**Transition: Counting from one on Materials to Counting from one by Imaging (CA)**

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CA

AC

EA

AA

AM

AP

**Domain: Ratios and Proportions**

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| **Achievement Objectives** | **Number: Level One** |
| Number Strategies AO1:  Use a range of counting, grouping, and equal-sharing strategies with whole numbers and fractions |

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| **Strategies being developed** | **Problem progression** | **References** | **Knowledge being developed** | **Resources** |
| Find by practical means halves and quarters of shapes and objects e.g. half a glass of water  Find halves and quarters of sets of objects to 20 by equal sharing of objects | Find halves and quarters of varying shapes and objects - discussing whether the shares are ‘fair’ (equal). Using reflective and rotational symmetry to determine equality, by mapping pieces on top of one another.  Teacher records symbols and discusses the meaning of top and bottom numbers.  Working with numbers less than 20, find halves and quarters (eighths?) of sets by equal sharing of objects. | ***Teaching Fractions, Decimals and Percentages (Book 7)***  [Fair Shares](https://nzmaths.co.nz/node/906) (11-14)  ***BSM***  6-2-9, 6-2-48, 7-2-7,  7-2-48, 7-2-49, 7-2-82, 8-2-8,  8-2-47, 9-2-48, 8-2-83, 8-3-6, 8-3-47, 8-3-49, 8-3-82 | Developing common vocabulary for fractions, particularly halves and quarters.  Extending this to eighths, sixteenths to develop understanding of ‘-ths’. | Various classroom objects including play dough, paper strips & circles, glasses & water…  Plastic teddies, counters, cubes |