|  |  |  |
| --- | --- | --- |
| **KS2 Arithmetic P1 2017**  **Addition and subtraction** | **Knowledge/ strategy** | **Pupils who need further teaching to address gaps in understanding**  **Date:** |
| 40 + 1,000 = | Any multiple of 10 + 1000  Using understanding of PV (link to Dienes blocks) |  |
|  | Any 4 digit number – 100  Using understanding of PV (link to Dienes blocks) |  |
| 345 − 60 = | Subtracting multiples of 10 from any 3 digit number  Partitioning multiples of 10 using number bond for U (eg 6/ 60) to bridge 100s boundary  Number line imagery |  |
|  | Any 3/ 4 digit numbers /multiples of 500, 100 etc seen as mental strategy  Using bar model imagery (inverse)  Number line imagery ( key facts) |  |
| 707 + 1,818 = | Any 3digit + 4 digit number  Knowing/ checking reasonable answer ( rounding)  Using formal method |  |
|  | Any 4 digit- 3 digit number  Knowing/ checking reasonable answer ( rounding)  Using formal method |  |
| 3+ 0.5 | Any whole number + tenths decimal  Using PV understanding , saying ‘5 tenths’ and ‘0 point 5’  Using number line imagery/ PV arrow cards |  |
| 4 – 0.5 | Any whole number – tenths decimal  Using PV understanding , saying ‘5 tenths’ and ‘0 point 5’  Using number line imagery |  |
| 9- 3.4  6+2.7 | Any whole number +/ – tenths decimal  Knowing/ checking reasonable answer  Using number line imagery |  |
| 2/6 + 3/ 6=  4/6 + 3/6 = | Any addition of fractions with same denominator (to one and more than one whole)  Link to U+U bonds as known fact  (Bar model imagery/ fraction walls) |  |
| 5/8 -2/8 = | Anny subtraction of fractions with same denominator  (Bar model imagery/ fraction walls) |  |
| 2/8+ 1/8 +4/8= | Adding any 3 fractions same denominator  ( bar model imagery/ fraction walls) |  |
| 2 ½ + ½ | Mixed number addition same denominator |  |

Key Stage 2 Arithmetic Paper 2017: addition and subtraction

Year 3 and Year 4 ( refer to examples in Key stage 1 )