## Algebra - Ways to Expand Numbers

Essential Question How can you write a two-digit number in different ways?

## Model and Draw

There are different ways to think about a number.

8 tens and 7 ones is the same as 80 plus 7 .

8 tens 7 ones

ロ

Shame and Show

Write how many tens and ones.
Write the number in two different ways.

$\qquad$
2.

$\qquad$ tens $\qquad$ ones
$\qquad$ $+$ $\qquad$ Math Talk Does the 7 in this number show 7 or 70? Explain.

## On Your Own

Write how many tens and ones.
Write the number in two different ways.
 tens $\qquad$ ones

4

$\qquad$ tens $\qquad$ ones
$\qquad$

## Problem Solving waild

5. Draw the same number using only tens.

Write how many tens and ones.
Write the number in two different ways.


TAKE HOME ACTIVITY • Write a two-digit number to ११.
Ask your child to write how many tens and ones and then write the number a different way.

## Identify Place Value

Essential Question How can you use place value to understand the value of a number?

## Model and Draw

The I in $I 25$ means I hundred.
The $\mathbf{2}$ in $1 \mathbf{2 5}$ means 2 tens.
The 5 in 125 means 5 ones.


Share and Show

Use your MathBoard and $\#$ to show the number.
Draw to complete the quick picture. Write how


## THINK

 106 has no tens. many hundreds, tens, and ones.

Math Talk How is the I in 187 different
from the I in 78I?

## On Youp Dwn

Use your MathBoard and $\square$.
Draw to complete the quick picture.
Write how many hundreds, tens, and ones.
2.

3.

4.


Problem Solving
Circle your answer.
5. I have I hundred, 9 tens, and 9 ones. What number am I?

## 99 <br> 100 <br> 199

6. I have 3 ones, 0 tens, and I hundred. What number am I?
$107 \quad 170 \quad 103$ tell how many hundreds, tens, and ones are in the number.

## Use Place Value to Compare Numbers

Essential Question How can you use place value to compare two numbers?

## Model and Draw

Use these symbols to compare numbers.
I want to eat the greater number.
$>$ is greater than
$<$ is less than
$=$ is equal to


46
$45<46$
45 is less than 46.

Compare I34 and I25.


First compare hundreds.
One hundred is equal to one hundred.

$$
100=100
$$

If the hundreds are equal, compare the tens. 30 is greater than 20.
$134>125$

## Share and Show

MATH
BOARD

Write the numbers and compare. Write $>,<$, or $=$.
I.

2.


Compare the numbers using $>,<$, or $=$.
3. 187

4. 165


159
5. 127


Math Talk Compare 173 and 177. Did you have to compare all the digits? Why or why not?

## On Your Own

Write the numbers. Compare. Write $>$, $<$, or $=$. 6.

-

$\qquad$



Compare the numbers using $>,<$, or $=$.
8. 143

II. 124
 129
 164
14. 173

17. 155

20. 122
O129
9. 162
 157
12. 189


195
15. 123


117
18. 181


I81
21. 166

 177
10. 185

13. 135
 135 16. 118

19. 192


179
22.154 154

## Problem Solving wald

23. Antonio is thinking of a number between 100 and 199. It has I hundred, 3 tens, and 6 ones. Kim is thinking of a number between 100 and 199 .
It has I hundred, 6 tens, and 3 ones. Who is thinking of a greater number?
$\qquad$ is thinking of a greater number.
$\qquad$

## $\checkmark$ Checkpoint

## Concepts and Skills

Write how many tens and ones.
Write the number in two ways.
I.

$\qquad$ tens and $\qquad$ ones
$\qquad$
$\qquad$
2.

____ tens and ___ one


Use your MathBoard and $\qquad$
Draw to complete the quick picture.
Write how many hundreds, tens, and ones.
3. I54

4. 128


| hundreds | tens | ones |
| :---: | :---: | :---: |
|  |  |  |

Write the numbers and compare. Write $>,<$, or $=$.


Compare the numbers using $>,<$, or $=$.

13. Which comparison is correct?

- $|32>|3|$
- $|3|=\mid 32$
- $13|>| 32$


## Algebra - Addition Function Tables

Essential Question How can you follow a rule to complete an addition function table?

## Model and Draw

The rule is Add 9. Add 9 to each number.

| Add 9 |  |
| :---: | :---: |
| 7 | 6 |
| 8 | 7 |
| 9 | 6 |

## Share and Show

Follow a rule to complete the table.
I.

| Add 3 |  |
| :---: | :--- |
| 7 |  |
| 8 |  |
| 9 |  |

4. 


2.

| Add 4 |  |
| :---: | :--- |
| 6 |  |
| 7 |  |
| 8 |  |

3. 

| Add 5 |  |
| :---: | :---: |
| 5 |  |
| 7 |  |
| 9 |  |

5. 

| Add 7 |  |
| :---: | :--- |
| 6 |  |
| 8 |  |
| 9 |  |

6. 

| Add 6 |  |
| :---: | :---: |
| 6 |  |
| 8 |  |
| 9 |  |

Math Talk Look at Exercise 4. How does the rule help you see a pattern?

## On Your Dwn

Follow a rule to complete the table.
7.

| Add 7 |  |
| :---: | :--- |
| 7 |  |
| 8 |  |
| 9 |  |

10. 

| Add 8 |  |
| :---: | :---: |
| 4 |  |
| 6 |  |
| 8 |  |
| 9 |  |

8. 

| Add 4 |  |
| :---: | :---: |
| 7 |  |
| 8 |  |
| 9 |  |

II.

| Add 3 |  |
| :---: | :---: |
| 3 |  |
| 5 |  |
| 7 |  |
| 9 |  |

9. 

| Add $\mathbf{5}$ |  |
| :---: | :---: |
| 7 |  |
| 8 |  |
| 9 |  |

12. 

| Add 6 |  |
| :---: | :---: |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |

## Problem Solving

13. Solve. Complete the table.

Tom is 8 years old.
Julie is 7 years old.
Carla is 4 years old.
How old will each child be in 4 years?

|  |  |  |
| :---: | :---: | :--- |
| Tom | 8 |  |
| Julie | 7 |  |
| Carla | 4 |  |
|  |  |  |

## Algebra•Subtraction Function Tables

Essential Question How can you follow a rule to complete a subtraction function table?

## Model and Draw

The rule is
Subtract 7. Subtract 7 from each number.

| Subtract $\mathbf{7}$ |  |
| :---: | :---: |
| 14 | 7 |
| 15 | 8 |
| 16 | 9 |

## Shame and Show

Follow a rule to complete the table.
I.

| Subtract 3 |  |
| :---: | :--- |
| 9 |  |
| 10 |  |
| 11 |  |

4. 

| Subtract 8 |  |
| :---: | :--- |
| 9 |  |
| 11 |  |
| 13 |  |

2. 

| Subtract 4 |  |
| :---: | :--- |
| 6 |  |
| 8 |  |
| 10 |  |

5. 

| Subtract 7 |  |
| :---: | :---: |
| 12 |  |
| 13 |  |
| 14 |  |

3. 

| Subtract 5 |  |
| :---: | :--- |
| 6 |  |
| 8 |  |
| 10 |  |

6. 

| Subtract 6 |  |
| :---: | :---: |
| 6 |  |
| 8 |  |
| 9 |  |

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Math Talk How can Exercise 2 help you solve Exercise 3?

## On Your Dwn

Follow a rule to complete the table.

7. | Subtract 4 |  |
| :---: | :--- |
| 11 |  |
| 12 |  |
| 13 |  |
8. 

| Subtract 7 |  |
| :---: | :---: |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |

8. 

| Subtract 6 |  |
| :---: | :---: |
| 7 |  |
| 8 |  |
| 9 |  |

II.

| Subtract 8 |  |
| :---: | :--- |
| 12 |  |
| 14 |  |
| 16 |  |
| 17 |  |

9. 

| Subtract 5 |  |
| :---: | :--- |
| 7 |  |
| 8 |  |
| 9 |  |

12. 

| Subtract 9 |  |
| :---: | :---: |
| 12 |  |
| 14 |  |
| 16 |  |
| 17 |  |

## Problem Solving waild

13. Solve. Complete the table.

Jane has 4 cookies.
Lucy has 3 cookies.
Seamus has 2 cookies.
How many cookies will each child have if they each eat 2 cookies? he or she used a rule to solve the problem.

## Algebra - Follow the Rule

Essential Question How can you follow a rule to complete an addition or subtraction function table?

## Model and Draw

The rule for some tables is to add. For other tables the rule is to subtract.

| Add I |  |
| :--- | :---: |
| 2 | 3 |
| 4 |  |
| 6 |  |
| 8 |  |


| Subtract I |  |
| :---: | :---: |
| 2 |  |
| 4 |  |
| 6 |  |
| 8 |  |

## Share and Show

Follow a rule to complete the table.
I.

| Add 2 |  |
| :---: | :--- |
| 10 |  |
| 9 |  |
| 8 |  |
| 7 |  |

2. 

| Subtract $\mathbf{2}$ |  |
| :---: | :--- |
| 10 |  |
| 9 |  |
| 8 |  |
| 7 |  |

3. 

| Subtract I |  |
| :---: | :---: |
| 3 |  |
| 4 |  |
| 7 |  |
| 9 |  |

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Math Talk What is the rule for the pattern in Exercise I?

## On Your Dwn

Follow a rule to complete the table.

4. | Add 5 |  |
| :---: | :--- |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
5. 

| Subtract $\mathbf{5}$ |  |
| :---: | :---: |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |

6. 

| Subtract I |  |
| :---: | :---: |
| 8 |  |
| 9 |  |
| 11 |  |
| 13 |  |

7. 

| Subtract 3 |  |
| :---: | :---: |
| 5 |  |
| 7 |  |
| 9 |  |
| 11 |  |

8. 

| Add 4 |  |
| :---: | :---: |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |

9. 

| Add 6 |  |
| :---: | :---: |
| 9 |  |
| 8 |  |
| 7 |  |
| 6 |  |

## Problem Solving

10. Find the rule. Complete the table.

|  |  |
| :---: | :---: |
| 3 |  |
|  | 8 |
| 7 | 10 |
|  | 12 |

Change the rule to Subtract 3. Have your child complete the table.

## Add 3 Numbers

Essential Question How can you choose a strategy to help add 3 numbers?

## Model and Draw

When you add 3 numbers, you can add in any order.
Using a strategy can help.
Make a 10 .


## Shane and Show

Use doubles.


Use count on.


Use strategies to find the sums. Circle any strategy you use.
I. 4 make a 10

7 doubles
+7 count on
4. 8 make a IO

4 doubles
+2 count on
2. 9 make a 10

8 doubles
+1 count on
5. 6 make a 10

3 doubles
+6 count on
3. 4 make a 10

6 doubles
+2 count on
6. 6 make a 10 7 doubles
+4 count on

Math Talk Explain why you used the make a 10 strategy to solve Exercise 6.

## On Your Own

Use a strategy to find the sum. Circle the strategy you choose.

| 7. 5 make a 10 <br> 5 doubles <br> +5 count on | 8. 7 make a 10 <br> 3 doubles <br> +5 count on | 9. 3 make a 10 <br> 8 doubles <br> +8 count on |
| :---: | :---: | :---: |
| 10. 4 make a 10 <br> 2 doubles <br> +7 count on | II. 2 make a 10 <br> 9 doubles <br> +2 count on | 12. 9 make a 10 <br> 9 doubles <br> +1 count on |
| 13. 9 make a 10 <br> 2 doubles <br> +8 count on | 14. 6 make a 10 <br> 3 doubles <br> +7 count on | 15. 8 make a 10 <br> 4 doubles <br> +1 count on |

## Problem Solving

16. Christine has 7 red buttons, 3 blue buttons, and 4 yellow buttons. How many buttons does she have?

## Add a One-Digit Number to a Two-Digit Number

Essential Question How can you find the sum of a I-digit number and a 2-digit number?

## Model and Draw

What is $54+2 ?$
To find the sum, find how many tens and ones in all.

| $\mathbf{5}$ tens $\mathbf{4}$ ones |
| ---: |
| $+\quad \mathbf{2}$ ones |$\quad$| $\mathbf{5 4}$ |
| ---: |
| $+\quad \mathbf{2}$ |

## Share and Show

## MATH BOARD

Add. Write the sum.

| I. $\begin{array}{r} 72 \\ +\quad 3 \\ \hline \end{array}$ | 2. 24 | 3. $\begin{array}{r} 41 \\ +\quad 4 \\ \hline \end{array}$ | 4. $\begin{array}{r}56 \\ +\quad 2 \\ \hline\end{array}$ |
| :---: | :---: | :---: | :---: |
| 5. $\begin{array}{r} 14 \\ +\quad 4 \end{array}$ | 6. $\begin{array}{r}33 \\ +\quad 6\end{array}$ | $\text { 7. } \begin{array}{r} 61 \\ +\quad 8 \end{array}$ | 8. $\begin{array}{r}93 \\ +\quad 4\end{array}$ |
| 9. $\begin{array}{r} 31 \\ +\quad 6 \\ \hline \end{array}$ | 10. $\begin{array}{r}11 \\ +\quad 7\end{array}$ | II. $\begin{array}{r} 40 \\ +\quad 4 \end{array}$ | 12. $\begin{array}{r} 35 \\ +\quad 3 \end{array}$ |

## On Your Dwn

Add. Write the sum.

| 13. $\begin{array}{r}22 \\ +\quad 7\end{array}$ | 14. $\begin{array}{r}53 \\ +\quad 3 \\ \hline\end{array}$ | 15. $\begin{array}{r} 46 \\ +\quad 2 \\ \hline \end{array}$ | 16. $\begin{array}{r}71 \\ +\quad 8\end{array}$ |
| :---: | :---: | :---: | :---: |
| $\text { 17. } \begin{array}{r} 84 \\ +\quad 5 \\ \hline \end{array}$ | 18. $\begin{array}{r}93 \\ +\quad 4 \\ \hline\end{array}$ | 19. $\begin{array}{r} 16 \\ +\quad 3 \\ \hline \end{array}$ | 20. $\begin{array}{r}37 \\ +\quad 1\end{array}$ |
| 21. $\begin{array}{r}62 \\ +\quad 2 \\ \hline\end{array}$ | 22. $\begin{array}{r}23 \\ +\quad 5\end{array}$ | 23. $\begin{array}{r}82 \\ +\quad 2\end{array}$ | $\text { 24. } \begin{array}{r} 44 \\ +\quad 4 \\ \hline \end{array}$ |

## Problem Solving

25. There are 23 children in the first grade class. Then 3 more children join the class. How many children are there now?

## Add Two-Digit Numbers

Essential Question How can you find the sum of two 2-digit numbers?

## Model and Dpaw

What is $23+14 ?$
You can find how many tens and ones in all.

| 2 | tens | 3 ones | 23 |
| :---: | :---: | :---: | :---: |
| + I | ten | 4 ones | +14 |
| $3$ | tens | $7$ <br> ones | 37 |

Share and Show
MATH
BOARD
Add. Write the sum.

| I.82 <br> +12 | 2.25 <br> +43 | 3. 15 <br> +14 | 4. <br> +12 |
| ---: | ---: | ---: | ---: |
| 5. 36 |  |  |  |
| +21 |  |  |  |

Math Talk How many tens are in $26+11$ ?
How do you know?

## On Your Dwn

Add. Write the sum.

| 13. $\begin{array}{r}83 \\ +\quad 12 \\ \hline\end{array}$ | 14. $\begin{array}{r}73 \\ +\quad 21 \\ \hline\end{array}$ | 15. $\begin{array}{r}16 \\ +\quad 51 \\ \hline\end{array}$ | 16. $\begin{array}{r}23 \\ +\quad 43 \\ \hline\end{array}$ |
| :---: | :---: | :---: | :---: |
| 17. $\begin{array}{r}24 \\ +55 \\ \hline\end{array}$ | 18. $\begin{array}{r}67 \\ +\quad 21 \\ \hline\end{array}$ | 19. $\begin{array}{r} 64 \\ +\quad 23 \\ \hline \end{array}$ | $\text { 20. } \begin{array}{r} 51 \\ +\quad 24 \\ \hline \end{array}$ |
| 21. $\begin{array}{r}26 \\ +\quad 32 \\ \hline\end{array}$ | 22. $\begin{array}{r}51 \\ +\quad 25 \\ \hline\end{array}$ | 23. $\begin{array}{r}46 \\ +\quad 22 \\ \hline\end{array}$ | 24. $\quad 34$ |

## Problem Solving (reald

25. Emma has 21 hair clips.

Her sister has II hair clips.
How many hair clips do the girls have together?
$\qquad$ hair clips

## Repeated Addition

Essential Question How can you find how many items there are in equal groups without counting one at a time?

## Model and Draw

When all groups have the same number they are equal groups.
Agita is putting 2 plants on each step up to her porch. She has 4 steps.
How many plants does she need?
There are 4 equal groups. There are 2 in each group. Add to find how many in all.


Agita needs $\qquad$ plants.

## Share and Show

Use your MathBoard and . Make equal groups. Complete the addition sentence.


Math Talk How can you use addition to find
5 groups of 4 ?

## On Youn Own

Use your MathBoard and . Make equal groups. Complete the addition sentence.


## Problem Solving \%aid

Solve.
9. There are 3 flower pots. There are 2 flowers in each flower pot. How many flowers are there?
flowers
10. There are 2 plants. There are 4 leaves on each plant. How many leaves are there?
leaves

## Use Repeated Addition to Solve Problems

Essential Question How can you use repeated addition to solve problems?

## Model and Draw

Dyanna will have 3 friends at her party. She wants to give each friend 4 balloons. How many balloons does Dyanna need?


THINK $4+4+4=12$

## Share and Show

Draw pictures to show the story.
Write the addition sentence to solve.
I. Ted plays with 2 friends. He wants to give each friend 5 cards. How many cards does Ted need?
$\qquad$ cards

2. Aisha shops with 4 friends. She wants to buy each friend 2 roses. How many roses does Aisha need?

$\qquad$ roses

Math Talk What pattern can you use to find the answer to Exercise 2?

## On Your Own

Draw pictures to show the story.
Write the addition sentence to solve.
3. Lea plays with 3 friends. She wants to give each friend 5 ribbons. How many ribbons does Lea need?
$\qquad$ ribbons
4. Harry shops with 5 friends. He wants to buy each friend 2 pens. How many pens does Harry need?
$\qquad$ pens
5. Cam plays with 4 friends. She wants to give each friend 4 stickers. How many stickers does Cam need?
$\qquad$ stickers

## Problem Solving World

Circle the way you can model the problem.
Then solve.
6. There are 4 friends. Each friend has 3 apples. How many apples are there?

4 groups of 4 apples
4 groups of 3 apples
3 groups of 4 apples
There are $\qquad$ apples.
$\qquad$

## $\checkmark$ Checkpoint

## Concepts and Skills

Follow the rule to complete each table.
I.

| Add 3 |  |
| :---: | :---: |
| 2 |  |
| 4 |  |
| 6 |  |
| 8 |  |

2. 

| Subtract 7 |  |
| :---: | :---: |
| 10 |  |
| 12 |  |
| 13 |  |
| 14 |  |

3. 

| Add 6 |  |
| :---: | :---: |
| 10 |  |
| 9 |  |
| 8 |  |
| 7 |  |

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Use strategies to find the sums. Circle any strategy you use.
5. 4 make a 10

3 doubles
+4 count on
6. 3 make a 10 7 doubles
+5 count on

Add. Write the sum.

| 7. 32 | 8. 52 | 9. 18 | 10. 43 |
| :---: | :---: | :---: | :---: |
| +14 | + 46 | + 21 | + 35 |

Use your MathBoard and . Make equal groups.
Complete the addition sentence.

| Number of <br> Equal Groups | Number in <br> Each Group | How many in all? |
| :--- | :---: | :---: |
| II. | 3 | 2 |

13. Choose the way to model the problem.

James has 4 letters. He puts 2 stamps on each letter.
How many stamps does he use in all?

- 2 groups of 4 stamps
O 4 groups of 4 stamps
- 2 groups of 2 stamps
- 4 groups of 2 stamps


## Choose a Nonstandard Unit to Measure Length

Essential Question How can you decide which nonstandard unit to use to measure the length of an object?

## Model and Draw

Use $\rightleftarrows$ to measure short things.

 measure long things.


## Share and Show

```
MMATH
```

Use real objects. Circle the unit you would use to measure. Then measure.

|  | Object | Unit | Measurement |
| :---: | :---: | :---: | :---: |
|  |  |  | about |
|  | $8$ | $\stackrel{\rightleftarrows}{\rightleftarrows}$ | about |
|  | (-xill | $\rightleftarrows$ | about |
|  |  |  | about |

Math Talk Alex measured a book with $\rightleftarrows$. Then he measured with $\longrightarrow$. Did he use more $\rightleftarrows$ or $\because$ ? Explain.

## On Your Own

Use real objects．Choose a unit to measure the length．Circle it．Then measure．


|  | Object | Unit | Measurement |
| :---: | :---: | :---: | :---: |
| 5. | $\ldots$ | $\longleftarrow 01$ | about＿＿＿ |
| 6. | $2 \pi$ | $\longleftarrow 01$ | about＿＿＿ |
| 7. |  | $\longleftarrow 01$ | about |
| 8. | - 敦垂倸 | － 01 | about＿＿＿ |

## Problem Solving

9．Fred uses to measure the stick．
Sue measures the stick and gets the same measurement． Circle the unit that Sue uses．
 objects such as pencils．Discuss why the measurements differ．

## Use a Non-Standard Ruler

Essential Question How can you use a non-standard measuring tool to find length?

## Model and Draw

About how long is the pencil?


The end of the pencil and the end of the $\Longleftarrow$ must line up. Count how many $\Longleftarrow$ from one end of the pencil to the other.

Shame and Show


About how long is the string?
I.

$\qquad$

2.

$\qquad$ $\rightleftarrows$

Math Talk In Exercise I, why must the end of the pencil and the end of the $\Longleftarrow$ line up?

## On Youp Dwn

About how long is the string?
3.

about $\qquad$ $\rightleftarrows$
4.

about $\qquad$ $\rightleftarrows$
5.

about $\qquad$ $\rightleftarrows$

## Problem Solving (neald

6. Wendy measures her pencil. She says it is about $2 \Longleftarrow$ long. Is she correct? Explain.
$\qquad$
$\qquad$

TAKE HOME ACTIVITY • Have your child use 20 paper clips to measure different small objects in your house. Be sure the paper clips touch end to end.

## Compare Lengths

Essential Question How can you compare lengths of objects?

## Model and Draw

First, write I, 2, and 3 to order the Then measure strings from shortest to longest. with $\mathbb{\square}$.


## Share and Show

## MATH BOARD

Write I, 2, and 3 to order the strings from shortest to longest. Then measure with $\boxminus$. Write the lengths.
about $\qquad$ about $\qquad$
about $\qquad$
$\square$ $\square$ $\square$ -

I.


## On Your Own

2. Write $I, 2$, and 3 to order the strings from shortest to longest. Then measure with $\boxminus$. Write the lengths.

about $\qquad$ $\square$
about $\qquad$ $\square$
about $\qquad$ $\square$
3. Write I, 2, and 3 to order the strings from shortest to longest. Then measure with $\square$. Write the lengths.
$\qquad$
$\qquad$

about $\qquad$ $\square$ about $\qquad$ $\bullet$ about $\qquad$ $\square$

## Problem Solving

4. Kate has these ribbons. Kate gives Hannah the longest one. Measure with $\boxtimes$ and write the length of Hannah's ribbon.
 about $\qquad$ $\square$

TAKE HOME ACTIVITY • Give your child three strips of paper. Have your child cut them about 4 paper clips long, about 2 paper clips long, and about 5 paper clips long. Then have your child order the paper strips from shortest to longest.

## Time to the Hour and Half Hour

Essential Question How do you tell time to the hour and half hour on an analog clock?

## Model and Draw

The hour hand and the minute hand show the time.
Write the time shown on the clock.


## Share and Show

## MATH BOARD

Read the clock. Write the time.


Math Talk Why does the hour hand point halfway between 5 and 6 at half past 5:00?

## On Your Own

Read the clock. Write the time.
4.

5.

6.

9.

$\qquad$

## Problem Solving (2edld

Draw and write to show the time.
10. Liam has soccer practice at half past 10:00.


TAKE HOME ACTIVITY • Say a time, such as half past I:00 or 7:00. Ask your child where the clock hands will point at that time.
$\qquad$

## $\checkmark$ Checkpoint

## Concepts and Skills

Use real objects. Choose a unit to measure the length.
Then measure.


How long is the yarn? Use the star ruler to measure.
4.

5.

stars long

Write I, 2, and 3 to measure the strings from shortest to longest. Then measure with cubes. Write the lengths.
6.
 ___ cubes long
 ___ cubes long

$\qquad$ cubes long
7. pionomoinonomomomod ___ cubes long

$\qquad$ cubes long

___
cubes long
8. Read the clock. Choose the correct time.


O 8:00

- 8:30
- 9:00
- 9:30

GR36 thirty-six

## Use a Picture Graph

Essential Question How do you read a picture graph？

## Model and Draw

| Our Favorite Hot Dog Toppings |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | mustard | \＆ | ㅊ | 찿 |  |  |
| \％ | ketchup | 犬 | ¢ | ¢ | ㅊ | 찿 |

Each $\frac{f}{x}$ stands for I child．

3children chose 㡿．

Most children chose Ketchup 2 fewer children chose 啳than

## Shape and Show

| Our Sock Colors |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 black | ㅊ | f |  |  |  |  |
| 閑 white | ㅊ | 찿 | ¢ | 찿 | 찿 | 찿 |
| D blue | f | f | f |  |  |  |

Each ${ }^{\circ}$ itands for I child．
Use the picture graph to answer the questions．
I．How many children are wearing ？ $\qquad$
2．What color of socks are most of the children wearing？
3．How many more children wear ${ }^{\circ} 4$ $\qquad$

## On Youp Dwn

## Our Weather

|  | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 兓 sunny | $\bigcirc$ | $\bigcirc$ |  |  |  |  |
| 潾 cloudy | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

Each $\bigcirc$ stands for I day．
Use the picture graph to answer each question．
4．How many days in all are shown on the graph？
$\qquad$ days

5．What was the weather for most days？Circle．

 days were there？
＿＿＿days

## Problem Solving wall

8．Today is sunny．Robin puts one more 签䇫 on the graph．How many days are there now？

## Use a Bar Graph

Essential Question How do you read a bar graph?

## Model and Draw



To find how many, read the number below the end of the bar. fish are

## Share and Show



Use the bar graph to answer the questions.
I. How many fish are in the aquarium?
2. How many fish in the aquarium are
3. How many fewer fish are than
4. Are more of the fish or 的?
___ fish

Math Talk How did you find the answer for Exercise I?

## On Your Own

Use the bar graph to answer the questions.
5. How many children chose 3 ?
6. How many children chose St
7. Which vegetable did most children choose? Circle.


$\qquad$

8. Which vegetables were chosen the same number of times? Circle.


## Problem Solving a drad

Use the bar graph to solve.
9. Brad and Glen both like corn the best. If the boys add this to the graph, how many children will have chosen corn?

## Take a Survey

Essential Question How can you take a survey?

## Model and Draw

You can take a survey to get information. Jane took a survey of her friends' favorite wild animals. The tally chart shows the results.

## REMEMBER

 Each tally mark stands for one friend's choice.| Favorite Wild Animal |  |
| :--- | :---: |
| Animal | Tally |
| elephant | IHI |
| monkey | III |
| tiger | II |



## Share and Show

## MATH

I. Take a survey.

Ask IO classmates which wild animal
is their favorite. Use tally marks to show their answers.

| Our Favorite Wild Animal |  |
| :--- | :---: |
| Animal | Tally |
| elephant |  |
| monkey |  |
| tiger |  |

2. How many children did not choose tiger?
$\qquad$ children
3. Did more children choose elephant or tiger?
4. The most children chose as their favorite.

Math Talk Describe a different survey that you could take. What would the choices be?

## On Your Own

5. Take a survey. Ask 10 classmates which color is their favorite. Use tally marks to show their answers.

Our Favorite Color

| Color | Tally |
| :--- | :--- |
| red |  |
| blue |  |
| green |  |

6. Which color was chosen by the fewest classmates? $\qquad$
7. Which color did the most classmates choose? $\qquad$
8. Did more classmates choose red or green? $\qquad$
9. $\qquad$ classmates chose a color that was not red.

IO. Did fewer children choose blue or green?
Problem Solving ead
II. Jeff wants to ask IO classmates which snack is their favorite. He makes I tally mark for each child's answer. How many more classmates does he need to ask?

| Our Favorite Snack |  |
| :--- | :--- |
| Snack | Tally |
| pretzels | II |
| apples | I |
| popcorn | HH |

$\qquad$ more classmates

## Identify Shapes

Essential Question How can attributes help you identify a shape?

## Model and Draw

The number of sides and vertices help you identify a shape.

triangle

square

rectangle

trapezoid

hexagon

3 sides, 3 vertices
4 sides, 4 vertices


Shaje and Show
Circle to answer the question. Write to name the shape.
I. Which shape has 4 sides?

2. Which shape has 3 vertices?

3. Which shape has 6 sides?
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4. Which shape has 4 vertices?


Math Talk How are a square and a rectangle alike?

## On Youp Dwn

Circle to answer the question. Write to name the shape.
5. Which shape has 3 sides?

6. Which shape has 4 vertices?

7. Which shape has 4 sides?

8. Which shape has 6 vertices?


## Problem Solving (aill

9. Jason, Mat, and Carrie each draw a shape with 4 sides. The shapes look different and have different names.

Draw 3 shapes the children might have drawn. Write to name each shape.

## Equal Shares

Essential Question How can you name two or four equal shares?

## Model and Draw

| half | half |
| :--- | :--- |


| fourth | fourth |
| :--- | :--- |
| fourth | fourth |


$\xrightarrow{\text { H. }}$ equal shares
 fouths

## Share and Show

MATH
BOARD
Circle the shape that shows equal shares. Write to name the equal shares.
I.

2.

3.

4.


Math Talk Are all equal shares the same size and shape? Explain.

## On Your Dwn

Circle the shape that shows equal shares. Write to name the equal shares.
5.

6.

7.


8.



## Problem Solving (redld

9. Riley wants to share his cracker with a friend. Draw to show two different ways Riley can cut the cracker into equal shares.
$\square$
$\square$

TAKE HOME ACTIVITY • Ask your child to help you cut a piece of toast into fourths.
$\qquad$

## Concepts and Skills

Use the picture graph to answer Exercises I and 2.

| Our Favorite Fruit |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\bigcirc$ apple | 앛 | 앛 | 앛 | 앛 | 앛 |  |  |  |
| $\Leftrightarrow$ banana | 찿 | 찿 | 앛 | 찿 | 찿 | 찿 | 찿 | 앛 |
| 0 orange | 찿 | 찿 | 앛 |  |  |  |  |  |

Each $\frac{f}{x}$ stands for I child.
I. How many children choose an orange? $\qquad$
2. Which fruit was chosen most often?

Use the bar graph to answer Exercises 3 and 4.

3. Which pet did most children choose? $\qquad$
4. How many more children chose a cat than a bird?
5. Take a survey. Ask 8 classmates which sport is their favorite. Use tally marks to show their answers.

| Our Favorite Sport |  |
| :---: | :---: |
| Sport | Tally |
| baseball |  |
| football |  |
| soccer |  |

6. Did more children choose baseball or soccer?

Circle to answer the question. Then write the shape name.
7. Which shape has 4 vertices?

8. Which shape shows fourths?

○


