## Learning outcomes from the CIC and how they relate to the key concepts

| Subitising | Place Value | Multiplicative Thinking | Partitioning | Proportional Reasoning | Generalising |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | - investigate models such as decomposition, skip counting to make sense of the operations of addition, subtraction, in N where the answer is in N , including the inverse operations | - investigate models such as arranging items in arrays and accumulating groups of equal size to make sense of the operations of multiplication and division in $\mathbf{N}$ where the answer is in $\mathbf{N}$, including the inverse operations <br> - investigate the properties of arithmetic commutative, associative and distributive laws and the relationships between them <br> - investigate models such as the number line to illustrate the operations of addition, subtraction, multiplication and division in $\mathbf{Z}$ <br> - Consolidate their understanding of factors, multiples and prime numbers in $\mathbf{N}$ | - investigate models to help think about the operations of addition, subtraction, multiplication and division of rational numbers <br> - calculate percentages <br> - use the equivalence of fractions, decimals and percentages to compare proportions | - consolidate <br> their <br> understanding <br> of the <br> relationship <br> between ratio <br> and proportion | - engage with the idea of mathematical proof <br> - use tables and diagrams to represent a repeatingpattern situation <br> - generalise and explain patterns and relationships in words and numbers <br> - write arithmetic expressions for particular terms in a sequence |

