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| **Projected Sequence of Lessons with First Three Detailed Lessons** |

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| **Date:** 11/2/15  **Learning Target/Objectives:** Students will be able to solve “result unknown” addition math stories using 5-group cards.  **Materials Needed:**   * Counting bears * 5- group cards * Sheet of paper * Pencil * Plastic sleeve with number sentence template and markers * Whiteboards and markers   **Description/overview of lesson:** I will begin the lesson by putting “good fit number bonds” on the board and asking the children to convert the number bond to a number sentence (this will be done on an individual white board). I will ask my students to think about the strategies that they have been using to solve a missing number in a number sentence. After I activate this prior knowledge, I will pose a question (see below) and ask the children to try and individually solve the problem on their white boards. After 5 minutes I will have the students come back together as a whole group and pick volunteers to show the class how they completed the problem. Hopefully, one of my students will use the “five group” card. I will choose these students as my “teacher helper.” Once the class gets an opportunity to see this child’s strategy, I will have the children brainstorm how we could use this math tool for this problem. I will conclude the lesson by having the students “try out” this new strategy and distributing the “exit slip.”  **TASK**  **Above**: “Once upon a time 8 little bears came out of hibernation. Then some more bears came out of hibernation. At the end, there were 12 bears out of hibernation. How many bears came out of hibernation?  **On Grade Level:** “Once upon a time, 5 little bears came out of hibernation. Then, some more bears came out of hibernation. At the end, there were 8 bears out of hibernation. How many bears came out of hibernation?”  **Below:** “Once upon a time, 3 little bears came out of hibernation. Then some more bears came out of hibernation. At the end, there were 6 bears out of hibernation. How many bears came out of hibernation?”  **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * “Today we will be finding the missing number in a problem. This will be very helpful to us as mathematicians because sometimes numbers are unknown.” * “Mathematicians must be able to persevere through problems and use their knowledge to figure out something they may not know.”   **Get them interested:**   * “Has anyone ever gotten home and realized you lost something at school?” (students will make the sign language sign for connection) * “Let’s say you came with 3 pencils and when you got home you only had 1 pencil. Did you know how many pencils you lost?” (wait for students to answer) Ask, “How?” * “Today we have some bears that missing because of hibernation. We need to figure out how many bears are missing just like you would have needed to find out how many items you had lost.”   **Expectations:**   * I expect everyone to participate in the lesson and give their best effort. * I expect everyone to give your own answers using your own strategies. * I expect everyone to respect their classroom family and respond to other’s ideas in a positive way.   **Activate Prior Knowledge:**   * I will give students the “good fit number bonds” on the board * The students will have white boards where they will transfer the number bond into a number sentence. * Through this students will activate prior knowledge about number sentences and how they have used them previously.   **Understanding what the task is asking:**   * Are we supposed to use the total number of bears in hibernation? (Answer: Let’s look for key words and phrases in the problem. Turn to your partner and find key words. Students should find total as a key word) * Can we use manipulatives to help us in the problem? (Yes! Manipulatives are welcomed. Dot cards, counting bears, and fingers will work the best for this task.) * Are we supposed to indicate where in the number sentence the number goes? (Yes, if you are using a number sentence, I want you to indicate where that number is in your number sentence.)   **DURING** (10 minutes)  **Key Questions:**   1. What answer did you come up with? What strategies did you use to arrive at this answer? 2. Turn and talk to a partner. What strategies did they use and why do you think they chose to do it this way?   **Procedure:**   1. I will first have the students examine a number bond and write a number sentence that matches. This will activate their prior knowledge and get them thinking about the elements of an addition problem. 2. I will then ask the students to think about **how** they solved this problem. How would they solve this problem if one of the numbers was missing? I will have the students identify different strategies they use to solve a problem. 3. Next, I will pose the story problem and ask the students to work individually on their white boards to solve the problem. 4. After 5 minutes, I will direct the student’s attention back to the whole class and we will discuss the different strategies that all of the students used. 5. I will choose a few teacher helpers to come up to the board and illustrate their thinking. 6. Hopefully, one of the children will use a five group card and we can explore this strategy in more detail when the student shows his/her work to the class. 7. If no student uses this strategy, I will introduce this concept to the students and ask them if this is something that we could do to solve this problem. 8. To conclude my lesson, I will review all of the strategies, emphasizing how useful the five card is, and distribute the exit slip so I can get an understanding of what the students did and did not comprehend.   **Possible Strategies:**   * Write a number sentence * Use counting bears * Use a number bond * Use their fingers * 5- group card   **AFTER (5 minutes):**   * The main strategy that I want my students to use is the using the five group cards. Although we have used this math tool in class in the past, I have a feeling that not many children will think to use this specific way to solve the problem. I do think that at least one student will think of this method, but my goal is to expand upon this idea during our whole class instruction. * I plan on using a lot of revoicing during my teaching. My children seem to have a hard time putting their thoughts down on paper, so I plan on “revoicing” the student’s thinking to better illustrate the point that my children are trying to get across. * I also plan on using wait time. I have many children in my class that tend to be a little bit shy, so I will wait for at least 30 seconds to give the students a chance to gather their thoughts. * At the end of my lesson, I plan to quickly going back through our strategies and encouraging students to try this “math tool” the next time they are solving an addition problem. * I also plan on having the children completing an exit slip and showing a visual demonstration of what they learned. |

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| **Date:** 11/3/15  **Learning Target/Objectives:** Students will be able to count on up to 3 more using numeral and 5-group cards and fingers to track the change.  **Materials Needed:**   * Document camera * Paper * Pencil * White board * Marker   **Description/overview of lesson:** I will begin the activity by discussing if anyone has been to a cider mill and or went to the store to buy apples. This will help get them interested in the lesson and excited to do the math. I will then move into the opening activity where I will say a number aloud. Students will repeat the number, touching their heads and counting on as they put their fist in the air, one at a time. As a class, we will then discuss what we were just doing in the opening activity. I want students to understand that we were counting as we were doing the opening activity. I will then give students the high level task and ask them to solve it using as many strategies as possible. After 5 minutes, students will reconvene on the carpet where we will discuss the strategies they have used. Finally, within our discussion, I will discuss the strategy of counting on in more depth. I want students to understand that we start at the first number given and use our fingers to count on from that number. This will be done through a discussion between students.  **TASK**  For each problem given, we will display an illustration of a basket with the written number of apples in the basket before more “fell right into her basket”.    **Above:** Beth went apple picking. She picked 9 apples and put them in her basket. 5 more apples fell out of the tree right into her basket! How many apples does she have in her basket now?  **On Grade Level:** Beth went apple picking. She picked 7 apples and put them in her basket. 2 more apples fell out of the tree right into her basket! How many apples does she have in her basket now?  **Below:** Beth went apple picking. She picked 2 apples and put them in their basket. 3 more apples fell out of the tree right into her basket right into her basket! How many apples does she have in her basket?  **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * “Have you ever been in a situation where a strategy that you use didn’t work for a problem? As mathematicians it is important for us to have different strategies to solve problems.” * “Yesterday, when we talked about perseverance and so I am going to help you find even more ways to solve a tricky problem! That way you will be ready to learn the next time you get stuck on a problem.”   **Get them interested:**   * “Has anyone ever gone to the cider mill and picked apples?!” (students will make the sign language signal for connection) Today we are going to look at a problem that one of our ‘friends’ when they went to they picked apples!”   **Expectations:**   * I expect everyone to participate in the lesson and give their best effort. * I expect everyone to give your own answers using your own strategies. * I expect everyone to respect their classroom family and respond to other’s ideas in a positive way.   **Activate Prior Knowledge:**   * “Last time we were together for math, we thought of some great strategies for solving tough addition problems. Does anyone remember those strategies?” * At this time, I will choose a volunteer in the class who wants to share their strategy for solving addition problems. If no one comes up with the idea of using 5 spot cards, I will put one up on the board and ask the children if they remember this strategy.   **Understanding what the task is asking:**   * Is 7 the whole number? Or one of the parts? (Possible answer: 7 is a part) * If we were to turn this into a number bond, where would we put each number? Why is this the case? (Possible answer: Show number bond on board) * Does the whole number change if we use a different strategy to solve this problem? (Possible answer: No)   **DURING** (10 minutes)  **Anticipated Strategies:**   * Count on * Use a number bond * Write a number sentence * Draw a picture * Use fingers * Use a 5- group card   **Key Questions:**   1. What answer did you come up with? What strategies did you use to arrive at this answer? 2. Turn and talk to a partner. What strategies did they use and why do you think they chose to do it this way?   **Procedure:**   1. I will begin the lesson with an opening activity. I will say a number aloud. Students will repeat the number, touching their heads and counting on as they put their fist in the air, one at time. 2. I will then have the students discuss what they just did. I will ask what they were doing when they were putting each fist in the air. (Students will respond with counting.) 3. After doing the warm-up activity. Students will return to their desks where I will pose our apple problem to them. I will ask them to work individually and use the whiteboard to solve it. 4. After 5-7 minutes, I will direct the students’ back to the whole group where we will discuss the strategies that they used to help solve the problem 5. How are the strategies different? 6. What strategy is a strategy you didn’t think about?   **AFTER:**   * The main strategy that I want my students to use is the using of fingers to count on. Although we have used this math tool in class in the past, I have a feeling that not many children will think to use this specific way to solve the problem. I do think that at least one student will think of this method, but my goal is to expand upon this idea during our whole class instruction. * I plan on using a lot of revoicing during my teaching. My children seem to have a hard time putting their thoughts down on paper, so I plan on “revoicing” the student’s thinking to better illustrate the point that my children are trying to get across. * I also plan on using wait time. I have many children in my class that tend to be a little bit shy, so I will wait for at least 30 seconds to give the students a chance to gather their thoughts. * At the end of my lesson, I plan to quickly going back through our strategies and encouraging students to try this “math tool” the next time they are solving an addition problem. * I also plan on having the children completing an exit slip and showing a visual demonstration of what they learned. |

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| **Date:** 11/4/15  **Learning Target/Objectives:** Students will be able to write true number sentences.  **Materials Needed:**   * Counting bears * Dot cards * Sheet of blank paper   **Description/overview of lessons:**  During this lesson, I will begin by having the students review number bonds and examine what a number sentence looks like. I will give the students “good fit number bonds” where they will I will then introduce a high level task of finding true and false number sentences using multiple strategies. The students will begin the task by working independently. After 5 minutes, they will be allowed to work with partner if desired. We will then return together and discuss the math we had just done. This will be a math discussion helping them to get understand the concept of comparing number sentences.  **TASK**  **Above**: Bob has 7 cupcakes and 5 ice cream cones. You want to have the same amount of dessert as your friend Bob. How many cupcakes and ice cream cones can you have to have the same amount of dessert as Bob? Find as many combinations as you can.  **On Grade Level:** Bob has 2 cupcakes and 5 ice cream cones. You want to have the same amount of dessert as your friend Bob. How many cupcakes and ice cream cones can you have to have the same amount of dessert as Bob? Find as many combinations as you can.  **Below**: Bob has 3 cupcakes and 2 ice cream cones. You want to have the same amount of dessert as your friend Bob. How many cupcakes and ice cream cones can you have to have the same amount of dessert as Bob? Find as many combinations as you can.  **Before**  **In order to help students understand the purpose of the lesson:**   * I will say, “Today we will be exploring number sentences and how we can use them to help us determine if they are true or false.” * “Number sentences are very important to us a mathematicians. They will be used to help us quickly solve a problem.” * I will also explain to the students that there are a lot of ways to arrive at a “correct” answer and it’s our job to find them all.   **To get the children interested in the lesson:**   * I will grab their attention by talking about math items where we are “mathematicians” such as number bonds! I will have the children demonstrate their knowledge by writing 1 or 2 number bonds on the board and talking about the “whole” part of a number bond. * I will then explain to the students that we are going to try and find some of the same numbers “hidden” within those whole numbers! It’s a scavenger hunt- we have to find all the little numbers to make a “true” number sentence.   **Expectations**:   * I expect everyone to participate in the lesson and give their best effort. * I expect everyone to give your own answers using your own strategies. * I expect everyone to respect their classroom family and respond to other’s ideas in a positive way.   **Activate In-School and Out-Of-School Experiences:**   * To activate the children’s background knowledge, I will talk about the number bonds that we have been working about in several previous lessons. * I will also ask the students to show me their sign language to indicate if they have ever had to share something before (ex: have you ever had to share candy or toys with your siblings?”). This will get the children thinking about their home life and how important it is to have an “equal” amount. * I will also activate the students out of school experiences by providing a math problem that discusses sweet treats such as cupcakes and ice cream.   **Understanding what the task is asking:**   * Are we supposed to use the total number of dessert that Bob has? (Answer: Let’s look for key words and phrases in the problem. Turn to your partner and find key words. Students should find total as a key word) * Can we use manipulatives to help us in the problem? (Yes! Manipulatives are welcomed. Dot cards, counting bears, and fingers will work the best for this task. * Are we supposed to indicate whether we are talking about ice cream cones or cupcakes? (Yes, when giving the two numbers, you must say whether or not your number represents ice cream cones or cupcakes)   **DURING** (10 minutes)  **Key Questions:**  What answer did you come up with? What strategies did you use to arrive at this answer?  Turn and talk to a partner. What strategies did they use and why do you think they chose to do it this way?  **Anticipated Strategies:**  **Overall:**   * Drawing ice cream cones and cupcakes to match the same amount * Using fingers to count how many desserts they need * Using counting bears to differentiate between cupcakes and ice cream cones * Add up the amount of dessert Bob has then decompose that number to help them figure out how many cupcakes and ice cream cones they have * Write a number sentence such as 3 + 2 = \_\_\_\_\_\_ + \_\_\_\_\_\_\_   **Below:**   * Counting bears, tally marks, fingers * 3 ice cream cones and 2 cupcakes * 4 cupcakes and 1 ice cream cones * 1 cupcake and 4 ice cream cones * 5 cupcakes and 0 ice cream cones * 0 cupcakes and 5 ice cream cones   **On Grade Level:**   * Drawings, tally marks, fingers * 5 cupcakes and 2 ice cream cones * 2 cupcakes and 5 ice cream cones * 3 cupcakes and 4 ice cream cones * 4 cupcakes and 3 ice cream cones * 1 cupcake and 6 ice cream cones * 6 cupcakes and 1 ice cream cone * 7 cupcakes and 0 ice cream cones * 0 cupcakes and 7 ice cream cones   **Above Grade Level:**   * Drawings, tally marks, fingers * 5 cupcakes and 7 ice cream cones * 7 cupcakes and 5 ice cream cones * 6 cupcakes and 6 ice cream cones * 4 cupcakes and 8 ice cream cones * 8 cupcakes and 4 ice cream cones * 3 cupcakes and 9 ice cream cones * 9 cupcakes and 3 ice cream cones * 10 cupcakes and 2 ice creams cones * 2 cupcakes and 10 ice cream cones * 11 cupcakes and 1 ice cream cones * 1 cupcake and 11 ice cream cones * 12 cupcakes and 0 ice cream cones * 0 ice cream cones and 12 cupcakes  1. **Launch**: First, we will have the students think about their prior experience with number bonds. I will ask questions to the students such as “ What is a number bond? What do we know about these three numbers? How are they related?” 2. I will ask for a few volunteers from the class to come up to the board and write a number bond down, turning that bond into a number sentence. 3. Next, I will transition to our main activity by introducing a problem that we have with our “friend Bob.” I will explain the problem to the class and ask them to help me figure out ways we can solve the problem! 4. I will reiterate to the students the expectations that we have for behavior and explain that they are able to use whatever strategy feels most comfortable while solving the problem. 5. Once the students begin working on the problem, I will pull 4 of the struggling students to a table and provide physical manipulatives for them to work with. 6. After 5 minutes, I will redirect the student’s attention to the front and tell them that they now need to “turn and talk” to a partner about the answer that they got and what strategy they used to arrive at this answer. 7. **Conclusion**: Once the children are given 3-5 minutes to share, I will bring the students back to a whole class discussion and we will explore the way that our friends used to solve the problem. 8. After doing this, I will give the children an exit slip, where they have to solve a number sentence in two different ways.   **AFTER**  *Which strategies or ideas would I like to have shared during discussion? What talk moves do I anticipate using to foster discussion? How will I bring closure to the lesson and help children reflect on their experiences?*  **Strategies or ideas I want shared**:  I would like to have the students discuss number sentences and explore different ways of determining if the amount of dessert they had was the same as Bob’s.   1. How did everyone solve the problem? Turn and talk to a partner to discuss the strategy you used. 2. Have students share out. (Hope someone used a number sentence) 3. Did anyone use a number sentence? If so, how did you use it? (If no one used a number sentence, help them understand how you would convert the two sets of numbers into a number sentence using number bonds) 4. Are the two number sentences you used equal? How do you know?   **I plan on using:**   1. Turn and talk 2. Wait time 3. Re-voicing   **Closure**:   * To bring closure to my lesson, I plan on bringing the class back as a whole group and talking about all of the strategies that were used. * I also plan on asking the students if something that they talked about with their partner changed their thinking on how to solve a problem. * Looking to the future, I also plan on asking the students about the strategy that they think worked best and what the will use tomorrow when we revisit this topic. * Finally, I plan on administering an exit slip so the students can apply what they worked on to an actual problem. Based on the results of this slip, I will know what I need to teach/re-teach tomorrow. |

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| **Date:** 11/5/15  **Learning Target/Objectives:** Students will be able to count on up to 3 more using numeral and 5-group cards and fingers to track change.  **Materials Needed:**   * 5-group cards * White boards   **Description/overview of lesson:** I will begin lesson with counting by tens for our opening activity. I will then move onto the task where students will work independently. I will then close the lesson out with a discussion of our strategy.  **TASK**:  Playing counting on   1. Partners A and B, lay all of the number sentence cards in front of you. 2. Partner A, you touch the card you want to take. 3. Count on or use the 5-group card to solve for the total under the sticky note. 4. When you do, your partner lifts the stick. If you are right, your partner says, “Go ahead and take it.   **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * Mention that there are really big numbers that we have to take apart sometimes, so we have to work on different ways to find the answer! * Today we will play a game to practice using our strategies   **Get them interested:**   * All sorts of strategies and we have to find the “best” one for you * Talk about the **game** we will be playing   **Expectations:**   * Review previous expectations   **Activate Prior Knowledge:**   * Discuss previous strategies used.   **Understanding what the task is asking:**   * I will demonstrate the game for the students * Have volunteers model correct way to play game   **DURING** (10 minutes)  **Key Questions:**   * What answer did you come up with? What strategies did you use to arrive at this answer * Turn and talk to a partner. What strategies did they use and why do you think they chose to do it this way?   **Procedure:**   * Students will get into pairs. * I will hand out the cards to each pair to play the game. * I will explain the directions. * Students will play the game and do multiple rounds.   **AFTER (5 minutes):**   * The main strategy that I want my students to use is the using the counting on. Although we have used this math tool in class in the past, I have a feeling that not many children will think to use this specific way to solve the problem. I do think that at least one student will think of this method, but my goal is to expand upon this idea during our whole class instruction. |

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| **Date:** 11/6/15  **Learning Target/Objectives:** Students will be able to create true number sentences with expressions on both sides of the equal sign.  **Materials Needed:**   * 7 pennies * Can * Bag of 20 connecting cubes per student * Dry erase board * Dry erase markers   **Description/overview of lesson:** I will begin the lesson by playing penny drop where I drop pennies into a can and the students count how many pennies they hear dropping in the can. Then we will do the whole group task using the document camera to help project the problems and using equal signs. We will then close out the lesson by discussing the lesson that we did.  **TASK**:   * I will project 3 red and 3 yellow cubes * Ask the students to write the mathematical expression that matches this scenario * I will project 5 red and 1 yellow cube * Have the students repeat written expression * Determine wither or not these two are equal * Students explain their thinking * Show students a “connected number sentence” * Give children a number (3,6,13- depending on math level) and have them create two equal number sentences.   **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * Mention that there are number sentences that are able to equal other number sentences! * This is to help us understand how our numbers can be taken apart.   **Get them interested:**   * All sorts of strategies and we have to find the “best” one for you * Talk about the using the cubes and the using white boards during this lesson.   **Expectations:**   * Review previous expectations   **Activate Prior Knowledge:**   * Discuss previous strategies used.   **Understanding what the task is asking:**   * I will demonstrate using the white boards * Have volunteers model correct way to use a white board   **DURING** (10 minutes)  **Key Questions:**   1. What answer did you come up with? What strategies did you use to arrive at this answer 2. Turn and talk to a partner. What strategies did they use and why do you think they chose to do it this way?   **Procedure:**   * Students will get into pairs * Each pair will get 1 white board and marker * Project 5 and 1 cubes on board of different colors. Have students write down number sentence. * Project 3 and 3 cubes on board of different colors. Have students write down number sentence. * Have students understand that these two number sentences are equal and can be shown with an equal sign * Students will work in pairs to build true number sentences using the number I give them.   **AFTER (5 minutes):**   * The main strategy that I want my students to use is writing true number sentences. We will discuss using numbers sentences and an equal sign. I want students to understand that an equal sign is a balance and that both sides of the equation must be balanced in order for the number sentence to be true. |

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| **Date:** 11/9/15  **Learning Target/Objectives:** Students will be able to correct false number sentences by writing equivalent expressions on both sides of the equal sign.  **Materials Needed:**   * Dry erase boards * 5 group cards (1 set per partner group) * Timer * True and false number sentence cards * Unifix cubes   **Description/overview of lesson:** I will begin the task by playing red light/green light with counting by 10s. We will then be playing true and false number sentences. They will play it with a partner. We will finish out the day by doing our practice pods and SAC at the end.  **TASK**:   * Students will be playing a true and false number sentence game * In the game, if the number sentence is true, then the children will put a check mark on their game card. If it is false, then they will use the unifix cubes to fix the number sentence and make it true.   **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * Mention that there are number sentences that may be true or false. We need to be detectives to figure out if they are false or true number sentences in order to play our game! * Today we will play a game to practice using our strategies!   **Get them interested:**   * All sorts of strategies and we have to find the “best” one for you * Talk about the **game** we will be playing   **Expectations:**   * Review previous expectations   **Activate Prior Knowledge:**   * Discuss previous strategies used.   **Understanding what the task is asking:**   * I will demonstrate the game for the students * Have volunteers model correct way to play game   **DURING** (10 minutes)  **Key Questions:**   1. What answer did you come up with? What strategies did you use to arrive at this answer 2. Turn and talk to a partner. What strategies did they use and why do you think they chose to do it this way?   **Procedure:**   * Students will get into pairs. * I will hand out the cards to each pair to play the game. * I will explain the directions. * Students will play the game and do multiple rounds.   **AFTER (5 minutes):**   * We will discuss the game and the students will discuss strategies they used when being detectives. I will ask questions to help students that not all number sentences are true. We will discuss how they knew that number sentences are not true. We will then do our SAC so that we are able to see if students understood the concept. |

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| **Date:** 11/10/15  **Learning Target/Objectives:** Students will be able to represent the same story scenario with addends repositioned (using the communicative property).  **Materials Needed:**   * 5-group cards * White boards * student bag of 7 counters * Dominos with dots 10 or less   **Description/overview of lesson:** I will begin the lesson by doing a five group addition problem as a group. This will prepare students for working with the commutative property in today’s lesson. Students will be put into pairs and use dominoes to help figure out of number sentences are equal. We will then close out the lesson with the practice pod and SAC.  **TASK**:   * Students will be divided up into partners * Each pair will be given a small baggie of dominos and one white board * On the white board students will use 2 domino to create a true or false number sentence. * If it is correct, students will put a check, if not, than they will put an x * Students will erase the boards and draw two more dominos.   **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * Mention that we have been working on number sentences that are true and false * I will also bring up to the students that it is important to know if things are true or not so we can check our work when we get done with a problem * Today we are going to practice our skills using dominos   **Get them interested:**   * All sorts of strategies and we have to find the “best” one for you * Talk about the **game** we will be playing * Lots of children in the class love using math tools so I will bring up the fact that this game uses dominos!   **Expectations:**   * Review previous expectations   **Activate Prior Knowledge:**   * Discuss previous strategies used.   **Understanding what the task is asking:**   * I will demonstrate the game for the students * Have volunteers model correct way to play game   **DURING** (10 minutes)  **Key Questions:**   * What answer did you come up with? What strategies did you use to arrive at this answer * What strategies did they use and why do you think they chose to do it this way? * Can we think of another way to solve this problem?   **Procedure:**   * Students will get into pairs. * I will explain the directions. * I will hand out baggies of dominos and reiterate instructions to ensure comprehension * Students will play the game and complete multiple rounds (as many round as they can do in 10 minutes)   **AFTER (5 minutes):**   * We will discuss the game and the students will discuss strategies they used when being detectives. I will ask questions to help students that not all number sentences are true. We will discuss how they knew that number sentences are not true. We will then do our SAC so that we are able to see if students understood the concept. |

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| **Date:** 11/11/15  **Learning Target/Objectives:** Students will be able to count on from a larger addend to solve addition problems.  **Materials Needed:**   * expression cards * equal signs per pair * number cards * linking cubs * white boards   **Description/overview of lesson:** We will begin the lesson by playing sparkle. We will count by 10s, starting at 5. This will help them understand that you can start at any number and count up from that. We will then use number cards to write a number sentence. I will close out the lesson with the practice pod and SAC.  **TASK**:   * Students will be given a set of number cards with number and pictures. * They will pick two cards. * They will find the bigger number and then count on. * Then they will write the number sentence starting with the larger number. * When they finish one they can mix the cards and pick two new cards.   **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * Mention that there are some number sentences can be written in many different ways. * Today we will play a game to practice counting on, starting at the bigger number.   **Get them interested:**   * All sorts of strategies and we have to find the “best” one for you * Talk about the practice they will be doing with a partner. * It is an awesome and fun matching game!   **Expectations:**   * Review previous expectations   **Activate Prior Knowledge:**   * Discuss previous strategies used.   **Understanding what the task is asking:**   * I will demonstrate the game for the students * Have volunteers model correct way to play game   **DURING** (10 minutes)  **Key Questions:**   * What answer did you come up with? What strategies did you use to arrive at this answer * Turn and talk to a partner. What strategies did they use and why do you think they chose to do it this way?   **Procedure:**   * Students will get into pairs. * I will hand out the cards to each pair to play the game. * I will explain the directions. * Students will play the game and do multiple rounds.   **AFTER (5 minutes):**   * We will discuss the game and the students will discuss strategies they used when playing the game. We will talk about how they counted on to figure out the answer. * How did they know which number was bigger? * How did they write their number sentence? * What was their thinking when writing the number sentence. |

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| **Date:** 11/12/15  **Learning Target/Objectives:** Students will be able to solve doubles and doubles plus 1 with 5- group cards.  **Materials Needed:**   * 5-group cards * White boards   **Description/overview of lesson:** I will begin my lesson with counting by twos for our opening activity. I will introduce the concept of doubles (3+3, 4+4, 5+5) and doubles plus 1.. I will then close the lesson with a discussion of our strategy (doubles) and an examination of how we can use this with other numbers.  **TASK**:   * I will have the students identify doubles and doubles plus one on an addition chart. They will color in the doubles and doubles plus one. * We will then practice writing double and doubles plus one sentences.   **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * To help our “super learner” powers, we need to learn lots of strategies to solve problems. * “Doubles” is another strategy that we can use to solve some of those harder problems.   **Get them interested:**   * Ask what is the students favorite single digit number (bringing in student interests will spark motivation for task) * Talk about “super power” and how learning new strategies will help us succeed.   **Expectations:**   * Review previous expectations   **Activate Prior Knowledge:**   * Discuss previous strategies used.   **Understanding what the task is asking:**   * I will demonstrate doubles and doubles plus one for students * I will first model the task then ask a volunteer to do the next one. * Finally, the students will get an opportunity to try out their new strategy. * The students that seem to be struggling with the task after 1-2 minutes, I will pull to my small table and provide more modeling and scaffolding.   **DURING** (10 minutes)  **Key Questions:**   * What answer did you come up with? What strategies did you use to arrive at this answer * How could we use doubles or doubles plus one to solve this problem?   **Procedure:**   * Students will get into pairs. * I will explain the directions and model task. * I will hand out the addition chart * Students will color the doubles and doubles plus one.   **AFTER (5 minutes):**  The main strategy that I want my students to use is recognizing doubles and how that a double +1 is just one more. I want them to know that this strategy will really help in noticing other patterns based off doubles. |

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| **Date:** 11/13/15  **Learning Target/Objectives:** Students will be able to look for and make use of repeated reasoning on the addition chart by solving and analysing problems with common addends.  **Materials Needed:**   * 8 pennies * a can * addition chart with sums to 10 to project * paper to cover the sections * white boards * colored pencils   **Description/overview of lesson:** I will begin the lesson by playing Missing Part with the students. We will then move on to the task. After the task and a discussion, students will be given time to do their practice pods and SAC.  **TASK**:   * Students will be given an addition chart. * “Today we are looking at the addition chart to write more number sentences and look at the repeated patterns.” * “You are going to finish your addition chart to make a chart of number sentences that total 10, 9 , 8, 7. If you finish, you can turn your chart over and look for equations that equal 6, 5, 4, 3, 2, and 1.” * For students that are needing more support, pull them as a small group.   **BEFORE** (5 minutes)  **In order to help students understand the purpose:**   * Yesterday, we used the addition chart to help us understand doubles and doubles +1. * Today we are going to use that addition part to help us understand what is common about addends and see patterns in the addition chart.   **Get them interested:**   * All sorts of strategies and we have to find the “best” one for you * “We are going to get to be math detectives again today! We need to find patterns within our addition chart and be able to describe them to me.”   **Expectations:**   * Review previous expectations   **Activate Prior Knowledge:**   * Discuss previous strategies used.   **Understanding what the task is asking:**   * I will ask if there are any questions and answer accordingly. * I will demonstrate how to do the first square on the addition chart.   **DURING** (10 minutes)  **Key Questions:**   * What answer did you come up with? What strategies did you use to arrive at this answer * Turn and talk to a partner. What strategies did they use and why do you think they chose to do it this way?   **Procedure:**   * We will begin by playing the game Missing part. * I will hand out the addition chart. * I will give the directions and allow students to work alone along with their practice pods. * I will then give out the SAC.   **AFTER (5 minutes):**   * We will discuss the game and the students will discuss strategies they used when writing the number sentences. * After discussing the strategies they used. We will then discuss patterns they see in the chart. * What do you notice about writing the number sentences? * How do the numbers change? * Do they change? |