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EDU 307
Ms. Miller
15 October 2018

Small Group Center

Math Standard:

1.OA.6 Use strategies to add and subtract within 20.

-Fluently add and subtract within 10.

Below Proficiency:

Objective: By the end of the unit, students will be able to use strategies to add and subtract within 10.

Emerging Proficiency:

Objective: By the end of the unit, students will be able to use strategies to add and subtract within 20.

Above Proficiency:

Objective: By the end of the unit, students will be able to use strategies to add and subtract double digit numbers.

Day 1	Teacher	Individual	Technology (iPads)	Formative Assessment
Below Proficiency	Focus on Adding within 10 Using Manipulatives	Manipulative Math	Rocket Math	Manipulative Math Activity Sheet
Emerging Proficiency	Focus on fluently adding and subtracting from 1-12	Spinner Math	Splash Math 1 st Grade	Spinner Math Equations
Above Proficiency	Focus on using strategies to add and subtract from 1-20	Spinner Math	Splash Math 1 st Grade	Spinner Math Equations

- Below Proficiency:
 - Teacher:
 - I want everyone to pretend they have two dogs playing in the yard (place 2 manipulatives on the table) then two more dogs ran into the yard (place 2 more manipulatives on the table), how many dogs are their now? (write out addition problem as you go)

- Go through a few more scenarios with them. Then give them manipulatives to work through the problems with you. Shift from word problems to basic equations.
 - Give them problems to work through while you observe and provide guidance.
 - Individual:
 - Students will receive an activity sheet (example below) where they are able to place manipulatives above the numbers in the equation in order to solve the equation.
 - Formative assessment: Students will need to turn in activity sheet. I will check for correct answers.
 - Technology:
 - Students will do addition on rocket math.



- Emerging Proficiency:

- Teacher:
 - I will write down equations on the white board and have students write down their answers on their table spots.
 - I will observe students' ability to accurately solve these problems mentally.
 - If students are struggling, I will remind them to count on, count back, or glance at their fingers to solve the equations quickly and accurately.
- Individual:
 - Students will receive a number spinner, paperclip, and a pencil. They will need to spin one number, write it down, draw a plus sign (or minus sign), spin another, write it down, draw an equal's sign, and then solve. They must alternate addition and subtraction. With subtraction they need to use the greater number as their first number. Emerging students will receive the 1-6 number spinner.
 - Formative Assessment: Students will write down their equations as they go and turn them in after the round.
- Technology:
 - Students will do addition & subtraction on Splash Math First Grade.

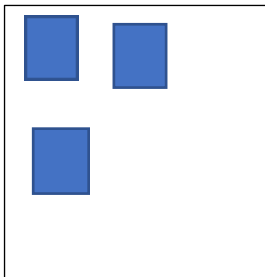


- Above Proficiency:

- Teacher:
 - I will have students warm up their brains by doing flashcards with addition and subtraction problems within 10.
 - Then we will work on adding and subtracting within 20 by using counting on and counting backwards using their fingers if needed.
 - We will walk through some of these equations together utilizing these strategies then I will give them the equations and practice these strategies on their own if needed. They will have to write their answers on their table spots and we will compare answers.
- Individual:

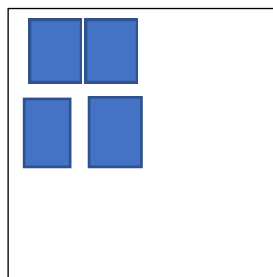
- Students will receive a number spinner, paperclip, and a pencil. They will need to spin one number, write it down, draw a plus sign (or minus sign), spin another, write it down, draw an equal's sign, and then solve. They must alternate addition and subtraction. With subtraction they need to use the greater number as their first number. Emerging students will receive the 1-9 number spinner.
- Formative Assessment: Students will write down their equations as they go and turn them in after the round.
- Technology:
 - Students will do addition & subtraction on Splash Math First Grade.

Name:



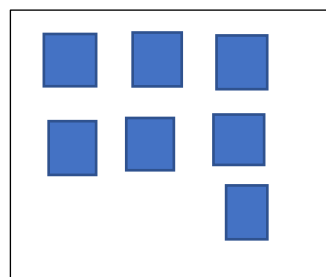
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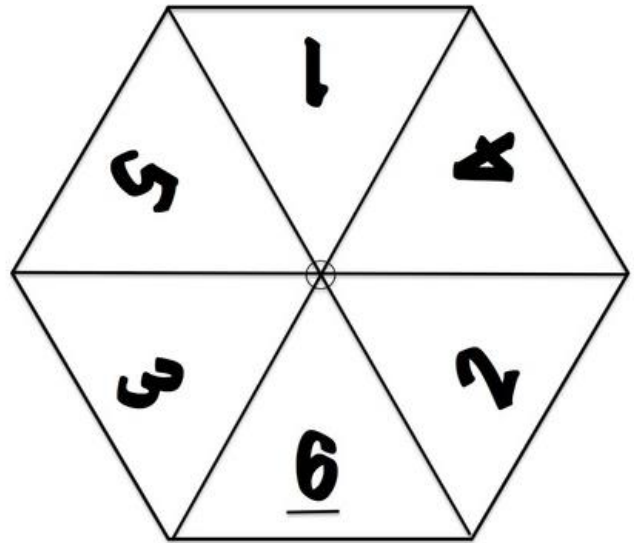
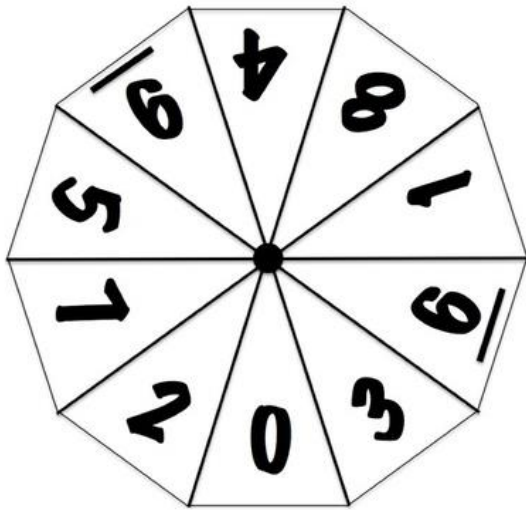


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Day 2	Teacher	Individual	Technology (iPads)	Formative Assessment
Below Proficiency	Focus on Subtracting with 10 using manipulatives	Lego Subtraction	Rocket Math	Lego Subtraction Sheet
Emerging Proficiency	Focus on addition within 20	Number Line Math	Splash Math 1 st Grade	Number Line Math Sheet
Above Proficiency	Introduce adding double digit numbers using the tree strategy	Card War	Monster Math	Card War Math Partner Sheet

- Below Proficiency:
 - Teacher:
 - During small group, I will give students scenarios similar to the addition ones from Day 1 but dealing with subtraction. For example, there were five dogs in the yard and three ran away, how many are left?
 - We will continue to use manipulatives, while working through the word problems so the students understand the process of subtraction.
 - We will shift from word problems to equations. I will demonstrate how to use Legos to solve subtraction problems, as they will need to know this for their individual activity.
 - Individual:
 - Students will be given a sheet with equations to be solved using Legos. Students will be given a baggie with various Legos in it ranging from 1-16. Students will find the Lego piece of the larger number and find the piece with the smaller

- number. By covering the number being subtracted they can count how many dots are left over, giving them their answer. (See example below)
- Formative Assessment: Students will hand in completed sheet. I will check if they solved correctly.
 - Technology:
 - Students will do subtraction on their Rocket Math App.
 - Emerging Proficiency:
 - Teacher:
 - “We have worked on addition and subtraction within 10 now we are going to venture out and practice addition and subtraction within 20. We are going to explore strategies that help us add up to 20. We will also use a number line to help us count on. Then transition to counting on using our fingers.”
 - Go through example problems together using a laminated number line. Have them practice some on their own.
 - Go through more examples using their fingers to count on as this strategy is more efficient to use during fast math.
 - Individual:
 - Students will receive a sheet of addition problems with number lines below. They must use the number lines to solve the problems. There will be problems at the end for them to do by counting on with their fingers.
 - Formative Assignment: Turn in number line sheet.
 - Technology:
 - Students will do addition and subtraction activities on Splash Math 1st Grade.
 - Above Proficiency:
 - Teacher:
 - “Today, we are going to dive into double digit addition. You have mastered your single-digit addition and therefore, I believe you are up for this challenge. We will be doing this by utilizing the tree strategy.”
 - Walk students through the tree strategy. Where you draw a line from the ones place to the other one’s place and add them. Then repeat this step with the ten’s place and solve.
 - Go through example problems together.
 - Individual:
 - Students will partner up with a deck of cards. They will each draw two card & add the numbers on the cards. They must write both equations down on a sheet of paper. Solve using the tree strategy as necessary. The one with the greatest sum wins. They must circle the winner of each round.
 - Formative Assessment: Turn in Card War Math Partner Sheet.
 - Technology:
 - Students will do addition and subtraction on their Monster Math App as a refresher & to gain familiarity with the app.



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Better Than Homework

Day 3	Teacher	Individual	Technology	Formative Assessment
Below Proficiency	Focus: Adding and subtracting within 10 using fingers	Addition Flower (Number: 1-10)	Splash Math 1 st Grade	Addition Flower
Emerging Proficiency	Focus on subtraction within 20	Addition Flower (Number: 10-20)	Monster Math	Addition Flower
Above Proficiency	Focus: adding double digit numbers by listing them vertically	Addition & Subtraction Flower: (Number: Double Digit)	Monster Math	Addition and Subtraction Flower

- Below Proficiency:
 - Teacher:
 - “Today we are going to use our fingers to help us add and subtract. I want everyone to hold up five fingers. Now, I want you to add three more (model this by holding up five and adding three). How many are there all together? (count all the fingers out loud to get the sum.”
 - Continue to walk through equations together. Transition to having students practice the equation you provide for them.
 - Individual:
 - Students will choose a number 6-10 to place in the middle of their flower. On each pedal they will have to create an equation that equals the number selected. Four petals minimum.
 - Formative Assessment: Turn in Flower. *same for all three levels
 - Technology:
 - Student will do adding and subtracting on their Splash Math 1st Grade App.

- Emerging Proficiency:
 - Teacher:
 - “Yesterday, we focused on adding within 20. Today, we will focus on subtracting within 20. When we subtract we want to count backwards or take away and see what we have left.”
 - Walk students through equations utilizing both of the strategies listed above.
 - Individual:

- Students will choose a number 11-20 to place in the middle of their flower. On each pedal they will have to create an equation that equals the number selected. Six petals minimum. Two of them need to be subtraction problems.
 - Technology:
 - Students will do addition and subtraction within 10 on their Monster Math App.
- Above Proficiency:
 - Teacher:
 - “So yesterday, we dove into double-digit addition yesterday. Today, I want to practice a new strategy for adding double-digit numbers. We will first review a few problems using our tree strategy then we will learn to solve them vertically.”
 - Review a few problems using the tree strategy.
 - Then add two-digit numbers by listing them vertically (how they are commonly seen). Explain how they can solve the problem by adding the one’s place first, then the tens. Demonstrate how to carry numbers as it is applicable to the problems.
 - Individual:
 - Students will choose a number 21+ to place in the middle of their flower. On each pedal they will have to create an equation that equals the number selected. Eight petals minimum, three of which need to be subtraction problems.
 - Technology:
 - Students will do addition and subtraction within 20 on their Monster Math App.





Day 4	Teacher	Individual	Technology	Formative Assessment
Below Proficiency	Focus on adding and subtracting within 10 using the counting-on or counting-back strategy	Touch Point Addition	Splash Math 1 st Grade	Touch Point Math Sheet
Emerging Proficiency	Introduce double-digit addition using tree model.	Yarn Math	Monster Math	Yarn Math Sheet
Above Proficiency	Focus on subtracting double digit numbers by subtracting them vertically	Double Dice Subtraction	Splash Math 2 nd Grade	Double Dice Subtraction Problems

- Below Proficiency:
 - Teacher:

- “Today, we are going to learn to add and subtract using touch points. Touch points help us count on or count back.” Provide an example on white board drawing in the touch points and using them to solve.
 - Have students work through the problems with you. Then have them take turns filling in the touch points and working through it together. Have students try a few on their own to prepare them for their activity.
 - Individual:
 - Students will be given a list of addition and subtraction equations within 10 ($2+5=$, $7-4=$, $2+3=$, etc.). They will also be given a page of sticker to use as touch points. First, they will apply the touch points to the problem, then they will solve by counting on or counting back. (See touch points below)
 - Formative Assessment: Students will the touch point math sheet in.
 - Technology:
 - Students will do addition and subtraction on Splash Math 1st Grade.
- Emerging Proficiency:
 - Teacher:
 - “Today, we are going to dive into double digit addition. You have mastered your single-digit addition and therefore, I believe you are up for this challenge. We will be doing this by utilizing the tree strategy.”
 - Walk students through the tree strategy. Where you draw a line from the ones place to the other one’s place and add them. Then repeat this step with the ten’s place and solve.
 - Go through example problems together.
 - Have them draw the line using yarn as they will do in their activity.
 - Individual:
 - Students will be given addition equations where the numbers are listed side by side. They must solve the equations by using yarn to bracket the one’s and the ten’s together. They must glue the yarn to the paper, so I can see how they bracketed the numbers.
 - Formative Assessment: Students will need to and these in following the round.
 - Technology:
 - Students will do addition and subtraction within 20 on their Monster Math App.
- Above Proficiency:
 - Teacher:
 - As we did previously with addition we will have students subtract by listing the minuends vertically and subtracting the one’s place, then the ten’s place. Review an addition problem first then move into subtraction. Demonstrate how to carry numbers as it is applicable to the problems.
 - Individual:
 - Students will receive two double dice. They will roll each of them. They will have to combine the numbers on the dice to create their first minuend (or number).

Then repeat this process for the next double dice. They will list the greater number first and subtract the lesser of the two. They will have to

- Formative Assessment: They will hand their equations in after the round.
- Technology:
 - Students will add and subtract on Splash Math 2nd Grade.



1 2 3 4 5 6 7 8 9



Day 5	Teacher	Individual	Technology	Formative Assessment
Below Proficiency	Introduce adding up to 20 using previously explored strategies	Number Line Math	Monster Math	Number Line Math Sheet
Emerging Proficiency	Introduce adding double digits	Card War	Splash Math 2 nd Grade	Card War Math Partner Sheet

Above Proficiency	Focus on adding and subtracting double digits in list format	Double digit addition and subtraction with dominos	Math Balance	Domino Math Problems
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- Below Proficiency:
 - Teacher:
 - “We have worked on addition and subtraction within 10 now we are going to venture out and practice addition and subtraction within 20. We are going to explore strategies that help us add up to 20. We will count on using our fingers. We will also use a number line to help us count on.”
 - Go through example problems together using a laminated number line. Have them practice some on their own.
 - Individual:
 - Students will receive a sheet of addition problems with number lines below. They must use the number lines to solve the problems. There will be problems at the end for them to do by counting on with their fingers.
 - Formative Assessment: Turn in Number Line Math Sheet.
 - Technology:
 - Students will practice addition within 20 on the Monster Math App.

- Emerging Proficiency:
 - Teacher:
 - “Today, we are going to dive into double digit addition. You have mastered your single-digit addition and therefore, I believe you are up for this challenge. We will be doing this by utilizing the tree strategy.”
 - Walk students through the tree strategy. Where you draw a line from the ones place to the other one’s place and add them. Then repeat this step with the ten’s place and solve.
 - Go through example problems together.
 - Individual:
 - Students will partner up with a deck of cards. They will each draw two card & add the numbers on the cards. They must write both equations down on a sheet of paper. Solve using the tree strategy as necessary. The one with the greatest sum wins. They must circle the winner of each round.
 - Formative Assessment: Students will hand in
 - Technology:
 - Students will do addition and subtraction activities on Splash Math 2nd Grade

- Above Proficiency:
 - Teacher:
 - “The past two days we have been working on adding and subtracting double digit numbers. Today, we are going to review both to make sure you have it down.”

- “I want you to take out your white boards and markers. I will hold up double-digit addition and subtraction flashcards. I want you to write down the equation vertically and solve it, like we have been practicing.”
- Walk through equations they are struggling with. Have each student walk the group through a problem to make sure they understand the process.
- Individual:
 - Students will be given a bucket of dominos. They will need to draw out two dominos which will be the addends and minuends, or numbers, within the equation. Students will have to write the problem out vertically and solve. They may manipulate the dominos to create the double-digit number of their choosing.
- Technology:
 - Students will use their addition and subtraction skills to take on the Math Balance App.



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