Breaking Barriers Planning - Strand: Calculating 1 Title: Wholes and parts and putting together Name: Margi Leech Date: 2019

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| Educational context | This is not a new idea for the students. They have seen parts and wholes in NNS activities as well as Pattern and Algebra  What makes a whole/group? The parts.  Equivalence – same number of parts making the same whole.  Adding introduction to create a total. |
| Aims | * To experience situations when it is useful to add * A whole can be made of parts – the same or different * The whole is larger than either of the parts * Using Numicon shapes and Cuisenaire rods * To begin to generalise; starting to use number words as nouns * To begin to understand that adding can be done in any order |
| Communication/words | Build, find, talk about, explain, put together, combine, join, same way, different way.  Same, more, less, larger, smaller, makes, equals, together, total, whole, parts, add, adding story, pattern… |
| Assessment | Look and listen for, linked with Individual Record of Progress:  See book for details Calculating 2, 3, 4 towards 5 |
| Context and links to other curriculum areas | All curriculum areas and everyday life experiences: PE, meals, board games, collections. |
| Maintenance/review | Daily counting and activities from previous weeks and months.  Let’s do a jigsaw together- discussing the parts coming together. |
| Focus Activities – Main teaching | Activity 1 – everyday activities talking about parts and whole.  **Teaching strategies:**   * Modelling * Copying – errorless learning * Back chaining * Physical prompt * Matching * Selecting * Teaching without testing – equipping instead.   *Be careful of ‘learned’ helplessness!*  *Be careful of not giving sufficient time.*   1. A bunch of grapes – many grapes 2. Number overlays – one shape covered many different ways – figure 1 3. Show PCM 19 and play taking turn games with this 4. ‘Hamburgers’ with the shapes   *Continue throughout the week or longer on the suggested activities; ROBOTS*  *Complete the detailed planning below for each day:* |
| Independent practice | Repeat of the above, matching activities, reasoning activities for problem solving |
| Further steps/Extension | Problem-solving across all strands and settings building in the language of problem-solving  - Assembling from parts, jigsaws, recipes  - Combinations – hamburger  - Combinations – numbers  - Equal  - More, less  - Rods  - Many ways of making numbers  - Commutativity  Equipment to use:  Blocks, Magnetic Pattern blocks, pegs, baseboards, PCM’s from BB, Robots |
| Resources | As suggested in the book. Other ideas – record them… |
| Home learning | Ask parents to talk about and show more, total, add...:   * baking – putting the parts together * making pizza * salad * planting a garden * putting laundry into the machine * putting slices of bread into the toaster |
| Reflection  What went well?  (Teaching practice and management)  What changes do you recommend?  (Future planning)  What did you learn from the children?  (Personal learning)  What did you observe about their learning?  (Student focus and assessment) |  |