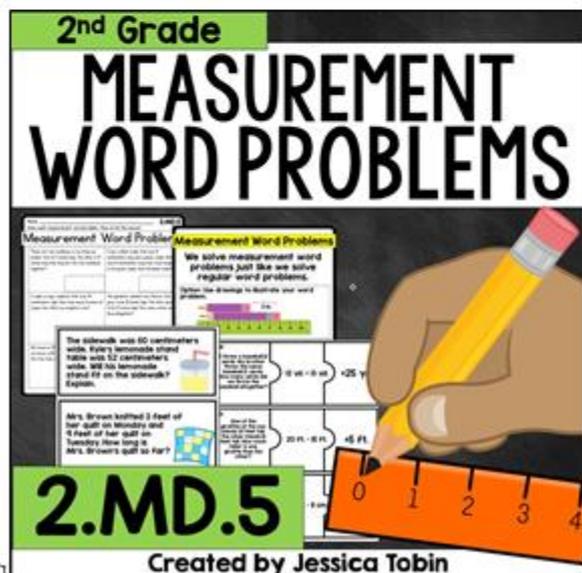


# 2.MD.5

This math unit provides lesson plans and math group resources to use while teaching the standard **2.MD.5**, which states that students will be able to...

**"Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem."**



## Using This Unit

Let's look at the structure of this unit.

### Pre-Assessment

- A pre-assessment is included that will help give you an idea of where your students are with this specific standard. Give this pre-assessment prior to any lessons on the standard.

### Daily Lessons

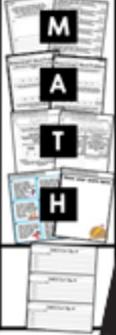
- Whole Group-** The whole group lesson will typically involve an anchor chart or poster to discuss. This should take about five minutes to complete.
- Partner Practice-** The whole group activity will be followed up with a partner practice activity. It will build on the knowledge the students learned or reviewed in the whole group lesson. This should take between 5-10 minutes.
- MATH Groups-** There are four break-apart groups to do each day. Each rotation can last between 10-15 minutes depending on how long you get for your math block.
  - Math Writing-* 2 writing options are given each day (one full sized page OR a cut and glue strip for a math journal)
  - Apply Skills-* You will find a variety of practice resources here, such as printables, interactive notebooks, or partner activities.
  - Teacher Time-* Small group differentiation can happen here. Most days will include a 'Remediation' activity, an 'On-Level' activity, and an 'Enrichment' activity.
  - Hands-on Practice-* These centers will give your students chances to get practice with manipulatives and other engaging activities.
- Exit Slip-** Every single day will come with an exit slip for students to show what they learned that day. Teacher will cut apart the three strips.

### Assessment

- This is to be completed after all lessons and math groups are taught.

# Daily Lesson Plans

Each standards-based math unit comes with daily lessons. Some are 3 days, while others may be 5+ days, depending on how complex the standard is. There are **4 main components** of each daily lesson.

2 <sup>nd</sup> Grade Math: 2.MD.5 Lesson #1	2.MD.5 lesson 1	
I can solve measurement word problems.		
Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.		
Activities		
Materials		
Whole Group	Teacher will either create anchor chart about word problem strategies, or teacher will show poster provided. Teacher will break apart a sample measurement word problem to show each of the letters in 'BURST'.	
Partner Practice	Students will break apart into partner sets. They will get 3 question cards each and practice boxing the measurements and lengths and underlining the question or action statement.	
Math Groups	M- Students will solve a measurement word problem, then write about their answer. Teacher will choose the full page writing sheet OR the cut apart strips for math journals. A- Students will practice marking up a word problem with the BURST method. They will read each word problem, mark it up, then solve. To save paper, laminate or put it in sheet protector to use with dry erase marker. T- (not differentiated today) Teachers and students will work together to assemble the input and guided output page of the interactive notebooks. They will cut and glue the input page, which teaches about the standard, then cut and glue one output page together for practice. H- Students will draw a task card, use the BURST method to solve it, and then write their answer on the recording sheet.	
Exit Slip	Students will complete an exit slip independently. Students will trade papers with a nearby classmate and grade their paper with a marker/pen while teacher reviews answers as a whole group.	

**Whole group activity:** This activity will typically include an anchor chart mini poster, plus some sort of teacher modeling activity.

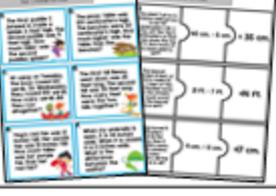
**Partner practice:** This will be a hands-on partner activity following the whole-group.

**M.A.T.H. groups:** (Explained in depth on next page) There are four groups/centers.

**Exit slip:** There are 3 exit slips to a page to cut out and administer for student learning.

# M.A.T.H. Groups

Each day comes with four group activity suggestions and materials for 'M.A.T.H.' groups. This is your small group time, splitting the class up into four groups to rotate around the room, participating in different activities for 10-20 minutes a piece.

<b>M</b>	<b>Math Writing</b>	2 options... worksheet or cut/glue notebook strips	
<b>A</b>	<b>Apply New Skills</b>	Worksheet or interactive notebook activities to apply the skill learned in whole group	
<b>T</b>	<b>Teacher Time</b>	Differentiated time for 3 levels (remediation, on-level, enrichment)	
<b>H</b>	<b>Hands-On Math</b>	Engaging center to follow up on the whole group/partner practice	

# Day 1 Activities

Here's a look at day 1's whole group, partner practice, MATH group activities, and exit slip.

2nd Grade Math: 2.MD.5 Lesson #1

I can solve measurement, word problems.

Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

Teacher will either create another chart about word problem strategies, or teacher will show another problem. Teacher will break apart a sample measurement word problem to show each of the letters in BURST.

### Word Problems

**B** Box the important measurements and lengths.

**U** Underline the question or action statement.

### Sample

Jed has a red rope that is 6 inches long. Keith has a blue rope that is 12 inches long. How much longer is Keith's rope than Jed's rope?

a. Show your work.  
b. Explain how you found your answer.

Keith's rope

a. 12 inches  
b. 6 inches

The sidewalk was 60 centimeters wide. Kyle's lemonade stand table was 52 centimeters wide. Will his lemonade stand fit on the sidewalk? Explain.



Name: \_\_\_\_\_ 2.MD.5

L's pizza was 31 centimeters wide. Her brother's pizza was 37 centimeters long. L said, "Yes! My pizza is 6 centimeters longer than yours!" Is L correct?

a. Show your work.  
b. Explain why L is or is not correct.



L's pizza was 31 centimeters wide. Her brother's pizza was 37 centimeters long. L said, "Yes! My pizza is 6 centimeters longer than yours!" Is L correct?

a. Show your work.  
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L's pizza was 31 centimeters wide. Her brother's pizza was 37 centimeters long. L said, "Yes! My pizza is 6 centimeters longer than yours!" Is L correct?

a. Show your work.  
b. Explain why L is or is not correct.

L's pizza was 31 centimeters wide. Her brother's pizza was 37 centimeters long. L said, "Yes! My pizza is 6 centimeters longer than yours!" Is L correct?

a. Show your work.  
b. Explain why L is or is not correct.

### Measurement Word Problems

Name: \_\_\_\_\_ 2.MD.5

Mark up the word problems, then solve.

Tara's marker is 10 centimeters long. Her crayon is 4 centimeters long. How much longer is Tara's marker than her crayon?

B  U  R  S  T

The water was 3 feet wide. The dryer was the same width. How wide were the washer and dryer together?

B  U  R  S  T

We made a marshmallow catpup in STEM class. I shot the marshmallow 30 centimeters. My partner shot the marshmallow \_\_\_\_\_.

### Measurement Word Problems

Name: \_\_\_\_\_ 2.MD.5

Mark up the word problems, then solve.

Jeremiah walked 10 yards to the first tree and 12 yards to the next tree. How many yards did Jeremiah walk in all?

B  U  R  S  T

Mrs. Brown knitted 3 feet of her quilt on Monday and 9 feet of her quilt on Tuesday. How long is Mrs. Brown's quilt now?



Day 1 Teacher Time

## 2.MD.5

I can use addition and subtraction within 100 to solve word problems about measurement.

Think BURST when solving. Box the important measurements and lengths. Underline the question or action statement. Restate the question. Show your work. Tell your answer and describe your reasons.

Strategy 1: Drawings  
Strategy 2: Equations (D, F, S, R, T)

Day 1 Teacher Time

## Measurement Word Problems

Lift the flap and write the problem.

I put beads on 7 inches of string. My sister put her beads on 8 inches of string. How many inches did we put beads on?

I pedaled for 200 yards down the street, and 200 yards back. How many yards did I pedal in all?

Day 1 Thank-You Mail

L's pizza was 37 centimeters long. L said, "Yes! My pizza is 6 centimeters longer than yours!" Is L correct?

a. Show your work.  
b. Explain why L is or is not correct.

L's pizza was 37 centimeters long. L said, "Yes! My pizza is 6 centimeters longer than yours!" Is L correct?

a. Show your work.  
b. Explain why L is or is not correct.

L's pizza was 37 centimeters long. L said, "Yes! My pizza is 6 centimeters longer than yours!" Is L correct?

a. Show your work.  
b. Explain why L is or is not correct.

Day 1 Thank-You Mail

The first puddle I jumped in made a splash 4 feet high. The second puddle was 9 feet high. How much taller was the second puddle splash?

The picnic table was 100 centimeters long. The picnic table was 100 centimeters long. How much taller was the picnic table than the benches?

The Easter Bunny rolled one egg 25 inches away and another egg 20 inches away. How many inches did both eggs roll total?

Kyra's shamrock chain was 13 inches long. She removed 5 inches of her chain. How long is her shamrock chain now?

Jilly's ice cream cone was 30 centimeters tall. Her brother's was only 24 centimeters tall. How much taller is Jilly's cone than her brother's?

Lucy built three sandcastles. One was 4 feet, one was 5 feet, and one was 3 feet. How tall were her three sandcastles altogether?

Jerome watched his frog jump 12 centimeters. Then, he jumped another 8 centimeters. How many centimeters did his frog jump in all?

Suzy drew a purple line on the board that was 25 inches long. Then, she drew a red line that was 35 inches long. What is the difference?

### Show your work here

Day 1 Thank-You Mail

Name: \_\_\_\_\_ 2.MD.5

Solve the problem, and then record your answer.

Card	Math Problem	Answer
a		
b		
c		
d		
e		
f		
g		
h		
i		
j		
k		
l		

Day 1 Thank-You Mail

Name: \_\_\_\_\_ 2.MD.5 Exit Slip #1

Write the steps of BURST:

B  
U  
R  
S  
T

Name: \_\_\_\_\_ 2.MD.5 Exit Slip #1

Write the steps of BURST:

B  
U  
R  
S  
T

Name: \_\_\_\_\_ 2.MD.5 Exit Slip #1

Write the steps of BURST:

B  
U  
R  
S  
T



# Day 3 Activities

Here's a look at day 3's whole group, partner practice, MATH group activities, and exit slip.

## Missing Addends

A missing addend is when you are given a sum, and only one of the addends.

In measurement word problems are given the total length, but one of the measurements.

We can write a symbol as the missing addend ( $2 + \triangle + 4$ )

My flower was 10 inches tall on Monday. By the end of the month was 20 inches tall. How much did it grow?

One of the squares in my quilt is 10 inches long. The entire quilt is 40 inches long. Determine the length of the rest of the quilt.

My pumpkin was 11 inches long. My siblings and I put our pumpkins in a row. The row was 56 inches long. How long were the rest of the pumpkins?

**2.MD.5**

Name: \_\_\_\_\_

The black cat found 8 inches of yarn to play with. His cat pal also found some yarn to play with. There were 70 inches of yarn total. How much did his cat pal have?

- Find the missing addend.
- Explain how you found your answer.

a. \_\_\_\_\_

b. \_\_\_\_\_

**Day 3: Apply New Skills**

### Measurement Word Problem

I measured a piece of grass that was 12 inches long. I cut some of it off. There were 5 inches left. How much did I cut off?

Write a math problem here.

---

Write a math problem here.

**Day 3: Apply New Skills**

### Measurement Word Problems

Katie drew a line on the chalkboard that was 47 inches long. She erased part of that line. There were only 28 inches left. How much did she erase?

Gage rode his bike 17 feet down the dirt path. The entire dirt path is 84 feet long. How much more does Gage have to go?

**Day 3 Teacher Time - "Q"**

The plant sprout was 6 inches tall. It will eventually be 12 inches tall. How much taller does it have to grow?

**Day 3 Teacher Time - "Q"**

The hen planted 6 seeds. A dog and took away 3 her seeds. She 3 inches of seed. How much did the dog eat?

**Day 3 Teacher Time - "Q"**

I washed 17 centimeters of the mirror. The entire mirror is 23 centimeters wide. How much more of it do I need to clean?

**Day 3 Teacher Time - "Q"**

Kyra put a 1 inch on a pipe cleaner was 8 inches long. How much more does she need to clean?

**Day 3 Teacher Time - "Q"**

Chair: 24 in.

**Day 3 Teacher Time - "Q"**

Pillow: 39 cm.

**Day 3 Teacher Time - "Q"**

Write a math problem here.

**Day 3 Teacher Time - "Q"**

Write a math problem here.

**Day 3 Teacher Time - "Q"**

Write a math problem here.

**Day 3 Teacher Time - "Q"**

### Trade and solve here.

**Day 3 Teacher Time - "Q"**

Write a math problem here.

**Day 3 Teacher Time - "Q"**

Write a math problem here.

**Day 3 Teacher Time - "Q"**

### Trade and solve

**Day 1 Hang-On Tail**

a. The first puddle I jumped in made a splash 4 feet high. The second puddle was 9 feet high. How much taller was the second puddle splash?

**Day 1 Hang-On Tail**

b. The picnic table is 100 centimeters. The benches were 40 centimeters high. How much higher was the table than the benches?

**Day 1 Hang-On Tail**

c. At camp on Tuesday, the boys rowed 120 yards. On Wednesday, they rowed 100 yards. How many yards did they row altogether?

**Day 1 Hang-On Tail**

d. The first hill Ben went down was 40 feet long. The second hill was 35 feet long. How many feet were the two hills together?

**Day 1 Hang-On Tail**

e. Jerry's red fan was 12 inches tall. Her purple fan was 16 inches tall. How much taller was her purple fan than her red fan?

**Day 1 Hang-On Tail**

f. When my umbrella open, it is 38 inches wide. When it is closed, it is 6 inches wide. What is the difference between the widths?

**Day 1 Hang-On Tail**

g. The Easter Bunny rolled one egg 25 inches away and another egg 20 inches away. How many inches did both eggs roll total?

**Day 1 Hang-On Tail**

h. Kyra was 48 inches tall. She grew 3 inches taller. How tall is she now?

**Day 1 Hang-On Tail**

i. Jill's ice cream cone was 30 centimeters tall. Her brother's was only 24 centimeters tall. How much taller is Jill's cone than her brother's?

**Day 1 Hang-On Tail**

j. Luc saw 4 feet and How her son did 10 feet. How much taller is she?

**Day 1 Hang-On Tail**

k. Jerome watched his Frog Jump 12 centimeters. Then, he jumped another 8 centimeters. How many centimeters did his Frog Jump in all?

**Day 1 Hang-On Tail**

l. Suzie was 35 inches tall. She grew 3 inches taller. How tall is she now?

**2.MD.5 Exit Slip #3**

Write an equation for each problem, then solve.

I measured a piece of paper that was 16 centimeters long. I cut some of that paper off. There were 21 centimeters of paper left after I cut it. How much paper did I cut?

**2.MD.5 Exit Slip #3**

Write an equation for each problem, then solve.

I measured a piece of paper that was 16 centimeters long. I cut some of that paper off. There were 21 centimeters of paper left after I cut it. How much paper did I cut?

**2.MD.5 Exit Slip #3**

Write an equation for each problem, then solve.

I measured a piece of paper that was 16 centimeters long. I cut some of that paper off. There were 21 centimeters of paper left after I cut it. How much paper did I cut?

# Assessments

Each unit comes with a pre-assessment to give to students before you teach the standard. This will come before any introduction to the standard. There is also an assessment to give after your unit is complete.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## 2.MD.5 Pre-Assessment

What does it mean to find the difference between two lengths?

- to subtract one length from another
- to add the lengths together
- to see if the lengths are equal

What would you do if a word problem asked you how much something is altogether?

- subtract
- add
- nothing

Show off your word problem skills below.

The brown dog caught a frisbee from 17 feet away. The black dog caught a frisbee from 20 feet away. How much farther was the black dog than the brown dog?

There are two trees in my front yard. One is 35 feet high. The other is only 20 feet high. How tall are the two trees together?

My brother made a line of his blocks that was 10 inches long. Then, he made another line that was 25 inches long. How much longer was his second line of blocks than his first?

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Name: \_\_\_\_\_ Date: \_\_\_\_\_

## 2.MD.5 Assessment

Which of these steps are NOT important when solving a word problem?

- underline the question
- box the numbers
- show your work
- ask a new question

After you've solved your word problem, you should...

- restate your answer
- leave the box blank
- box the numbers
- write a new question

Show off your word problem skills below.

I threw the basketball 12 feet to the basket. Then, my little brother threw the basketball 7 feet to the basket. How many feet did we throw the basketball together?

The cat walked a total of 11 yards on Tuesday and 12 yards on Wednesday. How many yards has the cat traveled in all?

The spider made a spider web that was 39 centimeters wide. After the boy swatted the spider web, there were 12 centimeters left. How many centimeters of spider web did the boy swat?

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