Measure With Inch Models

Place tiles on the squares. How many tiles? \( \frac{3}{\text{tiles}} \)
Each tile is about 1 inch long.

How long is the ribbon? about \( \frac{3}{\text{inches}} \)

Use color tiles. Measure the length of the object in inches.

1. \[ \text{about } \frac{\_\_\_}{\text{inches}} \]

2. \[ \text{about } \frac{\_\_\_}{\text{inches}} \]

3. \[ \text{about } \frac{\_\_\_}{\text{inches}} \]

Lesson Objective: Use concrete models to measure the lengths of objects in inches.
Measure with Inch Models

Use color tiles. Measure the length of the object in inches.

1. [Image]

about _____ inches

2. [Image]

about _____ inches

3. [Image]

about _____ inches

4. [Image]

about _____ inches

5. Look around your classroom. Find an object that is about 4 inches long. Draw and label the object.
Lesson 67
COMMON CORE STANDARD  CC.2.MD.1
Lesson Objective: Make an inch ruler and use it to measure the lengths of objects.

Make and Use a Ruler

Use a paper strip. Mark the sides of a color tile. Mark 6 tiles. Color each part.

Each part is about ___1___ inch long.

Line up the left edge of the bracelet with the first mark. Count the inches.
The bracelet is about ___5___ inches long.

Measure the length with your ruler. Count the inches.

1. 

about _____ inches

2. 

about _____ inches
Make and Use a Ruler

Measure the length with your ruler. Count the inches.

1. about _____ inches

2. about _____ inches

3. about _____ inches

4. about _____ inches

5. Use your ruler. Measure the width of this page in inches.

   about _____ inches
Lesson 68

COMMON CORE STANDARD CC.2.MD.1

Lesson Objective: Measure the lengths of objects to the nearest inch using an inch ruler.

Measure with an Inch Ruler

1. Line up one end with 0.
2. Find the inch mark closest to the other end.
3. Read the number of inches at that mark.

The ribbon is about ___ inches long.

Measure the length to the nearest inch.

1. [Image of a line]
   ___ inches

2. [Image of a line]
   ___ inches

3. [Image of a line]
   ___ inches
Measure with an Inch Ruler

Measure the length to the nearest inch.

1. ______ inches

2. ______ inches

3. ______ inches

4. ______ inches

5. Measure the string. What is its total length?

______ inches
Lesson 69
COMMON CORE STANDARD  CC.2.MD.1
Lesson Objective: Select appropriate tools for measuring different lengths.

Choose a Tool

Use an inch ruler to measure short lengths.

Use a yardstick to measure greater lengths.

Use a measuring tape to measure lengths that are not flat.

Choose the best tool for measuring the real object. Then measure and record the length.

1. a pencil

Tool: ____________________________
Length: __________________________

2. a chalkboard

Tool: ____________________________
Length: __________________________
Choose a Tool

Choose the best tool for measuring the real object. Then measure and record the length or distance.

1. the length of your desk

   Tool: ____________________________

   Length: _________________________

2. the distance around a basket

   Tool: ____________________________

   Length: _________________________

PROBLEM SOLVING

Choose the better tool for measuring. Explain your choice.

3. Mark wants to measure the length of his room. Should he use an inch ruler or a yardstick?

   Mark should use ___________________________ because

   __________________________________________
Lesson 70
COMMON CORE STANDARD  CC.2.MD.1
Lesson Objective: Use a concrete model to measure the lengths of objects in centimeters.

Measure with a Centimeter Model

Place unit cubes on the squares.
How many cubes long is the pencil?
The pencil is 8 cubes long.
Each unit cube is about 1 centimeter long.
So, the pencil is about 8 centimeters long.

Use a unit cube. Measure the length in centimeters.

1. __________________________
   about ________ centimeters

2. __________________________
   about ________ centimeters

3. __________________________
   about ________ centimeters

Measurement and Data 139
Measure with a Centimeter Model

Use a unit cube. Measure the length in centimeters.

1. about _____ centimeters

2. about _____ centimeters

3. about _____ centimeters

4. about _____ centimeters

PROBLEM SOLVING

Solve. Write or draw to explain.

5. Susan has a pencil that is 3 centimeters shorter than this string. How long is the pencil?

about _____ centimeters
Measure with a Centimeter Ruler

Line up the left end of the ribbon with the zero mark on the ruler.

Which centimeter mark is closest to the other end of the ribbon?

The ribbon is about 7 centimeters long.

Measure the length to the nearest centimeter.

1. _____ centimeters

2. _____ centimeters

3. _____ centimeters

Lesson 71
COMMON CORE STANDARD CC.2.MD.1
Lesson Objective: Measure lengths of objects to the nearest centimeter using a centimeter ruler.
Measure with a Centimeter Ruler

Measure the length to the nearest centimeter.

1. ______ centimeters

2. ______ centimeters

3. ______ centimeters

PROBLEM SOLVING

4. Draw a string that is about 8 centimeters long. Then use a centimeter ruler to check the length.
Lesson 72

COMMON CORE STANDARD CC.2.MD.2

Lesson Objective: Measure the lengths of objects in both inches and feet to explore the inverse relationship between size and number of units.

Measure in Inches and Feet

The real folder is about 12 inches wide. The real folder is also about 1 foot wide.

12 inches is the same as 1 foot.

Measure to the nearest inch. Then measure to the nearest foot.

<table>
<thead>
<tr>
<th>Find the real object.</th>
<th>Measure.</th>
</tr>
</thead>
</table>
| desk                  | _____ inches  
|                       | _____ feet   |
| rug                   | _____ inches  
|                       | _____ feet   |
| map                   | _____ inches  
|                       | _____ feet   |
Measure in Inches and Feet

Measure to the nearest inch. Then measure to the nearest foot.

<table>
<thead>
<tr>
<th>Find the real object</th>
<th>Measure.</th>
</tr>
</thead>
</table>
| 1. bookcase          | _____ inches   
                       | _____ feet    |
| 2. window            | _____ inches   
                       | _____ feet    |
| 3. chair             | _____ inches   
                       | _____ feet    |

**PROBLEM SOLVING**

4. Jake has a piece of yarn that is 4 feet long. Blair has a piece of yarn that is 4 inches long. Who has the longer piece of yarn? Explain.

__________________________________________________________________________

__________________________________________________________________________
Lesson 73

COMMON CORE STANDARD  CC.2.MD.2

Lesson Objective: Measure the lengths of objects in both centimeters and meters to explore the inverse relationship between size and number of units.

Centimeters and Meters

You can measure longer lengths in meters.

1 meter is the same as 100 centimeters.

The real board is about 100 centimeters tall.
So, the real board is about 1 meter tall.

Measure to the nearest centimeter.
Then measure to the nearest meter.

<table>
<thead>
<tr>
<th>Find the real object</th>
<th>Measure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>desk</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>desk</td>
<td>______ centimeters</td>
</tr>
<tr>
<td></td>
<td>______ meters</td>
</tr>
<tr>
<td>door</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>door</td>
<td>______ centimeters</td>
</tr>
<tr>
<td></td>
<td>______ meters</td>
</tr>
<tr>
<td>classroom floor</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>classroom floor</td>
<td>______ centimeters</td>
</tr>
<tr>
<td></td>
<td>______ meters</td>
</tr>
</tbody>
</table>

Measurement and Data 145
**Centimeters and Meters**

Measure to the nearest centimeter. Then measure to the nearest meter.

<table>
<thead>
<tr>
<th>Find the real object.</th>
<th>Measure.</th>
</tr>
</thead>
</table>
| 1. bookcase           | _______ centimeters  
                          | _______ meters |
| 2. window             | _______ centimeters  
                          | _______ meters |
| 3. map                | _______ centimeters  
                          | _______ meters |

**PROBLEM SOLVING**

4. Sally will measure the length of a wall in both centimeters and meters. Will there be fewer centimeters or fewer meters? Explain.
Lesson 74

Estimate Lengths in Inches

The bead is 1 inch long. How many beads will fit on the string? Four beads will fit on the string.

About how long is the string? The string is about \(\frac{4}{5}\) inches long.

Circle the best estimate for the length of the string.

1.  
   - 2 inches
   - 4 inches
   - 6 inches

2.  
   - 1 inch
   - 3 inches
   - 5 inches

3.  
   - 1 inch
   - 2 inches
   - 4 inches

4.  
   - 5 inches
   - 8 inches
   - 10 inches

Measurement and Data
Estimate Lengths in Inches

The bead is 1 inch long. Circle the best estimate for the length of the string.

1. The bead is 1 inch long.
   Circle the best estimate for the length of the string.
   - 1 inch
   - 4 inches
   - 7 inches

2. The bead is 3 inches long.
   Circle the best estimate for the length of the string.
   - 3 inches
   - 6 inches
   - 9 inches

3. The bead is 2 inches long.
   Circle the best estimate for the length of the string.
   - 2 inches
   - 3 inches
   - 6 inches

4. The bead is 2 inches long.
   Circle the best estimate for the length of the string.
   - 2 inches
   - 5 inches
   - 8 inches

PROBLEM SOLVING

Solve. Write or draw to explain.

5. Ashley has some beads. Each bead is 2 inches long. How many beads will fit on a string that is 8 inches long?
   
   ____ beads
Lesson 75

COMMON CORE STANDARD   CC.2.MD.3
Lesson Objective: Estimate the lengths of objects in feet.

Estimate Lengths in Feet

A 12-inch ruler is about 1 foot long. __3__ rulers, or __3__ feet

Find each object. Estimate how many 12-inch rulers will be about the same length as the object.

1. chalkboard

Estimate: _____ rulers, or _____ feet

2. poster

Estimate: _____ rulers, or _____ feet
Estimate Lengths in Feet

Find each object. Estimate how many 12-inch rulers will be about the same length as the object.

1. door
   Estimate: _____ rulers, or _____ feet

2. flag
   Estimate: _____ rulers, or _____ feet

3. wall of a small room
   Estimate: _____ rulers, or _____ feet

PROBLEM SOLVING

Solve. Write or draw to explain.

4. Mr. and Mrs. Baker place 12-inch rulers along the length of a rug. They each line up 3 rulers along the edge of the rug. What is the length of the rug?

   about _____ feet
Lesson 76

Estimate Lengths in Centimeters

The ribbon is about 8 centimeters long. How can you find the most reasonable estimate for the length of the string?

- The rope is about 7 centimeters long. Circle the best estimate for the length of the yarn.
  - rope
  - yarn
  - 5 centimeters 9 centimeters 14 centimeters

- The pencil is about 10 centimeters long. Circle the best estimate for the length of the ribbon.
  - pencil
  - ribbon
  - 5 centimeters 9 centimeters 12 centimeters
Estimate Lengths in Centimeters

1. The toothpick is about 6 centimeters long. Circle the best estimate for the length of the yarn.
   - 6 centimeters
   - 9 centimeters
   - 12 centimeters

2. The pen is about 11 centimeters long. Circle the best estimate for the length of the eraser.
   - 4 centimeters
   - 10 centimeters
   - 14 centimeters

3. The string is about 6 centimeters long. Circle the best estimate for the length of the crayon.
   - 5 centimeters
   - 9 centimeters
   - 14 centimeters

PROBLEM SOLVING REAL WORLD

4. The string is about 6 centimeters long. Draw a pencil that is about 12 centimeters long.
   
   -----------------------------
Estimate the length of the chalk tray.

The chalk tray is about the same length as 2 meter sticks.
So, the chalk tray is about 2 meters long.

Find the real object.
Estimate its length in meters.

1. window
   
   about ________ meters

2. bookshelf
   
   about ________ meters
Lesson 77
CC.2.MD.3

Estimate Lengths in Meters

Find the real object. Estimate its length in meters.

1. poster

about ______ meters

2. chalkboard

about ______ meters

3. bookshelf

about ______ meters

PROBLEM SOLVING: REAL WORLD

4. Barbara and Luke each placed 2 meter sticks end-to-end along the length of a large table. About how long is the table?

about ______ meters
Lesson 78
COMMON CORE STANDARD CC.2.MD.4
Lesson Objective: Measure and then find the difference in the lengths of two objects.

Measure and Compare Lengths

Which object is longer? How much longer?

1. Measure the leaf.
   The leaf is 9 centimeters.

2. Measure the stick.
   The stick is 5 centimeters.

3. Complete the number sentence to find the difference.
   \[
   \frac{9}{\text{centimeters}} - \frac{5}{\text{centimeters}} = \frac{4}{\text{centimeters}}
   \]
   The leaf is 4 centimeters longer than the stick.

Measure the length of each object. Write a number sentence to find the difference between the lengths.

1. \[
\frac{\text{centimeters}}{\text{centimeters}} - \frac{\text{centimeters}}{\text{centimeters}} = \frac{\text{centimeters}}{\text{centimeters}}
\]
   The string is \(\_\_\_\_\_\) centimeters longer than the paper clip.
Measure and Compare Lengths

Measure the length of each object. Write a number sentence to find the difference between the lengths.

1. The craft stick is _______ centimeters longer than the chalk.

2. The string is _______ centimeters longer than the toothpick.

PROBLEM SOLVING

Solve. Write or draw to explain.

3. A string is 11 centimeters long, a ribbon is 24 centimeters long, and a large paper clip is 5 centimeters long. How much longer is the ribbon than the string?

_______ centimeters
Problem Solving • Add and Subtract in Inches

Zack has two strings. One string is 12 inches long and the other string is 5 inches long. How long are Zack’s strings altogether?

Unlock the Problem

**What do I need to find?**
- how long Zack’s strings are in all

**What information do I need to use?**
- One string is 12 inches long.
- The other string is 5 inches long.

**Show how to solve the problem.**

![Diagram showing 12 inches and 5 inches]

$$12 + 5 = \underline{17}$$

The strings are 17 inches long in all.

Write a number sentence using a [ ] for the missing number. Solve.

1. Sara has two pieces of yarn. Each piece is 7 inches long. How many inches of yarn does she have in all?

![Diagram showing 7 inches and 7 inches]

Sara has _____ inches of yarn in all.
Problem Solving • Add and Subtract in Inches

Draw a diagram. Write a number sentence using a □ for the missing number. Solve.

1. Molly had a ribbon that was 23 inches long. She cut 7 inches off the ribbon. How long is her ribbon now?

Molly’s ribbon is _____ inches long now.

2. Jed has a paper clip chain that is 11 inches long. He adds 7 inches of paper clips to the chain. How long is the paper clip chain now?

The paper clip chain is _____ inches long now.
Problem Solving • Add and Subtract Lengths

Christy has a ribbon that is 12 centimeters long. Erin has a ribbon that is 9 centimeters long. How many centimeters of ribbon do they have altogether?

Unlock the Problem

What do I need to find?

how much ribbon they have altogether

What information do I need to use?

Christy has \( \frac{12}{\text{centimeters}} \) of ribbon.

Erin has \( \frac{9}{\text{centimeters}} \) of ribbon.

Show how to solve the problem.

\[
12 + 9 = \boxed{21}
\]

They have 21 centimeters of ribbon altogether.

Write a number sentence using a \( \boxed{\text{for the missing number. Then solve.}} \)

1. Lucas has one string that is 9 centimeters long and another string that is 8 centimeters long. How many centimeters of string are there in all?

\[
\boxed{9 + 8 = \text{____ centimeters of string in all}}
\]
Draw a diagram. Write a number sentence using a \( a \) for the missing number. Then solve.

1. A straw is 20 centimeters long. Mr. Jones cuts off 8 centimeters of the straw. How long is the straw now?

\[
\text{The straw is } \underline{12} \text{ centimeters long now.}
\]

2. Ella has a piece of blue yarn that is 14 centimeters long. She has a piece of red yarn that is 9 centimeters long. How many centimeters of yarn does she have altogether?

\[
\text{She has } \underline{23} \text{ centimeters of yarn altogether.}
\]
Lesson 81
COMMON CORE STANDARD CC.2.MD.7
Lesson Objective: Tell and write time to the hour and half hour.

Time to the Hour and Half Hour

It is zero minutes after the hour. Look at how you write this time.

It is 30 minutes after the hour. Look at how you write this time.

Look at the clock hands. Write the time.

1. 2. 3. 4. 5. 6.

Look at the clock hands. Write the time.

4. 5. 6.

Measurement and Data
Time to the Hour and Half Hour

Look at the clock hands. Write the time.

1. 
2. 
3. 

4. 
5. 
6. 

7. Amy’s music lesson begins at 4:00. Draw hands on the clock to show this time.
Lesson 82

COMMON CORE STANDARD  CC.2.MD.7
Lesson Objective: Tell and write time to the nearest five minutes.

Time to 5 Minutes

The minute hand moves from one number to the next in 5 minutes.
Start at the 12. Count by fives.
Stop at the number the minute hand points to.
The hour is 8 o’clock.
It is 20 minutes after 8:00.

Look at the clock hands. Write the time.

1.  

2.  

3.  

4.  

5.  

6.  

Measurement and Data
Lesson 82
CC.2.MD.7

Time to 5 Minutes

Look at the clock hands. Write the time.

1. 
2. 
3. 

4. 
5. 
6. 

PROBLEM SOLVING

Draw the minute hand to show the time. Then write the time.

7. My hour hand points between the 4 and the 5. My minute hand points to the 9. What time do I show?
Lesson 83

COMMON CORE STANDARD CC.2.MD.7

Lesson Objective: Practice telling time to the nearest five minutes.

Practice Telling Time

Use the clock hands to tell time. First find the hour.

The hour is ________.

Now figure out minutes. When the minute hand points to the 3 it is quarter past.

It is _________ minutes past 11.

The time is quarter past 11.

Draw the minute hand to show the time. Write the time.

1. quarter past 9

[Clock with minute hand on 9]

2. 30 minutes after 11

[Clock with minute hand on 6]

3. half past 10

[Clock with minute hand on 10]

4. 15 minutes after 6

[Clock with minute hand on 12]

Measurement and Data 165
Lesson 83
CC.2.MD.7

Practice Telling Time

Draw the minute hand to show the time. Write the time.

1. quarter past 7

2. half past 3

3. 50 minutes after 1

4. quarter past 11

5. 15 minutes after 8

6. 5 minutes after 6

PROBLEM SOLVING REAL WORLD

Draw hands on the clock to solve.

7. Josh got to school at half past 8.
   Show this time on the clock.
Lesson 84
COMMON CORE STANDARD  CC.2.MD.7
Lesson Objective: Tell and write time using a.m. and p.m.

A.M. and P.M.

A.M. times start after midnight.
A.M. times end before noon.

P.M. times start after noon.
P.M. times end before midnight.

get dressed for school

tell a bedtime story

A.M.  

7:30

P.M.  

Write the time. Then circle A.M. or P.M.

1. finish homework

2. go to morning recess

3. eat breakfast

4. get ready for bed

Measurement and Data
A.M. and P.M.

Write the time. Then circle A.M. or P.M.

1. walk the dog

2. finish breakfast

3. put on pajamas

4. read a bedtime story

PROBLEM SOLVING

Use the list of times. Complete the story.

5. Jess woke up at ____________. She got on the bus at ____________ and went to school. She left school at ____________.

3:15 P.M.
8:30 A.M.
7:00 A.M.
Lesson 85

COMMON CORE STANDARD CC.2.MD.8

Lesson Objective: Find the total values of collections of dimes, nickels, and pennies.

Dimes, Nickels, and Pennies

<table>
<thead>
<tr>
<th>Coin</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 dime</td>
<td>10¢</td>
</tr>
<tr>
<td>1 nickel</td>
<td>5¢</td>
</tr>
<tr>
<td>1 penny</td>
<td>1¢</td>
</tr>
</tbody>
</table>

Count dimes by tens.

- 10¢, 20¢, 30¢

Count nickels by fives.

- 5¢, 10¢, 15¢

Count pennies by ones.

- 1¢, 2¢, 3¢

1 dime = 10¢
1 nickel = 5¢
1 penny = 1¢

Count on by tens.

Count on by fives.

Count on by ones.

10¢, 20¢, 25¢, 30¢, 31¢

Total value: 31¢

Count on to find the total value.

1. [Image of coins] total value

2. [Image of coins] total value

Measurement and Data 169
Dimes, Nickels, and Pennies

Count on to find the total value.

1. [Image of coins] total value

2. [Image of coins] total value

3. [Image of coins] total value

4. [Image of coins] total value

Problem Solving: Real World

Solve. Write or draw to explain.

5. Aaron has 5 dimes and 2 nickels.
   How much money does Aaron have?
Lesson 86

COMMON CORE STANDARD  CC.2.MD.8
Lesson Objective: Find the total values of collections of quarters, dimes, nickels, and pennies.

Quarters

Count by twenty-fives.

1 quarter
25¢

25¢, 50¢, 75¢


25¢, 50¢, 60¢, 61¢

61¢
total value

Count on to find the total value.

1.

[Image of coins]

[Blank space for total value]

2.

[Image of coins]

[Blank space for total value]
Quarters

Count on to find the total value.

1.  

   ![Dimes and nickel coins](image1)

   ______ total value


2.  

   ![Quarters and pennies](image2)

   ______ total value


3.  

   ![Dimes, nickels, and quarters](image3)

   ______ total value

Problem Solving: Real World

Read the clue. Choose the name of a coin from the box to answer the question.

4. I have the same value as a group of 2 dimes and 1 nickel. What coin am I?

   nickel  dime  quarter  penny
Lesson 87
COMMON CORE STANDARD CC.2.MD.8
Lesson Objective: Order coins in a collection by value and then find the total value.

Count Collections

Draw the coins in order by value. Start with the coin that has the greatest value.

![Coins diagram]

Start at 25¢. Count on.

25¢, 35¢, 40¢, 41¢  total value 41¢

Draw the coins in order. Find the total value.

1. ![Coins image]

   total value __________

2. ![Coins image]

   total value __________

3. ![Coins image]

   total value __________
Count Collections

Draw and label the coins from greatest to least value. Find the total value.

1. 

2. 

3. 

Problem Solving

Solve. Write or draw to explain.

4. Rebecca has these coins. She spends 1 quarter. How much money does she have left?
Show Amounts in Two Ways

You can show the same amount in different ways.

<table>
<thead>
<tr>
<th>15¢</th>
<th>15¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>5, 10, 15</td>
<td>10, 15</td>
</tr>
</tbody>
</table>

Trade 2 nickels for 1 dime.

Use coins. Show the amount in two ways. Draw and label the coins.

1. 

<table>
<thead>
<tr>
<th>45¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>25¢ 10¢</td>
</tr>
</tbody>
</table>

2. 

<table>
<thead>
<tr>
<th>32¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>10¢ 10¢</td>
</tr>
</tbody>
</table>
Show Amounts in Two Ways

Use coins. Show the amounts in two ways. Draw and label the coins.

1. 39¢

2. 70¢

3. 57¢

4. Madeline uses fewer than 5 coins to pay 60¢. Draw coins to show one way she could pay 60¢.
Lesson 89
COMMON CORE STANDARD  CC.2.MD.8
Lesson Objective: Show one dollar in a variety of ways.

One Dollar

One dollar has the same value as 100 cents.

You can write one dollar like this:

$1.00

Count on to 100¢ to show $1.00.

25¢, 50¢, 75¢, 100¢

Draw more coins to show $1.00. Write the total value.

1. dimes

$1.00

2. nickels

$1.00

total value

Measurement and Data 177
One Dollar

Circle coins to make $1.00. Cross out the coins you do not use.

1.

2.

3.

**PROBLEM SOLVING**

4. Draw more coins to show $1.00 in all.
Lesson 90

Lesson Objective: Find and record the total value for money amounts greater than $1.

**Amounts Greater Than $1**

1. Count on and circle the coins that make one dollar.

2. Count on from 100¢ to find the total value for the whole group of coins.

3. $1.20 is the same as 1 dollar and 20 cents.

   Write **$1.20**.

Circle the money that makes $1. Then write the total value of the money shown.

1. 

2. 

Measurement and Data
Amounts Greater Than $1

Circle the money that makes $1.00. Then write the total value of the money shown.

1. [Image of money]

2. [Image of money]

3. [Image of money]

**PROBLEM SOLVING**

Solve. Write or draw to explain.

4. Grace found 3 quarters, 3 dimes, and 1 nickel in her pocket. How much money did she find?

__
Erin used one $1 bill and 3 nickels to buy a marker. How much money did Erin use to buy the marker?

Unlock the Problem

What do I need to find?
how much money
Erin used to buy the marker

What information do I need to use?
Erin used one $1 bill and 3 nickels

Show how to solve the problem.

Draw to show the money that Erin used.

Erin used $1.15 to buy the marker.

Use play coins and bills to solve.

Draw to show what you did.

1. Zeke has one $1 bill, 2 dimes, and 1 nickel.
   How much money does Zeke have?
Problem Solving • Money

Use play coins and bills to solve. Draw to show what you did.

1. Sara has 2 quarters, 1 nickel, and two $1 bills. How much money does Sara have?
   ________________________________

2. Brad has one $1 bill, 4 dimes, and 2 nickels in his bank. How much money does Brad have in his bank?
   ________________________________

3. Mr. Morgan gives 1 quarter, 3 nickels, 4 pennies, and one $1 bill to the clerk. How much money does Mr. Morgan give the clerk?
   ________________________________
Lesson 92

COMMON CORE STANDARD  CC.2.MD.9

Lesson Objective: Measure the lengths of objects and use a line plot to display the measurement data.

Display Measurement Data

Each X on the line plot is for the length of one book.

<table>
<thead>
<tr>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

Lengths of Books in Inches

One book is 5 inches long.
One book is 6 inches long.
Two books are 7 inches long.
One book is 8 inches long.

1. Use an inch ruler. Measure and record the lengths of 4 pencils in inches.

| 1st pencil: _____ inches |
| 2nd pencil: _____ inches |
| 3rd pencil: _____ inches |
| 4th pencil: _____ inches |

2. Write the numbers and draw the Xs to complete the line plot.

Lengths of Pencils in Inches
Display Measurement Data

1. Use an inch ruler. Measure and record the lengths of 4 different books in inches.

| 1st book: _____ inches |
| 2nd book: _____ inches |
| 3rd book: _____ inches |
| 4th book: _____ inches |

2. Make a line plot of the information above. Write a title for a line plot. Then write the numbers and draw the Xs.

3. Jesse measured the lengths of some strings. Use his list to complete the line plot.

<table>
<thead>
<tr>
<th>Lengths of Strings</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 inches</td>
</tr>
<tr>
<td>7 inches</td>
</tr>
<tr>
<td>6 inches</td>
</tr>
<tr>
<td>8 inches</td>
</tr>
<tr>
<td>5 inches</td>
</tr>
</tbody>
</table>
Lesson 93

Common Core Standard: CC.2.MD.10

Lesson Objective: Collect data in a survey and record that data in a tally chart.

Collect Data

You can take a survey to get information.

Which is your favorite sport?

Each tally mark stands for one person’s answer. Count the tally marks.

Favorite Sport

<table>
<thead>
<tr>
<th>Sport</th>
<th>Tally</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>soccer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>basketball</td>
<td></td>
<td></td>
</tr>
<tr>
<td>football</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Elijah asked his classmates to choose their favorite breakfast food. He made this chart.

1. Write numbers to complete the chart.

2. How many classmates chose pancakes?

3. Which breakfast food did the fewest classmates choose?

Elijah asked his classmates to choose their favorite breakfast food. He made this chart.

Favorite Breakfast Food

<table>
<thead>
<tr>
<th>Food</th>
<th>Tally</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>cereal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pancakes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>toast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eggs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Measurement and Data 185
Lesson 43
CC.2.MD.10

Name ________________________________

Collect Data

1. Take a survey. Ask 10 classmates how they got to school. Use tally marks to show their choices.

<table>
<thead>
<tr>
<th>Way</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>walk</td>
<td></td>
</tr>
<tr>
<td>bus</td>
<td></td>
</tr>
<tr>
<td>car</td>
<td></td>
</tr>
<tr>
<td>bike</td>
<td></td>
</tr>
</tbody>
</table>

2. How many classmates rode in a bus to school?
   ______ classmates

3. How many classmates rode in a car to school?
   ______ classmates

4. In which way did the fewest classmates get to school?
   ____________________________

5. In which way did the most classmates get to school?
   ____________________________

6. Did more classmates get to school by walking or by riding in a car?
   How many more?
   ______ more classmates
Read Picture Graphs

A picture graph uses pictures to show information.

<table>
<thead>
<tr>
<th>Favorite Color</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>red</td>
<td></td>
</tr>
<tr>
<td>blue</td>
<td></td>
</tr>
<tr>
<td>green</td>
<td></td>
</tr>
</tbody>
</table>

Key: Each \(\square\) stands for 1 child.

The row with \(\text{blue}\) has 5 pictures.

So, \(\boxed{5}\) children chose blue.

Use the picture graph to answer the questions.

1. How many children chose red? \(\boxed{\quad}\) children

2. Did more children choose green or choose red? \(\boxed{\quad}\)

3. Which color was chosen by the most children? \(\boxed{\quad}\)

4. How many children in all chose a favorite color? \(\boxed{\quad}\) children

Lesson 94
COMMON CORE STANDARD CC.2.MD.10
Lesson Objective: Interpret data in picture graphs and use that information to solve problems.
Read Picture Graphs

Use the picture graph to answer the questions.

<table>
<thead>
<tr>
<th>Number of Books Read</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryan</td>
</tr>
<tr>
<td>Gwen</td>
</tr>
<tr>
<td>Anna</td>
</tr>
<tr>
<td>Henry</td>
</tr>
</tbody>
</table>

Key: Each book represents 1 book.

1. How many books in all did Henry and Anna read? ______ books

2. How many more books did Ryan read than Gwen? ______ more books

3. How many fewer books did Gwen read than Anna? ______ fewer books

4. How many books did the four children read in all? ______ books

**Problem Solving Real World**

Use the picture graph above. Write or draw to explain.

5. Carlos read 4 books. How many children read fewer books than Carlos?
   ________ children
Make Picture Graphs

This picture graph uses 1 picture for each animal. Draw a △ for each tally mark.

**Animals at the Pet Store**

<table>
<thead>
<tr>
<th>Animal</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>fish</td>
<td>△△△</td>
</tr>
<tr>
<td>hamster</td>
<td>△△</td>
</tr>
<tr>
<td>turtle</td>
<td>△△△</td>
</tr>
</tbody>
</table>

How many turtles are at the pet store? ______ turtles

1. Use the tally chart to complete the picture graph. Draw a ☺ for each child.

**Favorite Color**

<table>
<thead>
<tr>
<th>Color</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>pink</td>
<td>☺☺☺</td>
</tr>
<tr>
<td>yellow</td>
<td>△△△</td>
</tr>
<tr>
<td>blue</td>
<td>☺☺☺</td>
</tr>
</tbody>
</table>

2. Which color did the fewest children choose? 

3. How many children chose pink? 

4. How many more children chose blue than chose yellow? 

COMMON CORE STANDARD CC.2.MD.10

Lesson Objective: Make picture graphs to represent data.
Make Picture Graphs

1. Use the tally chart to complete the picture graph.
   Draw a 😊 for each child.

<table>
<thead>
<tr>
<th>Favorite Cookie</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>chocolate</td>
<td></td>
</tr>
<tr>
<td>oatmeal</td>
<td>I</td>
</tr>
<tr>
<td>peanut butter</td>
<td></td>
</tr>
<tr>
<td>shortbread</td>
<td></td>
</tr>
</tbody>
</table>

Key: Each 😊 stands for 1 child.

2. How many children chose chocolate? _____ children

3. How many fewer children chose oatmeal than peanut butter? _____ fewer children

4. Which cookie did the most children choose?

5. How many children in all chose a favorite cookie? _____ children

6. How many children chose oatmeal or shortbread? _____ children
Read Bar Graphs

Look at the number below the right end of each bar. This number tells how many of each model Max has.

The bar for model cars ends at 7.
So, Max has 7 car models.

Use the bar graph.

1. How many model planes does Max have? _______ model planes

2. Does Max have more model boats or model planes? more model ________

3. How many models does Max have in all? _______ models

Common Core Standard CC.2.MD.10
Lesson Objective: Interpret data in bar graphs and use that information to solve problems.
Read Bar Graphs

Use the bar graph.

1. How many children chose basketball? _____ children

2. Which sport did the most children choose? _________________

3. How many more children chose basketball than baseball? _____ more children

4. Which sport did the fewest children choose? _________________

5. How many children chose a sport that was not soccer? _____ children

6. How many children chose baseball or basketball? _____ children
Make Bar Graphs

These bar graphs show how many games Alex, Sarah, and Tony played.

- Alex played 5 games.
- Sarah played 3 games.
- Tony played 4 games.

Jim is making a bar graph to show the number of markers his friends have.

- Adam has 4 markers.
- Clint has 3 markers.
- Erin has 2 markers.

1. Write labels for the graph.

2. Draw bars in the graph to show the number of markers that Clint and Erin have.
Make Bar Graphs

Maria asked her friends how many hours they practice soccer each week.

- Jessie practices for 3 hours.
- Victor practices for 2 hours.
- Samantha practices for 5 hours.
- David practices for 6 hours.

1. Write a title and labels for the bar graph.

2. Draw bars in the graph to show the data.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessie</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samantha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Which friend practices soccer for the most hours each week?

PROBLEM SOLVING

4. Which friends practice soccer for fewer than 4 hours each week?
Problem Solving • Display Data

The list shows how many hours Morgan worked on her project. Describe how the number of hours changed from Week 1 to Week 4.

<table>
<thead>
<tr>
<th>Week</th>
<th>Number of Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 hour</td>
</tr>
<tr>
<td>2</td>
<td>2 hours</td>
</tr>
<tr>
<td>3</td>
<td>3 hours</td>
</tr>
<tr>
<td>4</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

Unlock the Problem

What do I need to find?

how the number of \( \text{hours} \) changed from Week 1 to Week 4

What information do I need to use?

the number of \( \text{hours} \) Morgan worked on her project each week

Show how to solve the problem.

The number of hours

---

Measurement and Data
Problem Solving • Display Data

Make a bar graph to solve the problem.

1. The list shows the number of books that Abby read each month. Describe how the number of books she read changed from February to May.

<table>
<thead>
<tr>
<th>Month</th>
<th>Books</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>8 books</td>
</tr>
<tr>
<td>March</td>
<td>7 books</td>
</tr>
<tr>
<td>April</td>
<td>6 books</td>
</tr>
<tr>
<td>May</td>
<td>4 books</td>
</tr>
</tbody>
</table>

   The number of books ________________________________

   ________________________________

2. How many books in all did Abby read in February and March? _____ books

3. How many fewer books did Abby read in April than in February? _____ fewer books

4. In which months did Abby read fewer than 7 books?