|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number Knowledge** | | | | | | | | | |
|  | Level 1 | | Level 2 | | Level 3 | | Level 4 | |
| After 1 year | After 2 years | After 3 years | After 4 years | After 5 years | After 6 years | After 7 years | After 8 years |
| Number Range  *at least to* | **20** | **100s** | **1000s** | **10 000s** | **100 000s** & **0.1** | **1 000 000** & **0.01** | **>1 000 000 and < 0.01** | |
| Read & write  *Represent, read and record numbers* | Seventeen  (17) | One hundred and twenty-five  (125) | Two thousand and twenty-five  (2025) | Twenty thousand, four hundred & five  (20,405) | 3 and 4 tenths  (3.4) | Ten and fifteen hundredths  (10.15) | millions and billions  thousandths, millionths | |
| Order & compare  *Numbers in the range ..* | 0-20 | 0-100 | 0-1,000 | 0-100,000 | 0-1,000,000 | tenths & hundredths | tenths, hundredths and thousandths | |
| Round  *Round numbers to the nearest ..* |  | ten | hundred | thousand | million | tenths & hundredths | tenths, hundredths and thousandths | |
| Name & Expand  *Name, model and expand* | **17**  10+7 | **125**  100+20+5  1hundred, 2 tens and 5 ones | **2,025**  2,000+20+5  5 means 5 ones | **20,405**  20,000+400+5  4 means 4 hundreds | **175 525**  100,000+70, 000+5,000+500+20+5  2 means 2 tens | **12.5**  10 + 2 + 0.5  1 ten, 2 ones, 5 tenths  1 means 1 ten | 8753 = 8 x 103 + 7 x 102 + 5 x 101 + 3 x 100  2. 45 = 2 x 100 + 4 x 10-1 + 5 x 10-2 | |
| Nesting  *Number can have different names without changing the value. (includes unitising and re-unitising – 30 ones is 3 tens)* | **17**  1 ten, 7 ones | **125**  12 hundreds and 5 ones  **100** is  10 tens | **656**  65 tens and 6 ones  **1,000** is  10 hundreds *or*  1 thousand | **20,405**  20 thousands and 405 ones *or*  **10,000** is  100 hundreds *or*  10 thousands | **175,525**  17 tens thousands, 50 hundreds, 2 tens, 5 ones  **100,000** is  1,000 hundreds *or*  100 thousands | **12.5**  1 ten and 25 tenths  **1.00** is  10 tenths, 100 hundredths | **2.47**  2 whole and 47 hundredths  **10 000 000** is  10 000 thousands | |
| Renaming  *Numbers can be rearranged in terms of place value without changing the value* |  | **125** is  11 tens and 15 ones | **3250** is  30 hundreds and 250 ones | **12 505** is  11 ten thousands and 1505 ones | **125 475** is  124 thousands and 1475 ones | **1.2** is  11 tenths and  10 hundredths | **10.75** is  107 tenths and 5 hundredths  *or*  1 ten and 75 hundredths | |
|  | | | | | | | | | |
| **Number strategies** | | | | | | | | | |
|  | **Up to at least 100** | | **Up to at least 1000** | | **Up to at least 100 000 and 0.1, 0.01** | | **Up to 1 000 000 and < 0.01** | |
| Place Value Addition & Subtraction | The students see 10 as a complete count composed of 10 ones.  The student solves addition and subtraction tasks by incrementing by tens - 13,23,43… | | **Standard Partitioning**  43 + 25 =  (40+20) + (3+5) =  60 + 8 = 68  **Rounding and Compensation**  39 + 26 =  (39+1) + (26-1)  40 + 25 = 65  **Back through Ten**  84 - 8 as 84 - 4 - 4  84 - 4 = 80  80 - 4 = 76 | | **Rounding and Compensating**  630 - 390 = 630 - (390 + 10) =  630 - 400 = 230  230 + 10 = 240  923 – 587 = 923 – 600 + 13  **Standard Place Value Partitioning**  604 – 388 = 60 tens – 38 tens – 1 one  **Know sequences**  4.7, 4.8, 4.9, \_\_ with no calculation | | **Estimate calculations**  37 + 41 + 40 + 38 is about 4 x 40  **Standard PV Partitioning**  4.2 – 2.68 is decomposed to difference between 420 hundredths and 268 hundredths | |
| Place Value  Multiplication & Division | The students:   * use skip counting   (in 10’s) to solve multiplication tasks. | | The students:   * can skip count in 100s * recall 10x multiplication facts and corresponding division facts | | Understands Base 10 – 10 of these is one of these as digits move right or left  4200 is 420 x 10 with no calculating  4.3 is 43 ÷ 10 with no calculating  **Rounding and Compensating**  9 x 6 is  (10 x 6) = 60  60 - (1 x 6) = 54  The students:   * recall basic facts up to 10 times tables and corresponding division facts   **Know multiples of 10,100,1000**  1250, 2250, 3250, \_\_\_\_\_ with no calculation  701 000 is 691 000 if 10 000 is taken from it. | | Linking place value understanding to distributive law  6 x 13 = 6(10 +3) = 6 x 10 + 6 x 3 = 78  Use multiplicative understanding of pv  1.6 x 0.4 = 16 x 4 ÷ 100 = 0.64  24 ÷ 3 x 10 = 80  Link to percentages/fractions  40% of 56 = 56 ÷ 10 x 4  125/1000 = 0.125 | |