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| **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 + 1000Using understanding of PV (link to Dienes blocks) |  |
|  | Any 4 digit number – 100Using understanding of PV (link to Dienes blocks) |  |
| 345 − 60 =  | Subtracting multiples of 10 from any 3 digit numberPartitioning multiples of 10 using number bond for U (eg 6/ 60) to bridge 100s boundaryNumber line imagery |  |
|  | Any 3/ 4 digit numbers /multiples of 500, 100 etc seen as mental strategyUsing bar model imagery (inverse)Number line imagery ( key facts) |  |
| 707 + 1,818 =  | Any 3digit + 4 digit numberKnowing/ checking reasonable answer ( rounding)Using formal method |  |
|  | Any 4 digit- 3 digit numberKnowing/ checking reasonable answer ( rounding)Using formal method |  |
| 3+ 0.5  | Any whole number + tenths decimalUsing PV understanding , saying ‘5 tenths’ and ‘0 point 5’Using number line imagery/ PV arrow cards |  |
| 4 – 0.5 | Any whole number – tenths decimalUsing PV understanding , saying ‘5 tenths’ and ‘0 point 5’Using number line imagery |  |
| 9- 3.46+2.7 | Any whole number +/ – tenths decimal Knowing/ checking reasonable answerUsing 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 )