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| **Math 4** |
| **Subject: Math****Unit: Three Digit Addition Strategy – ‘ Right to Left’** |
| **Learning Target:** Students willpractise using base ten blocks and the interactive tools from the app, Number Basics, to represent the addition of larger 3 and 4 digit numbers. This will also help further develop their understanding of mental math strategies. |
| **Curriculum Outcomes:** **N 3 and N4 –** Students will use personal strategies to add 3 and 4 digit numbers. |
| **Screencast Support:** **Screencast** -  **‘Right to Left’ Addition Strategy** |
| **Resources/AT Tips:** **-Screencast** – **‘Right to Left’ Addition Strategy**-Pearson **interactive** Base Ten Blocks - iPads-App **Showbie**  App Showme -Base ten blocks and place value chart-“Right to Left’ Addition **sheet** |
| **Lesson Procedure** | **21st Century Skills** |
| **I do:** **Activate Prior Knowledge*** Ask students to share the personal strategies they like to use when adding 2 and 3 digit numbers.
* Discuss the fact that we often add numbers mentally, but that it’s beneficial to use the 100’s charts and manipulatives when adding also.
* Review the value of the digits within a 3 and 4 digit number - project a place value mat and base ten blocks on the Smartboard when doing so.
 |  find, validate remember, understand  communicate  |
| **You do:*** Using the **Smartboard and Pearson interactive base ten blocks**, review how to use the ‘front end addition’ strategy, starting with 3 digit numbers. Practice a couple of questions. Then demonstrate the newest strategy, adding numbers from right to left. Be sure to start with two, 2 digit numbers. Then graduate to using 3 digit numbers. Try a couple and collaborate with students.
* For further reinforcement, have students view the [screencast](https://www.youtube.com/watch?v=m1_1yReETe0) <https://www.youtube.com/watch?v=m1_1yReETe0>, **‘Right to Left’ Addition Strategy**.
* Provide students with base ten blocks and place value mats. Allow them to work with a partner.
 |   collaborate, communicate analyze, synthesize evaluate, leverage  |
| **We do:** * Ask partners to decide upon numerous 2, three and four digit numbers that they both have to build using base ten blocks. They are encouraged to ‘talk out loud’ and build the numbers using the ‘right to left’ addition strategy as they work and learn together.
* Have them complete the activity sheet – **Right to Left Addition**. They can use the paper version or use the app **Showbie** to complete it.
 |   collaborate, communicate analyze, synthesize critical thinking evaluate, leveragecreate, citizenship |
| **We share:*** Ask students to share their learning. Students take turns presenting their numbers with different partners. Teacher rotates, listens, and records. Offer assistance to those in need.
* Correct the questions together, allowing students to take the lead at the Smartboard using the interactive tools to show what they know. (Smart tools, Showbie , or Number Basics apps)
 |   collaborate, communicate critical thinking evaluate, leverage create, publish citizenship |
| **Differentiation** |
| **Adaptations:** * Any student needing adaptations or support can work with numbers up 100, eliminating the thousands place value and others if needed.
* **Replay** the screencast **Right to Left Addition** from another lesson as needed.
* Allow these students to play addition math games on the Cool Math Games website to help develop their understanding of numbers.
 | **Enrichment:** * With a partner, students ready for enrichment can complete the bottom half of the activity sheet, adding 4 digit numbers **or** create their own addition word problems using 4 digit numbers.
* Allow these students assist peers if interested.
* With a partner, have students explore interactive addition games on the Cool Math Games website for instance.
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| **Assessment:** Ask students to show the numbers 637 and 3245 in different ways. They record by drawing on paper **or** using the interactive tools on their iPad devices. They take turns presenting their work in partners and small groups. Teacher rotates, listens, and records.  |
| **Teacher Reflection:**  Allowing the students to work together allows you to roam, listen and support the students. This further informs the direction of ones instructional strategies. Learning addition strategies take time and practice; allow your students the time to build, draw and explain their thinking out loud. Replay the screencast as often as needed. |

**Adding 3 Digit Numbers from ‘Right to Left’**

1. Add.

 a) 219 b) 498 c) 104

 + 785  + 325  + 692

2. Pierre read one book with 356 pages.
He read another book with 275 pages.
How many pages did he read in total?

**Adding 4-Digit Numbers from ‘Right to Left’**

1. Find each sum. Estimate to check.

 a) 6238 b) 5216 c) 4390

 + 3529  + 3789  + 2178

2. Dalton has 1768 trading cards.
His grandma gives Dalton her collection of 673 trading cards.
How many cards does Dalton now have?