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| STRAND: Number + Measurement SUBSTRAND: Multiplication (B) + Volume & Capacity (A) STAGE: 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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):***  Model and use repeated addition as a strategy for multiplication.  Use uniform informal units to measure, compare and estimate capacities. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***Adjustment:*** | | | | | | | | | | | | **Post Assessment Highlighted** | | | | | | | | | | | | | | | | | | |
| **TEACHING AND LEARNING ACTIVITIES** | | | | | | | | | | | | | | | | | | | | | | | | **REG** | | | | | | |
| **Monday** | | | | | | **Tuesday** | | | | | | | | **Wednesday** | | | | | | | | | **Thursday** | | | | | | | |
| ***What I’m Looking For (WILF):***  ***To use arrays to model multiplication*** | | | | | | ***What I’m Looking For (WILF):***  ***To use arrays to model multiplication and to use repeated addition*** | | | | | | | | ***What I’m Looking For (WILF):***  ***To use arrays to model multiplication and to use repeated addition*** | | | | | | | | | ***What I’m Looking For (WILF):***  ***To compare, measure and estimate different capacities*** | | | | | | | |
| **Lesson Breakers** | | | | | | **Lesson Breakers** | | | | | | | | **Lesson Breakers** | | | | | | | | | **Lesson Breakers** | | | | | | | |
| **Introduction**  Call out a number and have the students form groups of that number and sit as a group. Any students left standing nominate the next number.  \* Skip count daily using IWB hundreds chart.   * \* Count out objects being handed out by twos. | | | | | | **Introduction**  Instruct children to place two objects in four cups. They are encouraged to count them by twos. This can be extended as required. | | | | | | | | **Introduction**  Use a double circle facing each other. Inside circle stress counts and outside circle takes sideways steps. On accented count children clap hands with their partner | | | | | | | | | **Introduction**  **Volume** refers to the amount of space occupied by an object or substance.  **Capacity** refers to the amount a container can hold.   * **How Could I Measure?**   Students suggest different materials that could be used to measure different containers, e.g. sand, water for cylindrical containers, blocks for rectangular boxes. | | | | | | | |
| **Body**  **Concert Time – year 1**  In small groups, students arrange a given number of chairs in equal rows for students to watch a concert. Students draw the array using symbols to represent the chairs.  Students are encouraged to use numbers on their array. Students are asked to find another way to arrange them.  Eg 5 + 5 + 5 = 15  Possible questions include:   * which would be the best array for a concert for 12 students? * how many different arrays did you find? | | | | | | **Body**  Display this array from the 2007 Basic Skills Test, Year 3, question 25.  http://www.schools.nsw.edu.au/learning/7-12assessments/naplan/teachstrategies/yr2010/numeracy/nn_numb/images/nn_numb_mudi_01_06.jpg  The students look at the array. The teacher says:   Tell me a story about the picture? What might it be? e.g. a set of cards, a block of chocolate, a page of stamps.   How many are there altogether?  Encourage students to focus on the strategies used to get to 18 rather than the actual answer by asking probing questions such as:   How many ways can you group the chocolates or stamps to get to a total of 18?   Are there any others?  Make a list of the different ways on a chart.  http://www.schools.nsw.edu.au/learning/7-12assessments/naplan/teachstrategies/yr2010/numeracy/nn_numb/images/nn_numb_mudi_table02.jpg  Students draw the arrays to match each of these. | | | | | | | | **Body**  Do **Echidnas** (DENS activity p131) but employ skip counting to find the total number.  **Ladybirds Activity** (DENS activity p133) – placing equal dots / counters on ladybirds to encourage skip counting by 2.   * **Arrays** (DENS Activity p189) Organise students into pairs. Provide students with counters. Instruct one of the pair to make a simple array no larger than 5 by 5. The student briefly shows the array to their partner before screening it with paper or cardboard. The other student attempts to construct the array pattern with their counters. The students should then compare arrays and then find the total number of counters in their array. * **Investigation:**   Give students a number card and ask them to investigate how many different equal groups they can make using the concrete material. E.g. You are looking for as many different combinations that are possible. Students should label each group. | | | | | | | | | **Body**   * Fill the box   Students pack boxes with blocks. Then they count the blocks and discuss, draw and write about the structure of their packing. Emphasise layers, rows and columns (boxes may have been packed in horizontal or vertical layers).  Students should:  1. Pack a box with blocks and count the blocks; structure the packing in layers.  2. State or record the number and type of units used to measure volume and capacity.  3. Suggest appropriate units and explain why one is better than another.   * Investigation: Packing   Students investigate the capacity of various containers by packing with informal units and counting the number of units used. Encourage students to estimate capacity first.   1. A box with pencils. 2. A carton with crayon packets. 3. A packet with blocks. 4. A cup with marbles.   Assessment-Matching suitable boxes to a stack of blocks. State how many layers and how many blocks in each layer. E.g. 2 layers of 9 blocks = 18 blocks | | | | | | | |
| **Conclusion**  <http://www.teacherled.com/>  resources/rainbowmulti/  rainbowload.html | | | | | | **Conclusion**  Word Problems  I had 5 chairs with 4 cats on each chair. How many cats did I have?  Children are asked to record their answer in the form of a drawing. If they are able They could be encouraged to look at repeated addition. The child could use a number sentence to record the answer as an extension. | | | | | | | | **Conclusion**  **Equal numbers of items in a group**  - In pairs children are given 3 paper cups and 9 unifix cubes and asked to share them into the cups.  - They reflect on their choices and report to other groups.  This can then be extended to different combinations. eg 5 cups 20 blocks | | | | | | | | | **Conclusion**  Write three statements about the volume and capacity of the containers you have measured. | | | | | | | |
| **Resources**  - <http://www.teacherled.com/>  resources/rainbowmulti/  rainbowload.html   * Interactive hundred’s chart * paper/pencils | | | | | | **Resources**   * cups * counters/cubes * arrays * array on smartboard | | | | | | | | **Resources**   * DENS activities | | | | | | | | | **Resources**   * Blocks * boxes | | | | | | | |
| **Reflection/Check In** | | | | | | **Reflection/Check In** | | | | | | | | **Reflection/Check In** | | | | | | | | | **Reflection/Check In** | | | | | | | |