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| STRAND: Number SUBSTRAND: Subtraction (A + B) STAGE: 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TERM: | 1 | | 2 | 3 | | | 4 | | WEEK: | | 1 | | 2 | | | 3 | 4 | | | 5 | | 6 | 7 | | | 8 | | | 9 | 10 | | 11 |
| AHC-ICON-Aboriginal Torres Strait Islander histories-300dpiAboriginal and Torres Strait Islander histories and cultures | | A-ICON-Asia Australias engagement with Asia-300dpiAsia and Australia’s engagement with Asia | | | S-ICON-Sustainability-300dpiSustainability | | | CCT-ICON-critical creative thinking-300dpiCritical and creative thinking | | EU-ICON-ethical understanding-300dpiEthical understanding | | | | | ICT-ICON-300dpiInformation and communication technology capability | | | IU-ICON-intercultural understanding-300dpiIntercultural understanding | | | L-ICON-literacy 300dpiLiteracy | | | N-ICON-numeracy-300dpiNumeracy\* | | | | PSC-ICON-personal social capability-300dpiPersonal and social capability | | | WE-work and enterprise-300dpiWork and enterprise | |
| ***What are we learning to do (WALT):***  Select and apply efficient mental, written and calculator strategies for subtraction with numbers of any size.  Use estimation and rounding to check the reasonableness of answers to calculations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***Adjustment:*** | | | | | | | | | | | | | | **Post Assessment Highlighted** | | | | | | | | | | | | | | | | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | | | | | | | | | | | | | | | | | | | | | | | **REG** | | | | | | | |
| **Monday** | | | | | | **Tuesday** | | | | | | **Wednesday** | | | | | | | **Thursday** | | | | | | | | **Friday** | | | | | |
| ***What I’m Looking For (WILF): To apply written, mental and calculator strategies to solve subtraction algorithms*** | | | | | | ***What I’m Looking For (WILF):***  ***To apply written, mental and calculator strategies to solve subtraction algorithms*** | | | | | | ***What I’m Looking For (WILF):***  ***To apply written, mental and calculator strategies to solve subtraction algorithms*** | | | | | | | ***What I’m Looking For (WILF):***  ***To use rounding and estimating to check answers*** | | | | | | | | ***What I’m Looking For (WILF):***  ***To use rounding and estimating to check answers*** | | | | | |
| **Lesson Breakers** | | | | | | **Lesson Breakers** | | | | | | **Lesson Breakers** | | | | | | | **Lesson Breakers** | | | | | | | | **Lesson Breakers** | | | | | |
| **Introduction**  **Students use a deck of cards to mentally add and subtract numbers** (ACE is 1, Jack is 11, Queen is 12 and King is 13) In pairs students take turns to place down cards. One student begins by adding the next card placing one down for their partner to subtract. Students will swap after 1 min. Example: 11 + 3 is 14 – 6 is 8 + 9 is 17. | | | | | | **Introduction**  **Students roll a dice.** In pairs or as a class in a circle, start at 50 and students roll a dice, e.g.: student rolls a 6. First student must add that number to 50 and the next student’s subtract that dice number from the new number – continue to take turns (proves the point of using inverse operations and the relationship between addition and subtraction.) This can also be done with a calculator to use larger numbers. | | | | | | **Introduction**  **Total Age**  Students work out their ages in months. Total ages in small groups and then add group totals to get total age for all the class. What would be as old as our total ages? | | | | | | | **Introduction**  **The students will begin by partaking in some mental computation questions. (Estimation)** The teacher will use a calculator to ask the students a long number question (either addition or subtraction) for example: 320+ 540 + 770 = The students will have limited amount of time to solve. In solving their answer- most students will try to be exact. At the end of the time ask students how we could find the answer quicker- ***by using estimation***- carry out a different question and ask students this time to estimate (record answers)- student who is closest will win. | | | | | | | | **Introduction**  **Rounding Game-** Students will stand on a vertical line. The teacher will read out a number. Students must jump on either side of the line to indicate the nearest thousand, million etc- for example: the teacher will have 2 million on one side of the line and 3 million on the other- the teacher will then read out 2 567 345- students will then be required to jump to the corresponding side of the nearest million (3 million). | | | | | |
| **Body**  **Guess and Check**  Give each student two identical  subtraction squares. On the first  square students record their  estimates of the answers, in the  second square students record the  answers they obtained using a  calculator.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | - | 2869 | 6431 | 7963 | 8064 | | 1863 |  |  |  |  | | 2000 |  |  |  |  | | 2679 |  |  |  |  | | 196 |  |  |  |  | | | | | | | **Body**  **Country Size**  Compare the relative sizes of countries by subtracting area and populations. Rank in order from smallest to largest. Are the two rankings the same? Discuss. | | | | | | **Body**  **Worksheet- In small group’s** students are given a worksheet of addition and subtraction questions that have been answered. Without calculating the answers, the students in the group must discuss if they believe the answer is correct or incorrect and share their reasons why. After deciding on correct or incorrect, the students may together calculate the correct answer. | | | | | | | **Body**  **Images- The students will begin** with viewing a range of images on the interactive whiteboard. These images will be shown for 5 seconds each and students must estimate the quantity/ number of each picture. (see attached for examples)  **Algorithms- The students will then** be shown a series of number algorithms and use the same estimation strategies studied last week. See  <http://www.modernchalk>  board.com/addition.html  for addition and subtraction algorithms for interactive whiteboard. | | | | | | | | **Body**  **Rounding when shopping (using decimals) -** Students are shown a series of shopping lists on the board and must round to the nearest whole dollar. There will be time limits. Students will record their answers in their books and share answers and discuss strategies at the end. Students will also look at decimal place value to help in their round- tenth, thousandth, hundredth | | | | | |
| **Conclusion**  <https://www.studylader.com>  .au/teacher/resources/activity?  Activity\_id=22396 | | | | | | **Conclusion**  <http://www.learnalberta.ca/>  content/me3us/flash/lesson  Launcher.html?lesson=  Lessons/07/m3\_07\_00  \_x.swf | | | | | | **Conclusion**  <http://www.topmarks.co.uk/>  Flash.aspx?a=activity11 | | | | | | | **Conclusion**  **Interactive estimation game**- Using i-pads and or computers in partners students will play an estimation game as a quick warm up game.  <http://www.oswego.org/>  ocsd-web/games/Estimate/  estimate.html | | | | | | | | **Conclusion**  **Worksheet-** Students will independently work through a rounding worksheet (to the nearest thousand) – see attached. <http://www.math-aids.com/Rounding/> | | | | | |
| **Resources**   * Packs of cards * Subtraction squares   <https://www.studylader.com>  .au/teacher/resources/activity?  Activity\_id=22396 | | | | | | **Resources**  <http://www.learnalberta.ca/>  content/me3us/flash/lesson  Launcher.html?lesson=  Lessons/07/m3\_07\_00  \_x.swf   * Dice * Calculators | | | | | | **Resources**   * Subtraction worksheets   <http://www.topmarks.co.uk/>  Flash.aspx?a=activity11 | | | | | | | **Resources**   * Calculators * IWB pictures   <http://www.modernchalk>  board.com/addition.html  <http://www.oswego.org/>  ocsd-web/games/Estimate/  estimate.html | | | | | | | | **Resources**  <http://www.math-aids.com/Rounding/>   * Shopping lists | | | | | |
| **Reflection/Check In** | | | | | | **Reflection/Check In** | | | | | | **Reflection/Check In** | | | | | | | **Reflection/Check In** | | | | | | | | **Reflection/Check In** | | | | | |