

# Mamie Martin Elementary

## 2nd Grade MATH

**Unit 11: Relating addition and subtraction to length**

**Days in Unit: 10**

### **Envision Math Alignment:**

**2.OA.1:** Topic 1 – Lessons 1, 2, 3, 4, 5, 6, and 7, Topic 2 – Lessons 1, 2, 3, 4, 5, and 7, Topic 3 – Lessons 1, 2, 3, 4, 5, and 6, Topic 4 – Lesson 4, Topic 8 – Lesson 9, Topic 9 – Lesson 9

**2.MD.5:** Topic 15 – Lessons 7 and 9

**2.MD.6:** Topic 8 – Lesson 6, Topic 9 – Lesson 6

### **Unit Summary:**

This unit extends students' previous understandings of measurement and number by introducing the concept of number lines. Students apply their understanding of measurement from the previous unit to incorporate the use of number lines as a tool to solve addition and subtraction problems. **Learning to solve one- and two-step problems is a critical understanding for this grade level.** Students will relate addition and subtraction to measurement contexts in their everyday lives.

### **Focus Standards and \*Specific Guidance for this Unit (The MCCR Standard is listed along with specific guidance on what part of the standard to teach in this unit)**

#### **Operations and Algebraic Thinking — 2.OA**

##### **A. Represent and solve problems involving addition and subtraction.**

2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

#### **Measurement and Data — 2.MD**

##### **B. Relate addition and subtraction to length.**

2.MD.5. 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.

2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

**LEARNING OUTCOMES:**

Solve addition and subtraction word problems involving measurement of length (to include using a number line).

**LEARNING TARGETS**

- **2. OA.1.1** Locate clue words to help me solve problems and choose when to add or subtract in a word problem.
- **2. OA.1.2** Represent addition and subtraction word problems using objects, drawings, and equations with unknowns in all positions.
- **2. OA.1.3** Solve addition and subtraction word problems that involve one step operations.
- **2. MD.5.1** Use addition and subtraction within 100 to solve word problems involving length.
- **2. MD.5.2** Create models and drawings to solve word problems involving length.
- **2. MD.5.3** Create equations with a symbol for the unknown number to represent the problems involving length.
- **2. MD.6.1** Create a number line that shows whole numbers as lengths from 0 with equally spaced points corresponding to the numbers 0,1,2...
- **2. MD.6.2** Use a number line to solve addition and subtraction problems as length within 100.

**Unit Vocabulary:**

- |              |                        |                       |
|--------------|------------------------|-----------------------|
| • Represent  | • Solution             | • Relationship        |
| • Unknown    | • Addition             | • Comparing           |
| • Equation   | • Sum                  | • Measurement         |
| • Symbol     | • Subtraction          | • Data                |
| • Clue words | • Taking from          | • Number Line Diagram |
| • Operation  | • Difference           | • Length              |
| • Strategies | • Corresponding Number | • Pattern             |
| • Solve      | • Proximity            | • Whole-Number        |
|              |                        | • Distance            |

**Essential Questions:**

- What is a number sentence and how can I use it to solve word problems?
- How can do we use addition and subtraction to solve problems?
- How can I identify one and two-step word problems?
- How can I use drawings to solve word problems?
- How can I use addition and subtraction to solve word problems that involve length?
- How can I use a drawing to show how to solve a problem using addition and subtraction involving length?
- How can using a number line help us when we are solving math problems?
- How can I create a number line to show whole numbers as lengths?

## Unit 11: Relating addition and subtraction to length

### Suggested Instruction Time: 10 days

#### ONLINE INSTRUCTIONAL VIDEOS:

- Smart board activity: Discuss the following clue words for addition- Total, altogether, both, plus, added, sum, increase, together, additional, join, in all, extra. Then, read the word problem, look for clue words and write the addition sentence

<https://www.ixl.com/math/grade-1/word-problems-write-the-addition-sentence>

- Online video for solving word problems

<https://www.youtube.com/watch?v=kCAtkj7HKZQ>

- Instructional Video for using a number line to solve addition and subtraction

[https://learnzillion.com/lesson\\_plans/6463-solve-one-step-addition-and-subtraction-problems-using-a-number-line](https://learnzillion.com/lesson_plans/6463-solve-one-step-addition-and-subtraction-problems-using-a-number-line)

#### INTERACTIVE SMARTBOARD ACTIVITIES

##### (Use to introduce lessons daily and/or for technology centers):

Note: The students can take turns answering the questions and the teacher can also allow the student to maneuver the mouse and actually host the game.

<http://www.mathplayground.com/wordproblems.html>

<http://mrnussbaum.com/second-grade-math/>

[http://www.harcourtschool.com/activity/length\\_strength2\\_inches/](http://www.harcourtschool.com/activity/length_strength2_inches/)

<http://www.mathchimp.com/2nd-grade-math-games>

<http://math4children.com/games-k-to-6/2nd%20grade/add%20and%20subtract/index.html>

<http://www.kidsmathtv.com/2nd-grade-games/>

<http://www.rulergame.net/>

#### WHOLE GROUP ACTIVITIES:

##### (Instructional strategies, guided practice, independent practice)

**Teacher Notes:** On days 1, 2 and 3 of this unit, students will locate clue words and use objects and drawings, to solve word problems. Students will represent word problems with objects drawings and equations. When students solve word problems, they need to see all different types of problem situations. Students can be asked the problems orally, if reading is an issue. Present the problems and different situations and allow the students to use manipulatives to act out the situation in the story. Have students explain their thinking and how they solved the problems so they can hear many different ways of approaching the problem. Essential vocabulary for this standard includes: add, combine, equation, symbol, put together, take apart, and compare

## 10 Frame Adding and Subtracting-

Materials Needed:

- 10 Frame Cards printable

<https://sites.google.com/site/get2mathk5/home/templates-graphic-organizers>

TTW distribute little ten frame card sets to students and present the following word problem.

- Tommy was on page 47 of his book. Then he read 8 more pages. How many pages did Tommy read in all?

TTW quickly review the make-ten idea from addition facts using two ten-frames. (Add on to get up to ten and then add the rest.) Challenge children to use the same idea to add on to a two-digit number. ( $7+6=7+3+3=13$  so  $47+3=50+3=53$ ; Two students can work together. First, they make a specified two-digit number with ten frame cards. They then stack up all of the less-than-ten cards and turn them over one at a time.

## 20 Tickets-

Materials Needed:

- 20 counters or linking cubes per student or partner group
- Pencils and paper

TTW put the following problem up on the board:

Bo bought 20 tickets to play games at Family Fun Night at his school. He wants to play each game at least once. He needs to use all of his tickets. How many times might he play each game? Find at least two ways he can do it.

Put the following chart up on the board:

Game	Number of Tickets Needed
Ring Toss	1
Putt-Putt Golf	2
Soccer Kick	3
Moonwalk	5

When all pairs of students have had a chance to find at least one solution, the teacher can lead a whole-group discussion and record each solution as an equation on chart paper or the chalkboard/whiteboard/SmartBoard.

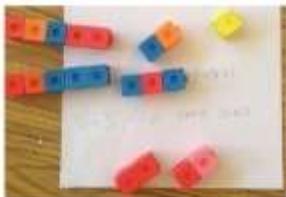
There are multiple solutions, and each pair of students should find more than one. The students can use the counters or linking cubes to represent each ticket needed to do each game, but then they should be encouraged to draw a picture to represent their work so there is a record of their thought process. Students who are comfortable with symbolic representations can record their solutions using equations.

The problem can be differentiated by using either a smaller or larger number of tickets. An extension would also be to have the students find the greatest number of times the games could be played to still do all games at least once. Another would be to ask if they can play

each game twice and justify their thinking and solution.

An example of one solution is:

- 1 ring toss
  - 3 Putt Putt Golf
  - 1 Soccer Kick
  - 2 Moonwalks
- Students can use linking cubes or counters to represent the required tickets.



An equation that represents this is  $1+0+5+5+2+3+2+2=20$

Another equation that represents this is  $2+2+1+2+3+5+5+0=20$

Solution: Starting with one of each

First, play each game once:  $1+2+3+5=11$

11 tickets are used.  $20 - 11 = 9$ , so there are 9 tickets left.

One way to use the rest of the tickets is to play Ring Toss, Soccer Kick and Moonwalk again because  $1+3+5=9$

- Ring Toss: 2
- Putt-Putt Golf: 1
- Soccer Kick: 2
- Moonwalk: 2

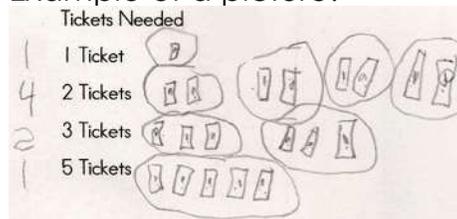
We can write this solution as an equation in different ways:

$$1+1+2+3+3+5+5=20 \text{ or}$$

$$1+2+3+5+1+3+5=20 \text{ or}$$

$$2+2+6+10=21$$

Example of a picture:



An equation that represents this solution is  $1+2+2+2+2+3+3+5=20$

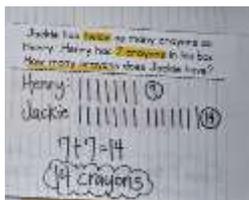
### Word Problem Scoot-

Materials Needed:

- Scoot word problems resource

<http://www.k5learning.com/free-math-worksheets/second-grade-2/word-problems>

Students start in one spot and scoot around the room solving problems. TTW prepare one problem at each desk and students solve and scoot around the room as they finish. More than one student will end up in certain places, that is okay. They will each write on their own paper as they scoot around they room. They are to show their work using drawings and equations. TTW include a variety of difficulty levels and I worded each one very differently so that my students have exposure to a number of problems. TTW take into account what they can do independently, and then try to stretch it a little further. Continue for as long as time allows.



Example:

**Teacher Notes:** Don't let computation concerns interfere with students exposure to problems. Students can be given manipulatives, fact charts, number lines or hundred charts to support computational skills. Problems can be differentiated by giving students number sets to choose from when solving problems. The focus for day 4 and 5 will be for students to practice solving addition and subtraction word problems.

### Math Journals-

Students use the following prompts to draw a picture, write an equation and write complete sentences about their answer.

Example of a written answer for the first prompt:

Juan had 8 toy cars. He could have had one of these combinations.

5 are red and 3 are blue

3 are red and 6 are blue

4 are red and 4 are blue

Journal Prompts:

- Juan has 8 toy cars. Some are blue and some are red. How many are blue? How many are red? Show as many different solutions as you can.
- Leah's mom baked 9 pies. Some were apple and some were peach. How many were apple? How many were peach? Show as many different solutions as you can.
- John had 6 coins in his pocket. He lost some. How many did he lose? How many did he have

left? Show as many different combinations as you can.

- Andrew had 7 marbles. His sister gave him some more and then he had 11 marbles. How many did Andrew's sister give him? Explain your thinking.

### **Write a Word Problem-**

Students need the opportunity of writing and solving story problems involving three addends with a sum that is less than or equal to 20. For example, each student writes or draws a problem in which three whole things are being combined. The students exchange their problems with other students, solving them individually and then discussing their models and solution strategies. Now both students work together to solve each problem using a different strategy.

Addition Example: Students use supplies at their desks to create a word problem: I have 5 crayons, 2 pencils and 1 eraser. How many writing supplies do I have?

Subtraction Example: I had 5 pencils. I loaned one to the student next to me. How many pencils do I have left?

Extension: Students can write their problems on note cards and leave them at a center for other students to solve at a later date.

### **Increasing Rigor Questions/Tasks-**

- Gail and Bill found 12 seashells on the beach. Some of them were shaped like cones. The rest of them were shaped like half circles. How many could have been shaped like cones? How many could have been shaped like half circles?
- Maria has eight more crayons than Brian. Maria has 10 crayons. How many crayons does Brian have? Use this answer to solve the next question.
- Ana has 4 crayons. If she puts her crayons with Brian and Maria's crayons, will they have enough crayons to fill a box that holds 16 crayons? How do you know?
- Jim had sixteen toy cars. He went to the toy store with his father. His father bought him some more cars. When Jim got home, he counted his cars and then he had 20. How many cars did his father buy for him?
- On Monday, Cara made 5 cupcakes. On Tuesday, Cara made some more. She had 11 cupcakes altogether. How many cupcakes did Cara make on Tuesday?

**Teacher Notes:** For days 6 and 7 the students will continue practice solving addition and subtraction problems to include word problems involving length. Students should continue to identify clue words, use manipulatives, drawings and write equations for word problems.

### **Pet Snake-**

Materials Needed:

- Rulers

Teacher will present the class with one or more of the following word problems and Guide the students through solving it. These problem types wouldn't necessarily be given to students at the same time although students will need experience and practice with all three types.

a. The class had a pet snake. It was 14 inches long. It grew 3 more inches. How long is it now?

b. The class had a pet snake. It was 14 inches long. It grew a few more inches. Now it is 17 inches long. How many inches did it grow?

c. The class had a pet snake. It grew 3 more inches. Now it is 17 inches long. How long was it to start?

Solutions: Students may use objects, pictures, or equations to represent their solutions. The solutions show equations with a question mark representing the unknown value, but other symbols are often used. For example,  $14 + ? = 17$  might also be written  $14 + \underline{\quad} = 17$  or  $14 + \square = 17$ .

a. Total Unknown: The snake was 17 inches long. Possible equation:  $14 + 3 = ?$

b. Addend Unknown: The snake grew 3 more inches. Possible equation:  $14 + ? = 17$

c. Start Unknown: The snake was 14 inches long to start. Possible equation:  $? + 3 = 17$

### **Measuring Blocks-**

Materials Needed:

- Paper clips
- Blocks or colored construction paper

1. Have two or more blocks of different lengths on hand and paper clips to use to measure them. The blocks need to measure a whole number of paper clips whose combined length is less than or equal to 20 paper clips. (Can use a piece of colored construction paper)

2. Have students work in pairs. Give each pair a block to measure using paper clips.

3. Tell students to find someone who measured another block. Ask them how many paper clips long it is. How long will the two different blocks be together if they are laid end-to-end? First try to figure this out. Then put the blocks end-to-end and measure it to check your answer.

4. Ask students to explain how they solved the problem and whether their answer checked out correctly. Even if students added correctly, they may not have lined up the paperclips very carefully and could get different lengths. This is a good opportunity to talk about how important it is to be careful when measuring.

5. Next, put the following word problem on the board: If you put your block next to another block, together they measure 18 paper clips. How long is the new block? Draw a picture to explain how you know.

Ask students to explain how they solved the problem and whether their answer checked out correctly. Finally, ask the students to write equations to represent their work.

### **Length Word Problems-**

Materials Needed:

- Word Problems worksheets involving length

<http://www.education.com/worksheet/article/length-word-problems/>

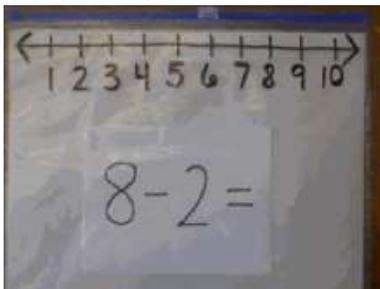
Students work with a partner to read the word problems and discuss how to solve. Each student works the problem on their own paper to turn in for a work sample.

Option: Students can write problems on index cards or paper.

1. Write an equation with a symbol for the unknown number to represent the problem.
2. Solve the problem. Show your work.
3. Answer the question in a sentence. 2. Check your work with a partner.

### **Additional Optional Activities:**

Draw a number line on a plastic bag with a sharpie. Use the slider to manipulate the calculation.



**Teacher Notes:** A number line is a useful tool for adding and subtracting whole numbers and fractions. A ruler is a tool built around this concept. This standard should be integrated with computational standards in grade 2. On days 8, 9 and 10 students will continue to practicing addition and subtraction to include word problems that include length and using number lines.

### Throw a Frisbee-

Materials Needed:

- Paper plates

Work with a partner. Mark a starting line. Each partner throws a small paper plate like a frisbee. Measure how far your plate went. Work with your partner to answer these questions and show the equation.

How far did Partner A throw?

How far did Partner B throw?

How far did you throw together?

How much longer distance did one travel than the other?

How much shorter distance did one travel than the other?

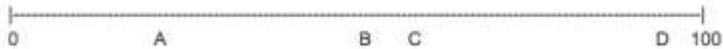
### Number Lines-

Materials Needed:

- Blank Number Line Template

<https://www.mathworksheets4kids.com/number-lines/template/10blank10.pdf>

TTW draw the following number line on the board:



TTW tell students to look at the number line and ask what numbers could might the letters A, B, C, and D represent? TTW ask students to explain their thinking.

Note: teacher can adjust number line to level of students understanding for example to represent 1-20.

TTW give students an empty number line. Provide them with a number (or students can use place value dice or digit cards). Students have to create their own end points and place the number you provided appropriately on the number line.

TTW give students a number line with endpoints. The student has to determine the midpoint and then choose a number less than/greater than the midpoint and place it appropriately on the number line.

### Human Number Line-

Materials Needed:

- Yarn
- Index cards

Students need many opportunities to place numbers on a number line. Ideas include:

1. Use yarn and index cards to make a human number line. Ask two students to hold the yarn and cards that say 0 and 100. Ask students to show where 35 goes, then 90, then 7. Change the endpoints to 0 and 200. Now where do the numbers belong?

2. Ask the students to move to the new location of the number based on the new endpoints.

Pinch a place on the number line and ask them what number could this be. Always ask them to explain their thinking.

3. Give students a number and two endpoints. Change the endpoints but keep the same number. Ask students to place 40 on a number line with endpoints of 30 and 50. Change the endpoints to 0 and 100. TTW ask: How does this change where you place the 40? Explain your thinking.

### **Number Line Word Problems-**

- Number line templates

[http://www.helpingwithmath.com/resources/oth\\_number\\_lines.htm](http://www.helpingwithmath.com/resources/oth_number_lines.htm)

- Word problems involving number lines

<http://www.education.com/worksheet/article/number-line-word-problems/>

### **Create a Number Lines and use them to Solve Problems-**

Students will create a number lines using one of the blank template resources provided. Students will solve addition and subtraction problems using the number lines they create. Teacher will choose from the following problems for addition and/or subtraction word problems differentiating as needed. Teacher will circulate and scaffold as needed.

1. 19 pencils were on my desk. I gave 14 pencils to students. How many pencils are on the desk now?
2. There are 7 birds in the nest, some flew away. Three were left. How many birds flew away?
3. Some books were on the shelf. I took 9 books off the shelf and put them in a basket. Now there are 8 books on the shelf. How many books were on the shelf before?
4. Noah had a book with 64 pages. He read 37 pages. How many more pages does he need to read to finish his book?
5. 41 chairs were in a room. Some chairs were out of the room. Then there were 32 chairs in the room. How many chairs were taken out of the room?
6. The school library had some magazines. A teacher took 25 magazines to her class. Then there were 30 magazines in the library. How many magazines were in the library before?

### **Increasing Rigor Questions/Tasks-**

1. Measure the length of your classroom in feet and then again in yards. Looking at the results, do you see a numerical relationship between feet and yards?
2. Estimate the length of your school box in centimeters and in inches. Which estimate is bigger and why? Now measure the school box using both units and compare your results with your estimate.
3. Measure the length of the blackboard (whiteboard/etc.) in feet and then in inches. Which measurement unit has the larger number? Why is that? Which measurement unit makes most sense to use for this activity?
4. Explain how a meter and a yard are alike and how they are different.

**Additional Optional Activities:**

<http://www.cpalms.org/uploads/Resources/final/72888/Document/27794/Math%20by%20Myself%20Word%20Problems.pdf>

**Additional Optional Worksheets:**

<http://www.education.com/worksheets/second-grade/word-problems/word+problems/>

<http://www.education.com/worksheets/second-grade/measurement/word+problems/>

<http://www.k5learning.com/free-math-worksheets/second-grade-2/word-problems>

<http://www.mathworksheets4kids.com/length.html>

**MINI LESSONS/CLOSURE ACTIVITIES****Teacher resources for word problems:**

<http://www.k5learning.com/free-math-worksheets/second-grade-2/word-problems>

<http://www.education.com/worksheets/second-grade/word-problems/word+problems/>

<http://www.education.com/worksheets/second-grade/measurement/word+problems/>

**Student Demonstrations-**

Students take turns coming to the front of the room to solve word problems using objects, such as books or linking cubes.

**Chalk Board Work-**

Students take turns coming to the front of the room to solve word problems on the board using pictures and then drawing an equation.

**Word Problem Exit Tickets-**

TTW give one of the differentiated word problems

1. Char had 10 markers. She gave 3 to a friend. How many did she have left?
2. Char had 10 markers. She gave some to a friend. Now she has 7 left. How many markers did she give to her friend?
3. Char had some markers. She gave 3 to a friend. Then she had 7 left. How many markers did she have to start with?

Solution: The solutions below are written in teacher language. Students may use objects, pictures, or equations to represent their solutions. The solutions show equations with a question mark representing the unknown value, but other symbols are often used. For example,  $10 - ? =$

7 might also be written  $10 - \underline{\quad} = 10$  or  $10 - \square = 7$ .

1. Result Unknown: Char had 7 markers left. Possible equation:  $10 - 3 = ?$
2. Change Unknown: Char gave 3 markers to her friend. Possible equation:  $10 - ? = 7$
3. Start Unknown: Char had 10 markers to start with. Possible equation:  $? - 3 = 7$

### **Exit Tickets Differentiated-**

Teacher will give each student one of the following differentiated tasks

1. There were 7 children at the park. Then 4 more showed up. How many children were at the park all together?
2. There were 7 children at the park. Some more showed up. Then there were 11 children in all. How many more children came?
3. There were some children at the park. Four more children showed up. Then there were 11 children at the park. How many children were at the park to start with?

Solutions: Students may use objects, pictures, or equations to represent their solutions. The solutions show equations with a question mark representing the unknown value, but other symbols are often used. For example,  $4 + ? = 11$  might also be written  $4 + \underline{\quad} = 11$  or  $4 + \square = 11$ .

1. Total Unknown: There were 11 children in all. Possible equation:  $7+4= ?$
2. Addend Unknown: 4 more children came. Possible equation:  $7+ ? = 11$
3. Start Unknown: There were 7 children in the park to start with. Possible equation:  $? +4=11$

### **Chalk Board Work-**

Students will take turns coming to the board solving word problems involving length. Students will draw pictures and write an equation.

### **Exit Tickets-**

Teacher will put one of the following differentiated word problems on the board. Students will take turns coming to the board to find clue words and solve the problem. Students will draw pictures to show work and then write the equation.

1. There are 8 children and 6 chairs. A child sits in each chair. How many children won't have a chair?
2. There are 8 children and some chairs. A child sits in each chair. 2 children don't have a

chair. How many chairs are there?

3. There are some children and 6 chairs. A child sits in each chair. 2 children don't have a chair. How many children are there?

4. There are 8 children and 10 chairs. A child sits in each chair. How many empty chairs are there?

5. There are 8 children and some chairs. A child sits in each chair. Two chairs are empty. How many chairs are there?

6. There are some children and 10 chairs. A child sits in each chair. Two chairs are empty. How many children are there?

Solutions:

1. 2 children will not have a chair.
2. There are 6 chairs.
3. There are 8 children.
4. There are 2 empty chairs.
5. There are 10 chairs.
6. There are 8 children.

### **Word Problem Relay-**

TTW divide the class into two teams. TTW put the problems at the link provided on the smart board. Students will take turns coming to the board to solve word problems involving length and using a number line. The team with the most correct wins.

<https://www.ixl.com/math/grade-2/customary-units-of-length-word-problems>

### **Lesson Activity Based Closure**

TTW use one of the activities provided to close out the lesson to make sure each student can talk about what they have learned today. It is important for the teacher to model a problem at the end of the lesson and let one students model the process to check for understanding.

### **40 Ways to Leave a Lesson-**

<https://docs.google.com/file/d/0B-0npvl9xzTBMGs1SUUzeEN3RU0/edit>  
[www.mathworksheetisland.com](http://www.mathworksheetisland.com)

### **SMALL GROUP/CENTER ACTIVITIES:**

<https://www.pinterest.com/explore/word-problems/>

<http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72888>

<http://www.stepinto2ndgrade.com/2014/09/workin-on-word-problems.html>

<http://www.education.com/worksheets/second-grade/word-problems/word+problems/>

<http://www.education.com/worksheets/second-grade/measurement/word+problems/>

<http://www.k5learning.com/free-math-worksheets/second-grade-2/word-problems>

<http://www.mathworksheets4kids.com/length.html>

<http://www.k5learning.com/free-math-worksheets/second-grade-2/word-problems>

### **SUMMATIVE ASSESSMENT RESOURCES:**

<https://hcpss.instructure.com/courses/106/pages/2-dot-md-dot-a-5-assessment-tasks>

<http://standardstoolkit.k12.hi.us/common-core/mathematics/mathematics-assessments/mathematics-grade-2-assessments/>

[https://www.orglib.com/2.md-measurement-data-displayFolderContents\\_0d1520c2bb\\_5352626379304A13AB93520596D85C45.html](https://www.orglib.com/2.md-measurement-data-displayFolderContents_0d1520c2bb_5352626379304A13AB93520596D85C45.html)

[https://www.orglib.com/2.md-measurement-data-displayFolderContents\\_0d1520c2bb\\_5352626379304A13AB93520596D85C45.html](https://www.orglib.com/2.md-measurement-data-displayFolderContents_0d1520c2bb_5352626379304A13AB93520596D85C45.html)

<https://www.opened.com/search?standard=2.MD.5>

<https://www.opened.com/search?standard=2.MD.6>

<https://www.opened.com/search?standard=2.OA.1>

<http://illuminations.nctm.org/Activity.aspx?id=3566>

### **FORMATIVE ASSESSMENTS:**

[http://www.ehow.com/about\\_5419008\\_types-formative-assessment.html](http://www.ehow.com/about_5419008_types-formative-assessment.html)

<http://www.edutopia.org/resource/checking-understanding-download>

<http://wvde.state.wv.us/teach21/ExamplesofFormativeAssessment.html>

<http://www.sheppardsoftware.com/mathgames/placevalue/value.htm>

### **ADDITIONAL ONLINE RESOURCES (Bellwork):**

#### **Worksheets-**

[www.mathworksheetsland.com](http://www.mathworksheetsland.com)

<http://www.k5learning.com/free-math-worksheets/second-grade-1>

<http://mathworksheetwizard.com/secondgrade-math.html>

<http://www.mathworksheets4kids.com/activities/2nd-grade.php>

<http://www.tlsbooks.com/secondgrademathworksheets.htm>

Skip counting printable poster for practice

<http://www.sparklebox.co.uk/3901-3910/sb3909.html#.Vbgu9SiyBsu>

Free printable number cards:

<http://www.activityvillage.co.uk/number-flash-cards-1-30>

Free printable ten frames:

<https://sites.google.com/site/get2mathk5/home/templates-graphic-organizers>

Free printable dominoes:

<http://www.dltk-cards.com/dominos/>

Number Lines:

[http://www.helpingwithmath.com/resources/oth\\_number\\_lines.htm](http://www.helpingwithmath.com/resources/oth_number_lines.htm)

<https://www.mathworksheets4kids.com/number-lines/template/10blank10.pdf>

Free printable spinners:

<http://cte.sfasu.edu/wp-content/uploads/2012/09/Templates-for-Spinners.pdf>

Free printable hundreds charts:

<https://www.superteacherworksheets.com/hundreds-chart.html>

Free printable coins and bills

<https://www.moneyinstructor.com/play.asp>

### **DIFFERENTIATING RESOURCES:**

[http://www.internet4classrooms.com/common\\_core](http://www.internet4classrooms.com/common_core)

<http://www.k-5mathteachingresources.com>

## **ADDITIONAL ONLINE RESOURCES (Bellwork):**

### **Worksheets-**

[www.mathworksheetisland.com](http://www.mathworksheetisland.com)

<http://www.k5learning.com/free-math-worksheets/second-grade-1>

<http://mathworksheetwizard.com/secondgrade-math.html>

<http://www.mathworksheets4kids.com/activities/2nd-grade.php>

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Free printable number cards:

<http://www.activityvillage.co.uk/number-flash-cards-1-30>

Free printable ten frames:

<http://www.mathwire.com/templates/tenframemat.pdf>

Free printable dominoes:

<http://www.dltk-cards.com/dominos/>

Free printable spinners:

<http://cte.sfasu.edu/wp-content/uploads/2012/09/Templates-for-Spinners.pdf>

Free printable hundreds charts:

<https://www.superteacherworksheets.com/hundreds-chart.html>

Free printable coins and bills

<https://www.moneyinstructor.com/play.asp>

Virtual manipulatives can be found here:

<https://grade1commoncoremath.wikispaces.hcpss.org/file/view/Directions%20for%20Virtual%20Manipulatives%201.NBT.2.pdf/519489918/Directions%20for%20Virtual%20Manipulatives%201.NBT.2.pdf>

### **Practice for Math Fact Fluency Activities:**

<http://www.interventioncentral.org/teacher-resources/math-work-sheet-generator>

[http://www.abcya.com/math\\_facts\\_game.htm](http://www.abcya.com/math_facts_game.htm)

<http://www.playkidsgames.com/games/mathfact/mathFact.htm>

<http://www.factmonster.com/math/flashcards.html>

<http://www.fun4thebrain.com/addition.html>

[http://www.mathplayground.com/index\\_addition\\_subtraction.html](http://www.mathplayground.com/index_addition_subtraction.html)

<http://www.math-drills.com/addition.shtml>

<http://mrshillsallstars.weebly.com/addition-without-regrouping.html>

<https://www.pinterest.com/janwray/double-digit-addition-subtraction/>

<http://www.theteachersguide.com/twodigitadditionworksheets.htm>

**DIFFERENTIATING RESOURCES:**

[http://www.internet4classrooms.com/common\\_core](http://www.internet4classrooms.com/common_core)

<http://www.k-5mathteachingresources.com>