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| **Math Lesson** | **Adding** | **Date** |  |
| **Subject/Grade Level** | Math Grade 1 | **Time Duration** | 45 minutes |
| **Unit** | Numbers: Adding and Subtracting | **Teacher** |  |

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| **OUTCOMES FROM ALBERTA EDUCATION PROGRAM OF STUDIES** | | | | | |
| **General Learning Outcomes:** | **Numbers: Develop a number sense** | | | | |
| **Specific Learning Outcomes:** | **N9.** Demonstrate an understanding of addition of numbers with answers to [10] and their corresponding subtraction facts, concretely, pictorially and symbolically, by:   * using familiar mathematical language to describe additive actions * creating and solving problems in context that involve addition * modelling addition, using a variety of concrete and visual representations, and recording the process symbolically.   **N10.** Describe and use mental mathematics strategies, such as:   * counting on | | | | |
| **LEARNING OBJECTIVES** | | | | | |
| **Students will:**   1. Identify and understand a number story 2. Create and model an addition story 3. Describe the action of adding using informal math language 4. Choose a method to solve a problem 5. Describe their thinking as they solve problems | | | | | |
| **ASSESSMENTS** | | | | | |
| **Observations:** | | | * Watch and listen for indications that students can * Create and model an addition story * Describe the action of addition using informal math language * Describe their thinking as they solve problems * Conversations: While walking around the room, ensure each student understands the adding concept, ask struggling students to explain their number stories, provide clarification if needed. | | |
| **Key Questions**: | | | * Talk about the (+) sign. What does this mean? What other words can we use? What do some equations look like on your sheet? * Number stories: What happened first? What happened next? How did the story end? * How are you solving the problem? What did you do first? * What happened to the number of frogs when more frogs joined them? Did the number get bigger or smaller? What would happen if along frog came along? | | |
| **Products** | | | * Lilly Pad worksheet | | |
| **LEARNING RESOURCES CONSULTED** | | | | **MATERIALS AND EQUIPMENT** | |
| * Small, M. (2008). Introducing Addition and Subtraction. In *Math focus 1*. Toronto: Thomson Nelson. * Program of Studies | | | | * SMART Board * YouTube video * Math Notebook document * Lily Pad worksheet * Number lines, math racks, cubes | |
| **PROCEDURE** | | | | | |
| ***Prior to lesson*** | | Prepare materials | | | |
| **Introduction** | | | | | **Time** |
| ***Attention Grabber*** | | Frog story: Once beautiful day there were two frogs that came hopping along, they seen a lily pad sitting in the pond so they both jumped on it. Then another frog came hopping along and seen the empty lily pad beside them. How many is in total? How do you know? What did you use to figure out the answer? | | | 2 minutes |
| ***Assessment of Prior Knowledge*** | | YouTube video while eating snack: Pirate Adding- count as a group up to 10. Ensure the students can all count.  What students know how to add?  (Formative Assessment) | | |  |
| ***Expectations for Learning and Behaviour*** | | Classroom rules. Enforce the behaviour chart discipline set out by my TA. | | |  |
| ***Transition to Body*** | | What does addition means? Explain adding. | | |  |
| **Body** | | | | | **Time** |
| ***Learning Activity #1*** | | **+ SMART Board Activity**  Ask students to meet me in front of the SMART Board once they have put their snacks away. Tell them we are going to create number stories today using frogs! We will roll this dice and place that number of frogs on this lily pad and then use the other dice and place the frogs on the other lily pad. Then we will add the two lily pads together to get a sum. Use the people picker to choose students to come and roll the dice. Have students use their fingers to figure it out if they are having trouble. Ask students What happened to the number of frogs when more frogs joined them? Did the number get bigger or smaller? What would happen if along frog came along? | | | 15-20 minutes |
| *Teacher Notes:*  *Assessment/*  *Differentiation* | | Call on students that are not paying attention, and students who may struggle in order to support their learning. The class as a group can count along with me as I point to the SMART Board. Use name dropping for students who are not looking forward or chatting with others.  Observation and conversation: Key questions, is everyone following along, does everyone understand adding   * Watch and listen for indications that students can * Identify and understand a number story * Describe the action of adding using informal math language   Describe their thinking as they solve problems (Formative Assessment) | | |  |
| ***Learning Activity #2*** | | **Number Stories**  Tell students we are now going to create our own number stories! Using the worksheet students will create and model a number story. I will demonstrate what to do on the worksheet while they are still sitting in front of the SMART Board; create a number story (ex. 4+3), write it at the top of the page along with your name, draw the first number of frogs on the top lily pad, draw the second number on the bottom lily pad, trace the addition sign and fill in the total. If the students have trouble filling in the total they can use a variety of strategies such as number lines, math racks, fingers, cubes. Ask students How are you solving the problem? What did you do first? | | | 15 minutes |
| *Teacher Notes: Assessments/ Differentiation* | | I will pick a few students to repeat what I said to ensure they were listening to and to have repetition during instruction for students that don't understand. I will walk around the room as the students are working to observe their understanding of addition and make myself available for students who may be struggling.  If students finish early they can during it over and create another story on the back.  Observations: Watch and listen for indications that students can   * Create and model an addition story * Choose a method to solve a number story * communicate the relationships between numbers * write number stories   Product: Lilly Pad worksheet  (Formative assessment) | | |  |
| **Closure** | | | | | **Time** |
| ***Consolidation of Learning:*** | | | Traffic Light – move your name under the red, yellow or green light | | 2 minutes |
| ***Feedback From Students:*** | | | Class discussion, observations | |  |