

Math Small Group Centers

Mrs. Abby DuBord

Grade: 2nd

Standard: 2.OA.1

Use strategies to add and subtract within 100 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.

Levels

Below Grade Level:

Students are able to use strategies to [add and subtract 0-10 within 100 using number problems and word problems](#) involving situations of adding to, taking from, putting together, taking apart and comparing with unknowns in most positions.

At Grade Level:

Students are able to use strategies to [add and subtract within 100 to solve word problems](#) involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.

Above Grade Level:

Students are able to use strategies to [add and subtract within 1,000 to solve word problems](#) involving various situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.

DAY 1

Defining the Problem

	Guided Instruction	Independent Work	Technology Integration	Formative Assessment
Below Grade Level	<p>Introduce add to, take from, put together, take apart, and compare word problems</p> <p>Practice within 10</p>	<p>Make a flip book of the 4 types of word problems and their definition</p> <p>Matching Worksheet</p>	<p>Online Highlighting Activity</p> <p>Given word problems, highlight based on the type of problem</p>	<p>Matching Worksheet</p> <p>Highlighting Activity</p> <p>Within 10</p>
At Grade Level	<p>Introduce add to, take from, put together, take apart, and compare word problems</p> <p>Practice within 100</p>	<p>Make a flip book of the 4 types of problems and their definition</p> <p>Matching worksheet</p>	<p>Online Highlighting Activity</p> <p>Given defined word problems, highlight the parts of the problem that prove the definition</p>	<p>Matching Worksheet</p> <p>Highlighting Activity</p> <p>Within 100</p>
Above Grade Level	<p>Introduce add to, take from, put together, take apart, and compare word problems</p> <p>Practice within 1,000</p>	<p>Make a flip book of the 4 types of problems and their definition</p> <p>Matching worksheet</p>	<p>Online Highlighting Activity</p> <p>Given word problems, define the type of problem and highlight the proof</p>	<p>Matching Worksheet</p> <p>Highlighting Activity</p> <p>Within 1000</p>

DAY 1 Activities

Below Grade Level

Guided Instruction:

Engage students by having them recall their addition and subtraction knowledge, adding or subtracting 0-10.

Give them 5 problems to solve on their individual white boards

Ex. $24 + 7$, $44 + 3$, $82 - 5$, $59 - 6$, $80 + 10$

Explain to students that there are similar problems to these within word problems

Word problems are number sentences with words added into them

There are 4 kinds of word problems, so before we get to solving them, we need to understand what each of them are.

Add to – addition word problems that change over time

Jon had 30 football cards. He got 8 football cards for his birthday. How many football cards does Jon have?

Take From – subtraction word problems that change over time

Jon had 15 football cards. He gave 6 away. How many football cards does he have now?

Put together/Take apart – addition or subtraction word problems that do not change over time

Jon has 8 Broncos football cards and 10 Chargers football cards. How many cards does he have all together?

Jon has 24 football cards. 8 of his cards are Broncos cards, the rest are Chargers. How many Chargers cards does he have?

Compare – comparing two whole numbers with words such as more or less

Jon has 14 football cards. Joe has 8 football cards. How many more cards does Jon have than Joe?

Give students time to ask questions

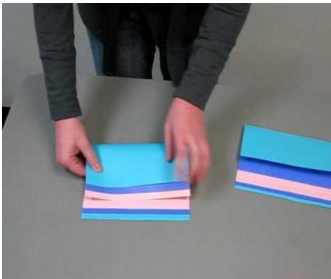
Have students **explore** the concepts by writing the definitions on a flip book that they will use throughout the week – this can be done while I am teaching each type of word problem

They will need 3 pieces of paper per student

4 tabs will be labeled (Add to, Take from, Put together/Take apart, Compare)

On the same page of the label, students will write the definition and an example if appropriate

Students will continue to work on their flip book if they do not finish at my table



We will **review** by going over the definitions one last time

I will hand out their matching worksheet that they will use during their independent work time

Independent Activity:

Students will work on their flip books on their own, writing definitions. I will hand out copies of the definitions and examples we used if students would like

When students are done with their flip books, they will complete a matching worksheet that I will use for their **formative assessment**

Name _____

Use the multiple choice options below to match the definition or example to the correct type of word problems

Each letter will be used more than once

- A. Add to
- B. Take from
- C. Put together/Take apart
- D. Compare

_____ A word problem that compares two whole numbers

_____ An addition word problem that changes over time

_____ A word problem that does not change over time

_____ A subtraction word problem that changes over time

_____ Sue picked 8 apples yesterday. Today she picked 6 more. How many apples has she picked?

_____ Sue has 21 green and 7 red apples. How many more green apples does she have?

_____ Sue has 21 green and 7 red apples. How many apples does she have all together?

_____ Sue picked 37 apples. She gave 4 away to her teacher. How many apples does she have?

Technology Integration:

Students will open an online document that is shared with them. This document has a handful of word problems on it. They are to highlight the word problems based on the type of word problem. For example, yellow is add to, green is take from, pink is put together/take apart, and blue is compare. They will share with me when completed.

They will share their final highlighted document to me. This can also be used as a **formative assessment**.

Highlight each sentence based on the type of word problem. Each color represents a type of word problem.

Yellow – add to

Green – take from

Pink – put together/take apart

Blue – compare

1. Holly has 3 dogs. One of her dogs had 9 puppies. How many dogs does she have now?
2. Doug has 17 video games. Cole has 6 video games. How many more video games does Doug have?
3. Ray had 84 pieces of candy. He ate 8 of them. How many pieces of candy does he have left?
4. Anne has 12 white socks and 4 blue socks. How many socks does she have all together?
5. Jill picked 17 apples last week and 7 this week. How many apples does she have now?
6. Maddie has 34 funny movies and 9 scary movies. How many movies does she have all together?
7. Fred had 47 toys. He donated 8 of them. How many toys does she have now?
8. Sophia drove 23 miles yesterday and 3 today. How many miles did she drive between the two days?

At Grade Level

Guided Instruction:

Engage students by having them recall their addition and subtraction knowledge, adding or subtracting 0-10.

Give them 5 problems to solve on their individual white boards

Ex. $24 + 53$, $44 + 17$, $82 - 15$, $59 - 36$, $80 + 10$

Explain to students that there are similar problems to these within word problems

Word problems are number sentences with words added into them

There are 4 kinds of word problems, so before we get to solving them, we need to understand what each of them are.

Add to – addition word problems that change over time

Jon had 30 football cards. He got 21 football cards for his birthday. How many football cards does Jon have?

Take From – subtraction word problems that change over time

Jon had 45 football cards. He gave 31 away. How many football cards does he have now?

Put together/Take apart – addition or subtraction word problems that do not change over time

Jon has 38 Broncos football cards and 19 Chargers football cards. How many cards does he have all together?

Jon has 64 football cards. 38 of his cards are Broncos cards, the rest are Chargers. How many Chargers cards does he have?

Compare – comparing two whole numbers with words such as more or less

Jon has 51 football cards. Joe has 25 football cards. How many more cards does Jon have than Joe?

Give students time to ask questions

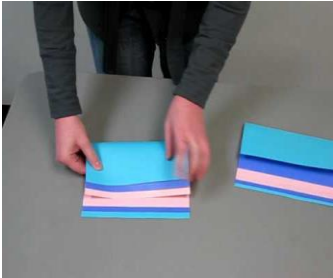
Have students **explore** the concepts by writing the definitions on a flip book that they will use throughout the week – this can be done while I am teaching each type of word problem

They will need 3 pieces of paper per student

4 tabs will be labeled (Add to, Take from, Put together/Take apart, Compare)

On the same page of the label, students will write the definition and an example if appropriate

Students will continue to work on their flip book if they do not finish at my table



We will **review** by going over the definitions one last time

I will hand out their matching worksheet that they will use during their independent work time

Independent Activity:

Students will work on their flip books on their own, writing definitions

I will provide the types of word problems without the definition

When students are done with their flip books, they will complete a matching worksheet that I will use for their **formative assessment**

Name _____

Use the multiple choice options below to match the definition or example to the correct type of word problems

Each letter will be used more than once

- E. Add to
- F. Take from
- G. Put together/Take apart
- H. Compare

_____ A word problem that compares two whole numbers

_____ An addition word problem that changes over time

_____ A word problem that does not change over time

_____ A subtraction word problem that changes over time

_____ Sue picked 18 apples yesterday. Today she picked 63 more. How many apples has she picked?

_____ Sue has 21 green and 37 red apples. How many more red apples does she have?

_____ Sue has 21 green and 73 red apples. How many apples does she have all together?

_____ Sue picked 37 apples. She gave 24 away to her teacher. How many apples does she have?

Technology Integration:

Students will open an online document that is shared with them. This document has a handful of word problems on it. They are to highlight the word problems based on the type of word problem. For example, yellow is add to, green is take from, pink is put together/take apart, and blue is compare. They will also explain their reasoning and solve if they have time. They will share their final highlighted document to me. This can also be used as a **formative assessment**.

Highlight each sentence based on the type of word problem. Each color represents a type of word problem.

Then, write an explanation of how you know.

You may solve the word problem if you have time.

Yellow – add to

Green – take from

Pink – put together/take apart

Blue – compare

1. Holly has 12 dogs. One of her dogs had 11 puppies. How many dogs does she have now?
2. Doug has 17 video games. Cole has 67 video games. How many more video games does Cole have?
3. Ray had 84 pieces of candy. He ate 18 of them. How many pieces of candy does he have left?
4. Anne has 12 white socks and 40 blue socks. How many socks does she have all together?
5. Jill picked 17 apples last week and 63 this week. How many apples does she have now?
6. Maddie has 34 funny movies and 29 scary movies. How many movies does she have all together?
7. Fred had 47 toys. He donated 18 of them. How many toys does she have now?
8. Sophia drove 23 miles yesterday and 83 today. How many miles did she drive between the two days?

Above Grade Level

Guided Instruction:

Engage students by having them recall their addition and subtraction knowledge, adding or subtracting 0-10.

Give them 5 problems to solve on their individual white boards

Ex. $124 + 53$, $424 + 170$, $282 - 215$, $759 - 360$, $830 + 102$

Explain to students that there are similar problems to these within word problems

Word problems are number sentences with words added into them

There are 4 kinds of word problems, so before we get to solving them, we need to understand what each of them are.

Add to – addition word problems that change over time

Jon had 130 football cards. He got 81 football cards for his birthday. How many football cards does Jon have?

Take From – subtraction word problems that change over time

Jon had 415 football cards. He gave 231 away. How many football cards does he have now?

Put together/Take apart – addition or subtraction word problems that do not change over time

Jon has 384 Broncos football cards and 149 Chargers football cards. How many cards does he have all together?

Jon has 564 football cards. 338 of his cards are Broncos cards, the rest are Chargers. How many Chargers cards does he have?

Compare – comparing two whole numbers with words such as more or less

Jon has 521 football cards. Joe has 225 football cards. How many more cards does Jon have than Joe?

Give students time to ask questions

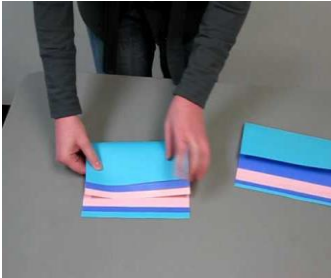
Have students **explore** the concepts by writing the definitions on a flip book that they will use throughout the week – this can be done while I am teaching each type of word problem

They will need 3 pieces of paper per student

4 tabs will be labeled (Add to, Take from, Put together/Take apart, Compare)

On the same page of the label, students will write the definition and an example if appropriate

Students will continue to work on their flip book if they do not finish at my table



We will **review** by going over the definitions one last time

I will hand out their matching worksheet that they will use during their independent work time

Independent Activity:

Students will work on their flip books on their own, writing definitions

I will provide assistance if needed, however it is expected that these students will understand their task

When students are done with their flip books, they will complete a matching worksheet that I will use for their **formative assessment**

Name _____

Use the multiple choice options below to match the definition or example to the correct type of word problems

Each letter will be used more than once

- I. Add to
- J. Take from
- K. Put together/Take apart
- L. Compare

_____ A word problem that compares two whole numbers

_____ An addition word problem that changes over time

_____ A word problem that does not change over time

_____ A subtraction word problem that changes over time

_____ Sue picked 218 apples yesterday. Today she picked 163 more. How many apples has she picked?

_____ Sue has 214 green and 437 red apples. How many more red apples does she have?

_____ Sue has 210 green and 373 red apples. How many apples does she have all together?

_____ Sue picked 437 apples. She gave 124 away to her teacher. How many apples does she have?

Technology Integration:

Students will open an online document that is shared with them. This document has a handful of word problems on it. They are to highlight the word problems based on the type of word problem. For example, yellow is add to, green is take from, pink is put together/take apart, and blue is compare. They will also explain their reasoning and solve. They will share their final highlighted document to me. This can also be used as a **formative assessment**.

Highlight each sentence based on the type of word problem. Each color represents a type of word problem.

Then, write an explanation of how you know.

Solve.

Yellow – add to

Green – take from

Pink – put together/take apart

Blue – compare

1. Holly has 102 goats. Some of her goats had kids, 87 in all. How many goats does she have now?
2. Doug has 217 video games. Cole has 367 video games. How many more video games does Cole have?
3. Ray had 784 pieces of candy. He ate 418 of them. How many pieces of candy does he have left?
4. Anne has 312 white socks and 240 blue socks. How many socks does she have all together?
5. Jill picked 517 apples last week and 363 this week. How many apples does she have now?
6. Maddie has 234 funny movies and 129 scary movies. How many movies does she have all together?
7. Fred had 647 toys. He donated 418 of them. How many toys does she have now?
8. Sophia drove 523 miles yesterday and 383 today. How many miles did she drive between the two days?

DAY 2

Writing Equations

	Guided Instruction	Independent Work	Technology Integration	Formative Assessment
Below Grade Level	<p>Writing equations based on word problems given</p> <p>(+- 10)</p>	<p>Given a word problem worksheet, write the equation that goes along with the problem</p>	<p>https://www.ixl.com/math/grade-2</p> <p>E.15 Write the Addition Sentence – One Digit F.13 Write the Subtraction Sentence up to 18</p>	<p>Word Problem to Equation Worksheet</p>
At Grade Level	<p>Writing equations based on word problems given</p> <p>(+- 100)</p>	<p>Drawing word problems out of a bag (+- 100)</p> <p>Writing the equation that goes along with the problem</p>	<p>https://www.ixl.com/math/grade-2</p> <p>G.11 Write the Addition Sentence up to Two Digits H.11 Write the Subtraction Sentence up to Two Digits</p>	<p>Word Problem to Equation Bean Bag Recording Sheet</p>
Above Grade Level	<p>Writing equations based on word problems given</p> <p>(+- 1000)</p>	<p>Drawing word problems out of a bag (+- 1000)</p> <p>Writing the equation that goes along with the problem</p>	<p>https://www.ixl.com/math/grade-2</p> <p>I.7 Write the Addition Sentence up to Three Digits J.7 I.7 Write the Subtraction Sentence up to Three Digits</p>	<p>Word Problem to Equation Bean Bag Recording Sheet</p>

DAY 2 Activities

Below Grade Level

Guided Instruction:

I will **engage** the students by having them do a word problem sort on the table. This will be done with cut out word problems. Each student will have 4 word problems, one of each type that they will add to the sort. Then we will go over the four types of word problems we went through the day before.

I will ask if students have any questions based on what we have done so far.

I will **explain** today's concept of writing equations out of word problems. Together, we will **explore** the four word problems we began with yesterday and write the proper math sentence or equation that goes along with it. Students know how to write and solve addition and subtraction equations.

Add to: Jon had 30 football cards. He got 8 football cards for his birthday. How many football cards does Jon have?

$$30 + 8 = \underline{\quad}$$

Take From: Jon had 45 football cards. He gave 7 away. How many football cards does he have now?

$$45 - 7 = \underline{\quad}$$

Put together/Take apart: Jon has 38 Broncos football cards and 9 Chargers football cards. How many cards does he have all together?

$$38 + 9 = \underline{\quad}$$

Compare: Jon has 14 football cards. Joe has 8 football cards. How many more cards does Jon have than Joe?

$$14 - 8 = \underline{\quad}$$

We will **review** by solving two of the problems above. The students can choose which ones they would like to use.

Independent Activity:

Students will be given a worksheet with word problems on it. Their job is to write an equation for each word problem and solve if they have time. This will be turned in and serve as their **formative assessment**.

Name _____

Write an appropriate equation for each word problem. Then solve.

Sue picked 8 apples yesterday. Today she picked 6 more. How many apples has she picked?

Sue has 21 green and 7 red apples. How many more green apples does she have?

Sue has 21 green and 7 red apples. How many apples does she have all together?

Sue picked 37 apples. She gave 4 away to her teacher. How many apples does she have?

Technology Integration:

Students will be directed to <https://www.ixl.com/math/grade-2> online. Their task is to go through the modules below.

E.15 Write the Addition Sentence – One Digit

F.13 Write the Subtraction Sentence up to 18

At Grade Level

Guided Instruction:

I will **engage** the students by having them list the four types of word problems we learned yesterday on their individual white boards. I will have them turn and talk to a partner about each of these types of problems. Then we will review as a group.

I will ask if students have any questions based on what we have done so far.

I will **explain** today's concept of writing equations out of word problems. Together, we will **explore** the four word problems we began with yesterday and write the proper math sentence or equation that goes along with it. Students will solve independently after we create the proper math sentence. Students know how to write and solve addition and subtraction equations.

Add to: Jon had 30 football cards. He got 21 football cards for his birthday. How many football cards does Jon have?

$$30 + 21 = \underline{\quad}$$

Take From: Jon had 45 football cards. He gave 31 away. How many football cards does he have now?

$$45 - 31 = \underline{\quad}$$

Put together/Take apart: Jon has 38 Broncos football cards and 19 Chargers football cards. How many cards does he have all together?

$$38 + 19 = \underline{\quad}$$

Compare: Jon has 51 football cards. Joe has 25 football cards. How many more cards does Jon have than Joe?

$$51 - 25 = \underline{\quad}$$

Independent Activity:

Students will choose a Ziploc baggie with many word problems in it (+- 100). They will pull out word problems, glue it to their paper and write the equation that goes along with it. Then they will solve. They will turn this in as their **formative assessment**.

Technology Integration:

Students will be directed to <https://www.ixl.com/math/grade-2> on their computers. Their job is to complete sections G.11 Write the Addition Sentence up to Two Digits and H.11 Write the Subtraction Sentence up to Two Digits

Above Grade Level

Guided Instruction:

I will **engage** the students by having them list the four types of word problems we learned yesterday on their individual white boards. I will have them turn and talk to a partner about each of these types of problems. Then we will review as a group.

I will ask if students have any questions based on what we have done so far.

I will **explain** today's concept of writing equations out of word problems. Individually, we will **explore** the four word problems we began with yesterday and write the proper math sentence or equation that goes along with it. Students will solve independently after we review and create the proper math sentence. Students know how to write and solve addition and subtraction equations.

Add to: Jon had 130 football cards. He got 81 football cards for his birthday. How many football cards does Jon have?

$$130 + 81 = \underline{\quad}$$

Take From: Jon had 415 football cards. He gave 231 away. How many football cards does he have now?

$$415 - 231 = \underline{\quad}$$

Put together/Take apart: Jon has 384 Broncos football cards and 149 Chargers football cards. How many cards does he have all together?

$$384 + 149 = \underline{\quad}$$

Compare: Jon has 521 football cards. Joe has 225 football cards. How many more cards does Jon have than Joe?

$$521 - 225 = \underline{\quad}$$

Independent Activity:

Students will choose a Ziploc baggie with many word problems in it (+- 1000). They will pull out word problems, glue it to their paper and write the equation that goes along with it. Then they will solve. This will be turned in and used as a **formative assessment**.

Technology Integration:

On their computers, students will be directed to <https://www.ixl.com/math/grade-2> and will complete sections I.7 Write the Addition Sentence up to Three Digits and J.7 I.7 Write the Subtraction Sentence up to Three Digits

DAY 3

Drawing Pictures

	Guided Instruction	Independent Work	Technology Integration	Formative Assessment
Below Grade Level	Practice solving word problems (+- within 10) by drawing pictures using base ten blocks for manipulatives	Word Problem Flash Cards (within 10) Show work with pictures	https://www.ixl.com/math/grade-2 E.4 Addition with Pictures F.5 Subtraction with Pictures	Flash Card Word Problems Worksheet
At Grade Level	Practice solving word problems (+- within 100) by drawing pictures and writing an explanation Base ten blocks can be used as manipulatives	Word Problem Flash Cards (within 100) Show work with pictures	https://www.ixl.com/math/grade-2 L.10 Addition and Subtraction Word Problems up to 100	Flash Card Word Problems Worksheet
Above Grade Level	Practice solving word problems (+- within 1000) by drawing pictures and writing an explanation Base ten blocks can be used as manipulatives	Word Problem Flash Cards (within 1000) Show work with pictures	https://www.ixl.com/math/grade-2 I.5 Addition Word Problems up to Three Digits J.5 Subtraction Word Problems up to Three Digits	Flash Card Word Problems Worksheet

DAY 3 Activities

Below Grade Level

Guided Instruction:

I will **engage** students by having them write two equations that go along with the word problems I give to them.

Bill has 13 pairs of shoes and Tom has 5 pairs of shoes. How many more pairs of shoes does Bill have?

Fran made 26 dollars from her chores last week. This week she made 9 dollars. How many dollars has she earned?

I will introduce the concept of drawing pictures to help solve word problems by handing out base ten blocks.

I will **explain** that pictures help us check our work and better understand the type of problem and the answer. I will show a couple of examples to the group.

Students will **explore** by using base ten blocks and drawing pictures that help them solve the answer to the following word problems:

Noah ran 13 miles last week. This week he ran 4 miles. How many more miles did he run last week?

Amanda knows how to play 53 songs on her guitar. She has learned how to play 8 more. How many songs can she play now?

We will **review** by going over the pictures that each student made for the problems above, making changes if needed.

Independent Activity:

Students will take an appropriate flash card deck (addition and subtraction word problems ± 10).

Students will draw flashcards, write an equation that goes along with the word problem, draw a picture to support their work, and solve.

They will record their work on a sheet they get from me during group time. This will be their **formative assessment**.

Name _____

Equation

Drawing

Solution

1.

2.

3.

4.

5.

Technology Integration:

Students will go back to <https://www.ixl.com/math/grade-2> on their computers and work on sections E.4 Addition with Pictures and F.5 Subtraction with Pictures

At Grade Level

Guided Instruction:

I will **engage** students by having them write three equations that go along with the word problems I give to them.

Bill has 13 pairs of shoes and Tom has 57 pairs of shoes. How many more pairs of shoes does Tom have?

Fran made 26 dollars from her chores last week. This week she made 39 dollars. How many dollars has she earned?

Travis has 82 balloons. 49 of them popped. How many balloons does he have left?

I will introduce the concept of drawing pictures to help solve word problems by handing out base ten blocks.

I will **explain** that pictures help us check our work and better understand the type of problem and the answer. I will show a couple of examples to the group.

Students will **explore** by using base ten blocks and drawing pictures that help them solve the answer to the following word problems:

Noah drove 13 miles last week. This week he drove 49 miles. How many more miles did he run this week?

Amanda knows how to play 53 songs on her guitar. She has learned how to play 28 more. How many songs can she play now?

We will **review** by going over the pictures that each student made for the problems above, making changes if needed.

Independent Activity:

Students will take an appropriate flash card deck (addition and subtraction word problems +/- 100).

Students will draw flashcards, write an equation that goes along with the word problem, draw a picture to support their work, and solve.

They will record their work on a sheet they get from me during group time. This will be their **formative assessment**.

Name _____

Equation

Drawing

Solution

1.

2.

3.

4.

5.

Technology Integration:

Students will go back to <https://www.ixl.com/math/grade-2> on their computers and work on section L.10 Addition and Subtraction Word Problems up to 100

Above Grade Level

Guided Instruction:

I will **engage** students by having them write three equations that go along with the word problems I give to them.

Bill has 135 pairs of shoes and Tom has 57 pairs of shoes. How many more pairs of shoes does Tom have?

Fran made 326 dollars last week. This week she made 239 dollars. How many dollars has she earned?

Travis has 482 balloons. 249 of them popped. How many balloons does he have left?

I will introduce the concept of drawing pictures to help solve word problems by handing out base ten blocks.

I will **explain** that pictures help us check our work and better understand the type of problem and the answer. I will show a couple of examples to the group.

Students will **explore** by using base ten blocks and drawing pictures that help them solve the answer to the following word problems:

Noah drove 613 miles last week. This week he drove 849 miles. How many more miles did he run this week?

Amanda knows how to play 253 songs on her guitar. She has learned how to play 128 more. How many songs can she play now?

We will **review** by going over the pictures that each student made for the problems above, making changes if needed.

Independent Activity:

Students will take an appropriate flash card deck (addition and subtraction word problems +/- 1000).

Students will draw flashcards, write an equation that goes along with the word problem, draw a picture to support their work, and solve.

They will record their work on a sheet they get from me during group time. This will be their **formative assessment**.

Name _____

Equation

Drawing

Solution

1.

2.

3.

4.

5.

Technology Integration:

Students will go back to <https://www.ixl.com/math/grade-2> on their computers and work on sections I.5 Addition Word Problems up to Three Digits and J.5 Subtraction Word Problems up to Three Digits

DAY 4

Strip Diagrams

	Guided Instruction	Independent Work	Technology Integration	Formative Assessment
Below Grade Level	Introduce strip diagrams (+- 10)	Strip Diagram Blocks Recording Sheet	https://www.mathplayground.com/tb_addition/index.html Building strip diagrams online – Whole Part	Recording Sheet
At Grade Level	Introduce strip diagrams (+- 100)	Strip Diagram Blocks Recording Sheet	https://www.mathplayground.com/tb_addition/index.html Building strip diagrams online – Whole Part, Compare 1 step	Recording Sheet
Above Grade Level	Introduce strip diagrams (+- 1000)	Strip Diagram Blocks Recording Sheet	https://www.mathplayground.com/thinking_blocks_modeling_tool/index.html Creating problems and strip diagrams that coincide	Recording Sheet

DAY 4 Activities

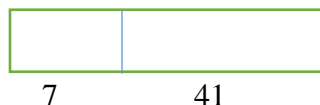
Below Grade Level

Guided Instruction:

I will **engage** students by having base ten blocks set out, 4 tens and 7 ones. I will have them write a word problem on their white board that goes along with the blocks (which are used in drawing pictures)

We will go over each student's word problem and discuss

I will have three different strip diagrams ready to show the students. I will **explain** the basics of a strip diagram to them, including addition and subtraction. An example is below.



Then, we will work together to **explore** and solve the strip diagrams I have shown them. I will have strip diagram blocks ready for students to use as manipulatives.

$$7 + 41 = \underline{\quad\quad} \quad 92 - \underline{\quad\quad} = 87 \quad \underline{\quad\quad} + 63 = 71$$



We will **review** by going over our answers and any questions that arise. Students will continue this in their rotations.

Independent Activity:

Students will take a set of strip diagram blocks with them to their seats. They will use these to help them solve word problems. They will draw how they used the manipulatives on their recording sheet, label the blocks, and solve. They will turn their work in. This will be their **formative assessment**.

Name _____

1. Megan had 32 fish in her fish tank. She bought 7 more. How many fish does she have?
2. Anthony has 26 basketball players on his team. 5 of his players are sick. How many healthy players does he have?
3. Brianna has 16 pairs of jeans and 9 pairs of yoga pants. How many pants does she have all together?

Technology Integration:

On their computers, students will go to https://www.mathplayground.com/tb_addition/index.html to build strip diagrams to word problems online. They will click on the “Part Whole” option and play a robot game.

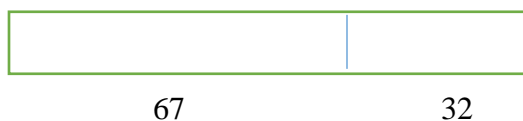
At Grade Level

Guided Instruction:

I will **engage** students by having a picture drawn representing $54 - 13 = \underline{\quad}$. I will have them write a word problem on their white board that goes along with the picture.

We will go over each student's word problem and discuss

I will have three different strip diagrams ready to show the students. I will **explain** the basics of a strip diagram to them, including how to determine if we are using addition or subtraction and what piece is missing. An example is below.



Then, we will work together to **explore** and solve the strip diagrams I have shown them. I will have strip diagram blocks ready for students to use as manipulatives.

$$27 + 41 = \underline{\quad} \qquad 92 - \underline{\quad} = 50 \qquad \underline{\quad} + 63 = 84$$



We will **review** by going over our answers and any questions that arise. Students will continue this in their rotations.

Independent Activity:

Students will take a set of strip diagram blocks with them to their seats. They will use these to help them solve word problems. They will draw how they used the manipulatives on their recording sheet, label the blocks, and solve. They will turn their work in. It will be their **formative assessment**.

Name _____

1. Megan had 32 fish in her fish tank. She bought 27 more. How many fish does she have?
2. Anthony has 26 basketball players on his team. 11 of his players are sick. How many healthy players does he have?
3. Brianna has 16 pairs of jeans and 39 pairs of yoga pants. How many pants does she have all together?

Technology Integration:

On their computers, students will go to https://www.mathplayground.com/tb_addition/index.html to build strip diagrams to word problems online. They will click on the “Part Whole” or “Compare 1 Step” options and play a robot game.

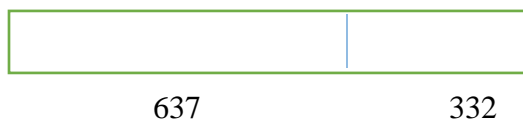
Above Grade Level

Guided Instruction:

I will **engage** students by having a picture drawn representing $923 - 714 = \underline{\quad}$. I will have them write a word problem on their white board that goes along with the picture

We will go over each student’s word problem and discuss

I will have three different strip diagrams ready to show the students. I will **explain** the basics of a strip diagram to them, including how to determine if we are using addition or subtraction and what piece is missing. An example is below.



Then, we will work together to **explore** and solve the strip diagrams I have shown them. I will have strip diagram blocks ready for students to use as manipulatives.

$$237 + 418 = \underline{\quad\quad} \quad 792 - \underline{\quad\quad} = 505 \quad \underline{\quad\quad} + 463 = 784$$



We will **review** by going over our answers and any questions that arise. Students will continue this in their rotations.

Independent Activity:

Students will take a set of strip diagram blocks with them to their seats. They will use these to help them solve word problems. They will draw how they used the manipulatives on their recording sheet, label the blocks, and solve. They will turn their work in. This will be their **formative assessment**.

Name _____

1. Megan had 532 fish in her fish tank. She bought 327 more. How many fish does she have?

2. Anthony coaches 326 athletes. 115 of his athletes are sick. How many healthy players does he have?

3. Brianna loves clothes. She has 146 pairs of jeans and 209 pairs of yoga pants. How many pants does she have all together?

Technology Integration:

On their computers, students will go to https://www.mathplayground.com/thinking_blocks_modeling_tool/index.html and create their own strip diagrams based on a word problem they create. This will be challenging, but very rewarding for these students.

DAY 5

Putting it all Together to Solve

	Guided Instruction	Independent Work	Technology Integration	Formative Assessment
Below Grade Level	Review the steps to efficiently solving a word problem (+- 10)	Step by Step Worksheet (+- 10)	Choose one of the following games: https://www.education.com/game/matching-pictures-equations/ https://www.mathplayground.com/wpdatabase/wpindex.html https://www.mathplayground.com/WordProblemsWithKatie1.html	Step by Step Worksheet
At Grade Level	Review the steps to efficiently solving a word problem (+- 100)	Step by Step Worksheet (+- 100)	Choose one of the following games: https://www.education.com/game/elliotts-museum-word-problems/ https://www.mathplayground.com/wpdatabase/wpindex.html https://www.mathplayground.com/WordProblemsWithKatie1.html	Step by Step Worksheet
Above Grade Level	Review the steps to efficiently solving a word problem (+- 1000)	Step by Step Worksheet (+- 1000)	Choose one of the following games: https://www.education.com/game/elliotts-museum-word-problems/ https://www.education.com/game/3-digit-subtraction-word-problems/ https://www.mathplayground.com/WordProblemsWithKatie1.htm	Step by Step Worksheet

DAY 5 Activities

Below Grade Level

Guided Instruction:

I will **engage** the students by having them put the steps of solving a word problem in order. I will have the steps cut out and students will individually put them in order.

Define the problem, write an equation, draw pictures, use a strip diagram, solve

I will **explain** to students that they will be putting it all together to solve problems today. I will have students discuss what they find easiest and what is more difficult. We will work on anything specific that students want to review.

Students **explore** by solving one word problem showing each of their steps on a scratch sheet of paper.

Faith picked 62 apples last week. She picked 9 this week. How many apples has she picked?

We will **review** by going over student work and answer any questions.

Independent Activity:

Students will get a worksheet from me that lays out the steps to solving a word problem. A word problem will be listed at the top of the worksheet. Students will solve the problem step by step showing all of their work. This will be their **formative assessment**.

Name _____

Oscar ate 15 dog treats last month. This month he ate 7. How many more dog treats did he eat last month?

Define the type of word problem:

Write an equation:

Draw a picture:

Create a strip diagram:

Solve:

Technology Integration:

Students may choose one of the following games that will put all of their knowledge together to solve word problems.

<https://www.education.com/game/matching-pictures-equations/>

<https://www.mathplayground.com/wpdatabase/wpindex.html>

<https://www.mathplayground.com/WordProblemsWithKatie1.html>

At Grade Level

Guided Instruction:

I will **engage** the students by having them put the steps of solving a word problem in order. I will have the steps cut out and sitting on the table. Students will write the steps in order on their white boards

Define the problem, write an equation, draw pictures, use a strip diagram, solve

I will **explain** to students that they will be putting it all together to solve problems today. I will have students discuss what they find easiest and what is more difficult. We will work on anything specific that students want to review.

Students **explore** by solving one word problem showing each of their steps on a scratch sheet of paper.

Faith has 45 red apples and 38 green apples. How many apples does she have?

We will **review** by going over student work and answer any questions.

Independent Activity:

Students will get a worksheet from me that lays out the steps to solving a word problem. A word problem will be listed at the top of the worksheet. Students will solve the problem step by step showing all of their work. This will be their **formative assessment**.

Name _____

Karen walked 62 miles last month. This month she walked 49 miles. How many more miles did she walk last week?

Define the type of word problem:

Write an equation:

Draw a picture:

Create a strip diagram:

Solve:

Technology Integration:

Students may choose one of the following games that will put all of their knowledge together to solve word problems.

<https://www.education.com/game/elliotts-museum-word-problems/>

<https://www.mathplayground.com/wpdatabase/wpindex.html>

<https://www.mathplayground.com/WordProblemsWithKatie1.html>

Above Grade Level

Guided Instruction:

I will **engage** the students by having them put the steps of solving a word problem in order. They will write out the steps on their white board

Define the problem, write an equation, draw pictures, use a strip diagram, solve

I will **explain** to students that they will be putting it all together to solve problems today. I will have students discuss what they find easiest and what is more difficult. We will work on anything specific that students want to review.

Students **explore** by solving one word problem showing each of their steps on a scratch sheet of paper.

Faith picked 573 apples last month and 421 apples this month. How many apples does she have?

We will **review** by going over student work and answer any questions.

Independent Activity:

Students will get a worksheet from me that lays out the steps to solving a word problem. A word problem will be listed at the top of the worksheet. Students will solve the problem step by step showing all of their work. This will be their **formative assessment**.

Name _____

Isaac played outside for 478 minutes this month. He played inside for 502 minutes this month. How many minutes has he played this month?

Define the type of word problem:

Write an equation:

Draw a picture:

Create a strip diagram:

Solve:

Technology Integration:

Students may choose one of the following games that will put all of their knowledge together to solve word problems.

<https://www.education.com/game/elliotts-museum-word-problems/>

<https://www.education.com/game/3-digit-subtraction-word-problems/>

<https://www.mathplayground.com/WordProblemsWithKatie1.htm>