb
10th

$\qquad$ 14 lb
11th
$\qquad$
$\qquad$ lb
$\qquad$
12th $\qquad$

## HOME LINK

$5 \cdot 6$

## Relation Symbols



Family As children continue their work with relation symbols $(<\rangle,,=)$, you can help by having Note your child read aloud the number models on this page. Read the example as follows: 65 is less than 83.

Please return this Home Link to school tomorrow.

## Write $<,>$, or $=$.

Example: $65<83$

1. 15 $\qquad$ 17
2. 28 $\qquad$ 19
3. 24 $\qquad$ 24
4. 36 $\qquad$ 63
$<$ is less than
$>$ is more than
$=$ is the same as
$=$ is equal to
5. 92 72
6. 55 $\qquad$ 128

## Practice

Draw the hour and minute hands to show each time.



## HOME LINK

$5 \cdot 7$

## Comparing Amounts of Money

Family Children are beginning to solve number stories in which they find how much more (or less) Note one number is than another. This is called the difference between the two numbers.

Help your child line up the pennies in two rows and pair pennies in the top row with pennies in the bottom row. Have your child make as many pairs as possible. The extra pennies that could not be paired represent the difference.
Please return this Home Link to school tomorrow.

1. Bart
$\oplus(P)(P(P) P(P) P(P)(P$
Perry
$\oplus(P) P(P) P(P)$
Who has more? $\qquad$ How much more?
2. Tricia

P $($ P $(P$
Martha
$\oplus(P(P \oplus(P \oplus(P(P$
Who has more?
How much more?
3. Franklin has 17 pennies.

Maria has 25 pennies.
$\qquad$ How much more? $\qquad$ $\phi$

## Practice

4. Circle the tens place.
115
80
55
17

## Comparing Coin Collections

1. Mike


Anna


Who has more money?
How much more money? $\qquad$ $\phi$
2. Karen


Don


Who has more money?
How much more money? $\phi$
3. Ivan $(P)(\square)(P(P)(D)$

Jana $(\mathbb{P}(\mathbb{P}(\mathbb{P}(\mathbb{1}) \mathbb{( 1 )} \mathbb{( 1 )}$
Who has more money?
How much more money? $\qquad$ C
144

LESSON
5.8

## Comparisons

## Example:

Carlos
(P®


Lynn
$\oplus(P(P(P(P)$
Who has more money? Lynn How much more money? $4 \subset$


Deon 21 pennies
Who has more money?
How much more money? $\varnothing$
2. Cat 7 lb
 Eagle $\square 15 \mathrm{lb}$

Which animal weighs more?
How much more? lb

## Try This

3. Andy has 17 crayons. Kate has 25 crayons.

Who has fewer crayons?
How many fewer crayons?

## HOME LINK 5.8

## Number Stories



Family Children have been telling and solving number stories. Have your child explain the number Note story that goes with the picture he or she chooses. If you like, help your child record the number story in words. The number model may show addition or subtraction, depending on how your child tells the story.

Please return this Home Link to school tomorrow.

## Here is a number story Mandy made up.

I have 4 balloons.
Jamal brought 1 more.
We have 5 balloons together.

$4+1=5$

1. Find a picture in a magazine or draw your own picture. Use it to write a number story. Write a number model to go with your story.

## Practice

Write each sum.

2. |  | $\bullet$ | $\bullet$ |
| :--- | :--- | :--- |
| $\bullet$ |  | $\bullet$ |

$2+4=$ $\qquad$

$6+4=$ $\qquad$

$5+1=$ $\qquad$

## HOME LINK

## Comparing Sums



Family For the next few days, children will return to basic addition facts. They will concentrate on Note memorizing the +0 and +1 facts (for example, $7+0$ and $8+1$ ), doubles facts (for example, $3+3$ ), and facts that have a sum of 10 (for example, $3+7$ and $6+4$ ). Consider spending a short time each day practicing these addition facts with your child.

Please return this Home Link to school tomorrow.

Write $<,>$, or $=$.


## Practice

Find the sums.
5. $4+3=$ $\qquad$ 6. $\quad=0+9$
7. $\quad=6+2$
8. $\quad=10+2$

## Circle the even sums.

Roll a die. Draw an X in a box for the number rolled, from the bottom up.
Which number reached the top first? $\qquad$

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
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|  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 |

## HOME LINK

$5 \cdot 10$

## Turn-Around Dice



Family Turn-around addition facts are pairs of facts in which the numbers being added are the Note same. Turn-around facts have the same sum. For example, $2+3=5$ and $3+2=5$ are turn-around facts. Knowing about turn-around facts cuts down on the number of facts that have to be memorized: If you know a fact, you also know its turn-around fact.

Please return this Home Link to school tomorrow.
Find the total number of dots on the dice. Use turn-around facts to help you.


Unit
dice dots
-
$+$ $\qquad$
3.


## Practice

Solve the riddles.
5. 2

and 4 a $=$ $\qquad$
6. 4

and 7 $\square$ $=$ $\qquad$

## HOME LINK <br> $5 \cdot 11$

## Adding 0 and 1

Family
Give your child several 1-digit, 2-digit, and 3-digit numbers. Ask him or her to add Note 0 and 1 to each number.

Include numbers with 9 in the ones place like 9, 49, 79, 129, 359, and 789.
Also use 0 in the tens and ones places, like in 208 and 320.
Please return this Home Link to school tomorrow.
Record your answers in the table below.

1. Ask someone at home to say a 1 -digit number; for example, 7 . Add 0 to the number and give the answer. Then add 1 to the number and give the answer.
2. Have someone say a 2 -digit number. Repeat with a 3 -digit number.
Example: $25+0=25 \quad 25+1=26$
Number Models

|  | Number | $+\mathbf{0}$ | $+\mathbf{1}$ |
| :--- | :---: | :---: | :---: |
| Example | 25 | $25+0=25$ | $25+1=26$ |
| 1-digit number |  |  |  |
| 2-digit number |  |  |  |
| 3-digit number |  |  |  |

## Practice

Write $<,>$, or $=$.
3. 19
21
4. 10
4
5. 2
11
6. 0

## LESSON <br> 5•11 Two-Fisted Penny Addition

| 15 |  | 16 |  | 17 |  | 18 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Left | Right | Left | Right | Left | Right | Left | Right |
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## LESSON <br> $5 \cdot 12$ <br> "What's My Rule?"

Write the missing numbers.

3.

4. Make your own.


## HOME LINK

5•12 Family Letter

## "What's My Rule?"

Today your child learned about a kind of problem you may not have seen before. We call it "What's My Rule?" Please ask your child to explain it to you. Here is a little background information you may find useful.
Imagine a machine with a funnel at the top and a tube at the bottom-we call this a function machine. The function machine can be programmed so that when you drop a number into the funnel at the top, the machine changes the number according to the rule and a new number comes out of the tube at the bottom.

For example, you can program the machine to add 2 to any number that is dropped into the funnel. If you put in 3 , out comes 5 ; if you put in 6 , out comes 8 .
You can show this with a table:


Here is another example of a function machine:


In a "What's My Rule?" problem, some of the information is missing. To solve the problem, you have to find the missing information. The missing information can be the numbers that come out, the numbers that are dropped in, or the rule for programming the machine. For example:


Missing "in" numbers


Missing rule

## HOME LINK

 $5 \cdot 12$
## "What's My Rule?"

Family Ask your child to explain what the function machine is doing to the "in" numbers before Note filling in the missing "out" numbers. For example, in the first problem, the function machine is adding 1 to each of the "in" numbers.
Please return this Home Link to school tomorrow.

Fill in the missing rule and numbers.


## HOME LINK $5 \cdot 13$

## More "What's My Rule?"



Family Children continue to explore number patterns. Each problem on this page represents a Note different kind of problem.

In the first problem, your child tries to find the rule. In the second problem, the rule is given.
The second problem calls for applying the rule to find the "out" numbers.
Encourage your child to describe how he or she solved each problem.
Please return this Home Link to school tomorrow.

1. Find the rule.


## 2. What comes out?



## Practice

4. Count back by 2 s .
5. 44, 42,


HOME LINK


## Unit 6: Family Letter

## Developing Fact Power

Knowing the basic facts is as important to mathematics as knowing words by sight is to reading. Your child should begin to master many addition and subtraction facts by the end of the year.
Learning the facts takes practice. It is not necessary to practice for a long time, but it is important to practice often. One good way to practice is to play the games described on the third page of this letter.
Later in this unit, children will extend their time-telling skills by learning to tell time to the nearest 5 minutes and by representing the time in digital notation, as it appears on a digital clock.


## Math Tools

Your child will be using Fact Triangles to practice and review addition and subtraction facts. Fact Triangles are a "new and improved" version of flash cards; the addition and subtraction facts shown are made from the same three numbers, and this helps your child understand the relationships among those facts. The Family Note on Home Link 6-4, which you will receive later, provides a more detailed description of Fact Triangles.


Please keep this letter for reference as your child works through Unit 6.

## Unit 6: Family Letter cont.

## Vocabulary

Important terms in Unit 6:
fact family A set of related facts linking two inverse operations, such as addition and subtraction. For example:

$$
\begin{aligned}
& 3+4=7 \\
& 4+3=7 \\
& 7-3=4 \\
& 7-4=3
\end{aligned}
$$

function machine An imaginary device that receives inputs and generates outputs. The machine usually pairs an input number with an output number by applying a rule such as " +5 ."

name-collection box A diagram that is used for collecting equivalent names for a number.


## Do-Anytime Activities

To work with your child on the concepts taught in this unit and previous units, try these interesting and rewarding activities:

1. Using the Fact Triangles, cover the sum for addition practice. Cover one of the other numbers for subtraction practice. Make this brief and fun.
2. Have your child tell you a number story that fits a given number model, such as $3+5=8$.
3. Go to your local library and check out the book 12 Ways to Get to 11 by Eve Merriam, an entertaining book that presents addition facts.
4. Fill in name-collection boxes. Begin with a number, such as 20 , and find at least five equivalent names.

## Building Skills through Games

In Unit 6, your child will practice addition, subtraction, and money skills by playing the following games.

## Addition Top-It

Players turn over two cards and call out the sum. The player with the higher sum keeps all of the cards. The player with more cards at the end of the game wins.

## Fact Power Game

Players take turns naming sums of addition facts on a game board. The player who correctly answers the greatest number of addition facts wins the game.

## Coin Exchange

Players put 20 pennies, 10 nickels, and 2 quarters in a pile. At each turn, a player rolls 2 dice and collects the amount of money equal to the number of dots on the dice. Players make exchanges whenever possible. The game ends when there are no more quarters. The player who has the greatest amount of money wins.

## As You Help Your Child with Homework

As your child brings assignments home, you may want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through the Home Links in this unit.

## Home Link 6*1

1. $\frac{59}{14}$ (yellow); $6+6=12$ (blue); $7+7=14$ (yellow)

$\frac{8}{+2}$ (green); $5+5=10$ (green); ${ }^{+\frac{6}{15}}$ (red);
$4+6=10$ (green)
2. Sample answer: $(\operatorname{DC}(1)(1)(\mathbb{A}()(P)$

## Home Link 6•2

1. $9+1,1+9,8+2,2+8,3+7,7+3,6+4$, $4+6,5+5,10+0,0+10$
2. All names should be equal to 15 .
3. All names should be equal to 18 .

## Home Link 6•3

1. $7,5,12$

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

2. $6,9,15$

$$
\begin{array}{ll}
6+9=15 & 9+6=15 \\
15-6=9 & 15-9=6
\end{array}
$$

3. $30 ; 24$

## Home Link 6•4

Your child should practice addition and subtraction facts using Fact Triangles.

## Home Link 6•5

1. $9,3,12$
$9+3=12 \quad 3+9=12$
$12-9=3 \quad 12-3=9$
2. All names should be equal to 14 .
3. Your child should cross out $5+5+5,2+10$, and tally marks totaling 10.
4. Sample answer:


## Home Link 6.6

1-4 The lengths recorded should match the lengths of the objects chosen by your child.
5. 10
6. 9

## Home Link 6.7

Your child should practice addition and subtraction facts using Fact Triangles.

## Home Link 6.8

1. Sample answers:
2. Sample answers:


3. 9
4. 9
5. 5

## Home Link 6‘9

1. $50 ¢$ or $\$ 0.50$
2. $82 \not \subset$ or $\$ 0.82$
3. $43 ¢$ or $\$ 0.43$
4. $66 \not \subset$ or $\$ 0.66$
5. $74 ; 75 ; 77$

## Home Link 6•10

1. 


2.

3.


## Home Link 6*11

Your child should practice addition and subtraction facts using Fact Triangles.

## Home Link 6*12

1. 25 children
2. 18
3. 5
4. 13
5. All names should be equal to 12 .
