|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Make it: Collect this amount of blocks, counters etc. | More is not the same: adding one more will change the amount | Draw / visualise the amount (e.g. in a line) | Draw the amount in a structured fashion (e.g. circle, array) | Recognise drawing of the amount and track it when the paper moves/rotates | Conserve the amount when it moves, but each piece remains visible | Conserve the amount when the pieces are covered or hidden (e.g. shaking a cup) | Partition the amount in one way (e.g. 4 and 4 make 8) | Partition the amount to find all combinations of two numbers (e.g. 1+7, 2+6…) | Missing part partitioning (find how many more are needed to make a total) | Visualise relative size of all numbers up to this amount on an open number line. |
| 2 |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |
| 4 (key stage) |  |  |  |  |  |  |  |  |  |  |  |
| 5-6 (6 key stage) |  |  |  |  |  |  |  |  |  |  |  |
| 7-8 |  |  |  |  |  |  |  |  |  |  |  |
| 9-11 |  |  |  | Draw tens frame |  |  |  |  |  |  | Number line 1-10 |
| 12 (key stage) |  |  |  |  |  |  |  |  |  |  |  |
| 13-19 |  |  |  |  |  |  |  |  | Key stage for developing place value |  |  |
| 20-100 |  |  |  |  |  |  |  |  |  |  |  |
| Arrays to 5x5 |  |  | Draw all arrays to 5x5 | Draw rectangle and break into parts |  |  |  | Distribute the array into parts |  | Hidden parts of arrays |  |
| Halves, quarters, eighths |  |  |  |  |  | Rotating does not change area |  | Make halves in many ways |  |  |  |
| 100-1000 |  |  |  |  |  | Regrouping |  |  |  |  | Critical for understanding fractions |
| Arrays to 10x10 |  |  |  | Structural drawing only, link to division |  |  |  |  | Distribute difficult facts (e.g. 7 = 5+2) |  |  |
| Simple fractions |  |  |  |  |  |  |  |  |  |  |  |
| Decimals | It’s about size not a dot |  |  |  |  |  |  |  |  |  |  |
| Large numbers |  |  |  |  |  |  |  |  |  |  |  |
| Percentage |  |  |  |  |  |  |  |  |  |  | Connect to PV, fractions |