




UNIT PLANNING TEMPLATE

	Unit Topic / Guiding Question: Single-digit addition strategies	
	Rationale: Students need various strategies to solve simple addition problems efficiently and accurately. The class recently ended a unit on “ten more/ten less, one more/one less” and are ready to move into addition.	
STAGE 1: Desired Results		
UN DE RST AN D	Big Ideas	Essential Questions
DO	<p>Development of computational fluency in addition and subtraction with numbers to 100 requires an understanding of place value.</p>	<p><i>How can learning different strategies help me solve addition problems more accurately and efficiently?</i></p> <p><i>Why is it important to visually-represent addition problems?</i></p>
	<p>Core Competencies:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>C Communication</p> </div> <div style="text-align: center;">  <p>T Thinking</p> </div> <div style="text-align: center;">  <p>PS Personal & Social</p> </div> </div>	

- Communicating
- Collaborating

- Creative Thinking
- Critical & Reflective Thinking

- Personal Awareness & Responsibility
- Positive Personal & Cultural Identity
- Social Awareness & Responsibility

Students combine their efforts with those of others to effectively accomplish learning and tasks: During this unit, students are often working in pairs to problem-solve and finish a task at hand.

Students communicate by receiving and presenting information: Students will have opportunities to participate with their ideas and thinking during various Number Talks.

Students learn to analyze and make judgments about a work, a position, a process, a performance, or another product or act: During the unit, students will analyze and choose difference strategies to reach an answer, they will reflect on why these methods work.

Learning Standards – Curricular Competencies:

Estimate reasonably

Develop mental math strategies and abilities to make sense of quantities

Develop and use multiple strategies to engage in problem solving

Represent mathematical ideas in concrete, pictorial, and symbolic forms

KN O W Firs t Pe opl es Pri nci ple s of Lea rni ng	<p>Learning Standards - Content:</p> <p>Addition and subtraction to 100</p> <ul style="list-style-type: none"> -whole-class number talks -using an open number line, hundred chart, ten-frames 	
	<ul style="list-style-type: none"> <input type="checkbox"/> <i>Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.</i> <input type="checkbox"/> <i>Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).</i> <input type="checkbox"/> <i>Learning involves recognizing the consequences of one's actions.</i> <input type="checkbox"/> <i>Learning involves generational roles and responsibilities.</i> <input type="checkbox"/> <i>Learning recognizes the role of indigenous knowledge.</i> <input type="checkbox"/> <i>Learning is embedded in memory, history, and story.</i> <input type="checkbox"/> <i>Learning involves patience and time.</i> <input type="checkbox"/> <i>Learning requires exploration of one's identity.</i> <input type="checkbox"/> <i>Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations.</i> 	<p>Comments on how you will address the FPPL:</p> <p>Many of the activities in this unit are experiential and exploratory. Students work in pairs to complete tasks and must reciprocate respect for one another. As there are several strategies covered, this topic requires a great deal of patience and time to learn well.</p>
STAGE 2: Assessment Plan		
Formative Assessment (Assessment as Learning and Assessment for Learning):		
	<ul style="list-style-type: none"> -Participation during whole class Number Talks -Conversations during games and partner activities -Whiteboard diagrams, number lines and pictures 	
Summative Assessment (Assessment of Learning):		

-Addition Booklets completed accurately by last class
-Completion of “Make a Model” activity every week

Stage 3: Learning Plan

Date/Lesson	Learning Intentions	Instructional Activities (brief description here – lesson plans will be used to flesh out each lesson)
<i>Feb. 1, 2021</i>	<i>I can use mental math to estimate how many pieces there are</i>	<ul style="list-style-type: none"> -Open class with an ESTI mystery to get students using mental math -Explain that we will be estimating (making an informed guess) -Use the opportunity for a short Number Talk -Students pair/share with one another to discuss their estimations -Let students know that our next unit will be Addition -Show the Addition song, stopping throughout to think about some addition problems posed
<i>Feb. 2, 2021</i>	<i>I can use the “Count On” method to solve simple addition problems</i>	<ul style="list-style-type: none"> -Remind students that we are looking at Addition this unit -Introduce students to the Count On method -Draw or hang a ten frame on whiteboard with a simple problem written above eg. 1+2, visually-represent using circles then attempt a harder one eg. 4+5, as a class -Explain that with the Count On method we take the larger number and “count on” from it to get the answer -Show how to solve the same problem using fingers -Show how to represent the problem and solve using a tally -Hand out whiteboards to pairs and ask one partner to draw a ten frame (like the one on the board) then fill in the amount of circles given by teacher eg. 3 circles plus 4 circles -Pass to other partner to solve, then switch roles -Ask students to draw tallies on their whiteboard to solve another problem and hold up when complete -Ask students to put down whiteboard and use only fingers to solve a problem, hold up hands when complete

<p>Feb. 3, 2021</p>	<p><i>I can use an addition chart to solve simple addition problems</i></p>	<ul style="list-style-type: none"> -Review Count On method from last class on whiteboard -Hand students an addition chart and go over how to use it -Practice Count On method of adding: students complete worksheet from Quest 2000 book with music to see how many they can do accurately in one song
<p>Feb. 4, 2021</p>	<p><i>I can represent my mathematical thinking using various manipulatives</i></p>	<ul style="list-style-type: none"> -Manipulatives station with ten frames, counters, tallies -Model how to use the manipulatives and explain that students have the choice to use either of the “Make a Model” sheets (one has questions and one is blank for students to make their own questions) -Students create and/or solve three problems using manipulatives, draw out on “Make a Model” sheet then show to teacher -Count On game for students finished early
<p>Feb. 8, 2021</p>	<p><i>I can understand how two numbers added together result in the same sum when they are flipped</i></p>	<ul style="list-style-type: none"> -Introduce Turn-around method -Show ten frame again, complete an addition problem as a class then swap number positions in the equation around, ask “Is this the same problem?” -Show how it looks in another ten frame (exactly the same) -Present Flip Flop activity and model how to make one -Students make their own Flip Flops
<p>Feb. 9, 2021</p>	<p><i>I can understand how two numbers added together result in the same sum when they are flipped</i></p>	<ul style="list-style-type: none"> -Review the Turn-around method as a class -Practice Turn-around method (worksheet from Quest 2000 with music) -Early finishers can add more equations to their Flip Flops from last class
<p>Feb. 10, 2021</p>	<p><i>I can identify the Turn-around method when it is used</i></p>	<ul style="list-style-type: none"> -Let students know we will be playing a game in partners called “Flip Flop Match” -Explain rules of Flip Flop Match -Put students in pairs and explain rules of Flip Flop Match -Play Flip Flop Match game
<p>Feb. 11, 2021</p>	<p><i>I can use two different strategies to figure out the sum of a problem</i></p>	<ul style="list-style-type: none"> -Go through the two strategies we have learned so far (Count On and Turn-arounds or “Flip Flop”) -Ask students how we could use our strategies to solve the problem 3+7 -Give students “Fish School” handout to complete using a chosen strategy
<p>Feb. 12, 2021</p>	<p><i>I can visually-represent and use manipulatives to represent my mathematical thinking</i></p>	<ul style="list-style-type: none"> -ESTI Mystery -Manipulatives practice: Students fill in “Make a Model” sheet using Turn-around or Count On method with manipulatives to solve

Feb. 15, 2021	<i>I can identify doubles and come up with my own examples of doubles</i>	<ul style="list-style-type: none"> -Introduce Doubles method to class by thinking of common items we see in 1s, 2s, 3s, 4s, 5s, 6s and so on -Draw pictures on board (or put up pictures of items printed beforehand) -Go through a few pictures on the board and try doubling them as a class -Hand out whiteboards and allow students to draw a picture of two identical things to double -Ask for examples
Feb. 16, 2021	<i>I can creatively express the Doubles method</i>	<ul style="list-style-type: none"> -Remind students that we learned about the Doubles method last class -Let students know we will be creating a flipbook to show the Doubles method -Model how to create the flipbook under Doc Cam -Hand out materials to students -Early finishers can complete a fun Addition worksheet
Feb. 17, 2021	<i>I can see how the Doubles and Doubles Plus One methods are closely related</i>	<ul style="list-style-type: none"> -Introduce Doubles Plus One method by relating back to our doubles pictures and adding "1" to our answers -Show a problem on the board eg. $4+3$ and ask how we could double two numbers and add one -If time allows, students can complete the Doubles Plus One worksheet from Quest 2000
Feb. 18, 2021	<i>I can creatively express the Doubles Plus One method</i>	<ul style="list-style-type: none"> -Remind students about our Doubles Plus One method and let them know we will be making a second flipbook to help us remember this method -Let students know that the same process applies for this flipbook as the last flipbook -Hand out materials -Extra practice sheets ready for early finishers
Feb. 19, 2021	<i>I can work with a partner to solve Doubles and Doubles Plus One problems</i>	<ul style="list-style-type: none"> -ESTI Mystery -Students write on Near Double Neighbours House laminated sheets in partners -Students record answers on separate sheet then switch with another pair for different laminated sheets
Feb. 22, 2021	<i>-I can use a number line to locate an "Almost Neighbours" and solve an addition problem</i>	<ul style="list-style-type: none"> -Introduce Almost Neighbours method (using number line) -Relate this method back to the Doubles method, showing students that if we take the number in-between both numbers and double it we will get the correct answer -Hand out whiteboards and ask students to copy the number line on their whiteboards -Write a problem eg. $6+8$ on the board and ask students to find both on their number lines then identify the number in between, ask for volunteers to try and solve the problem -Show with drawn counters how the problem might look and how we can make both sides equal in order to double -This could be a good opportunity to let students experiment and have a small Number Talk
Feb. 23, 2021	<i>-I can make models to represent addition problems using the "Almost Neighbours" strategy</i>	<ul style="list-style-type: none"> -Remind students we are looking at the Almost Neighbours strategy -Practice Almost Neighbours with diagrams (Make a Model sheet to be filled in with Almost Neighbours numbers)
Feb. 24, 2021	<i>-I can recognize and use the "Almost Neighbours" strategy to solve an addition problem</i>	<ul style="list-style-type: none"> -Practice Almost Neighbours method with Quest 2000 worksheet -Fun Addition "Colour by Sum" worksheets ready

Feb. 25, 2021	<i>-I can work with a partner to recognize and use the "Almost Neighbours" strategy to solve an addition problem</i>	-Introduce students to the "BAM!" game using Almost Neighbours: In partners, students take turns to pull a popsicle stick out of a cup that has an Almost Neighbours addition problem written on it, if they answer correctly they keep the stick... if a student pulls out a stick that says "BAM!" they put all the sticks back in the cup
Feb. 26, 2021	<i>-I can choose and use a strategy to solve addition problems</i>	-ESTI Mystery -Go through strategies we have learned so far -Fun Addition worksheets: Choose a strategy
Mar. 1, 2021	<i>-I can begin to see different ways of making ten</i>	-Introduce Making 10s using a ten-frame on the whiteboard -Practice Making 10s with "Make Ten" and "Colour to Make Ten" worksheets
Mar. 2, 2021	<i>-I can express the "Making 10" strategy creatively</i>	-Review the different combinations that make ten as a class -Let students know we will be doing a craft called "Making Ten Man" to help us remember the numbers that add up to ten -Set out supplies for activity -Put together "Making Ten Man" -Practice adding to ten as a class, using our Making Ten Man models
Mar. 3, 2021	<i>-I can differentiate between the "Making 10" strategy and "Doubles" strategy</i>	-Remind students about the Doubles method and go through a few addition problems where we can use the Doubles method -Let students know we will be doing an activity where we compare these two strategies (Doubles and Making 10s) in a fun way -Hand out supplies for Addition Pocket Books (handout) -Begin putting together Addition Pocket Books
Mar. 4, 2021	<i>-I can differentiate between the "Making 10" strategy and "Doubles" strategy</i>	-Let students know we will be finishing our Addition Pocket Books today -Finish Pocket Books and work in partners to sort into correct categories (Making 10s strategy or Doubles strategy)
Mar. 5, 2021	<i>-I can work with a partner to complete addition problems with various strategies</i>	-ESTI Mystery -Put students into pairs and go through the rules of "It's War" addition game -Play "It's War" addition game until end of class
Mar. 8, 2021	<i>-I can understand that adding "0" to any number will give a sum that is equal to the given number</i>	-Introduce Zero Facts by explaining that anytime we add "0" to a number it stays the same -Go through a few problems as a class -Practice Zero Facts method using a worksheet from Quest 2000 book
Mar. 9, 2021	<i>-I can express my mathematical thinking and explain why I use certain strategies</i>	-As a class, go through different strategies we have learned to add -Give students a few problems and allow them to choose a strategy to solve it -Ask for volunteers to share their thinking -Use time for a good Number Talk

Mar. 10, 2021	<i>-I can utilize multiple strategies to solve addition problems</i>	-Fun addition worksheets: Choose a strategy -Colour by Sum worksheets -Early finishers can also play with manipulatives laid out on table to experiment
Mar. 11, 2021	<i>-I can express addition strategies I have learned in a visually-appealing way</i>	-Begin on Addition booklets (assessment)
Mar. 12, 2021	<i>-I can express addition strategies I have learned in a visually-appealing way</i>	-Continue with Addition booklets
Mar. 15, 2021	<i>-I can be proud of and celebrate my learning</i>	-Finish Addition booklets and celebrate learning
Resources needed:		
	-Quest 2000 book -“Learning our Addition Strategies” PDF -Manipulatives: counters, ten frames, popsicle sticks, number lines, addition charts, whiteboards	
Interdisciplinary connections: (e.g. How did you weave ELA, Social Studies, Science, Math, Fine Arts, and/or ADST together in this instructional sequence?)		
	-ELA is present as students are communicating their thinking to classmates and teacher, they are also visually-representing strategies. -Art is present as students use fine-motor skills to create various crafts and booklets related to addition strategies.	
Reflection		
	How did the unit go? How do I know?	

	<p>Where to next?</p>
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