**Components of a Mathematics Workshop**

**Learning focus:** Equality

**Curriculum:**

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|  | PA | NS |
| Gr1 | O2: demonstrate an understanding of the concept of equality, using concrete materials and addition and subtraction to 10 | O3: solve problems involving the addition and subtraction of single-digit whole numbers, using a variety of strategies |
| Gr2 | O2: demonstrate an understanding of the concept of equality between pairs of expressions, using concrete materials, symbols and addition and subtraction to 18 | O3: solve problems involving the addition and subtraction of one- and two-digit whole numbers, using a variety of strategies, and investigate multiplication and division |

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| **Time:** | **Components:** | **Learning Goals/ Teacher Moves:** |
| 10 mins | Time to explore and practice how numbers work | Explore making equality  Question of the day “How can we show numbers in different but equivalent ways?”  Table top centres   1. Balance Scale with manipulatives (addition and subtraction equations under 20) 2. Money (“show me x value” using coins and numbers) 3. Charts (which number is missing 3 part table e.g., 7= \_\_\_+4)   Teacher questioning and observation |
| 10 mins | Minilessons or other whole-group lessons  (expectation, strategy, concept) | Pull students to carpet in circle.  Give an example to *show* what the equal sign means using the balance scale.  Show with smaller numbers (e.g., 3, 5) with manipulatives and the scale.  Model counting different combinations to make equivalent values.  Math talk format for student response e.g., thumbs up/down/sideways to show thinking. |
| 15 mins | Independent work on mathematics  Guided small-group support or strategy lessons  Conferring | Small group guided instruction. Create an equation that is equal to # (targeted to heterogeneous group level) using manipulatives, number lines, balance scales. |
| 15 mins | Group work: structures for collaboration, talk, and choice | In pairs, demonstrate understanding of equality by matching equal numbers and equations posted around room. Travel around the room with chart that has equation at top; write the equations they find that are equivalent. |
| 10 mins | Math shares | Bring everyone together. Notice and name strategies you saw students using to complete the group work activity. Build into next steps: what are faster ways to get to the answer e.g., can you group numbers? |