## CALCULATION POLICY FOR ADDITION AND SUBTRACTION

| Year 6 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Block 1 | Block 2 | Block 3 |
| Calculation content | ADDITION AND SUBTRACTION (UNIT 1) <br> Optional revision <br> Number facts and calculation strategies <br> - Facts for one hundred <br> - Friendly numbers <br> - Facts for one and ten <br> - Single digit number facts <br> - Making the next/previous ten <br> - Partitioning the minuend <br> Column method <br> - Add numbers with up to 7 digits (with exchanging) <br> - Subtract numbers from numbers with up to 7 digits (with exchanging) | MONEY AND DECIMALS (UNIT 1) n/a <br> ADDITION AND SUBTRACTION (UNIT 2) <br> - Adding numbers that form a sequence <br> - Adding and subtracting decimals and associated problems (tenths, hundredths and thousandths) <br> FRACTIONS (UNIT 2) <br> - Addition of fractions with unrelated denominators <br> - Subtraction of fractions with unrelated denominators | CALCULATION UNIT n/a <br> MONEY (UNIT 2) <br> n/a |


| Year 6 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Block 1 | Block 2 | Block 3 |
| Strategies/ methods | Optional revision <br> Number facts and calculation strategies <br> - Facts for one hundred <br> - Friendly numbers <br> - Facts for one and ten <br> - Single digit number facts <br> - Making the next/previous ten <br> - Partitioning the minuend There are no new methods. It is helpful for teachers to use the optional revision lessons so they become familiar with children's proficiency in the various methods. <br> Add numbers with up to 7 digits (with exchanging) <br> Children consolidate their understanding of the column method, interpreting calculations presented in varied ways, eg: $\begin{aligned} & 549,893+5,662= \\ & =38,265+153,827 \\ & -\quad 357,247=999,888 \end{aligned}$ $\overline{467,889}+77,862+5,997,459=$ $\qquad$ | Adding numbers that form a sequence Teaching explores what happens when a series of numbers to be added form a sequence, eg: $30+40+50=40 \times 3$ <br> Adding and subtracting decimals (tenths, hundredths and thousandths) Children learnt about complements for one thousand in Year 5. (Addition and subtraction Unit 1.) <br> They are now encouraged to use scaling to convert facts like $\begin{aligned} & 0.001+0.999=1 \text { to } \\ & 1+999=1,000 . \end{aligned}$ <br> Scaling is also encouraged for examples where the number of decimal places is not the same, eg: $\begin{aligned} & 1.005+0.5 \text { becomes } \\ & 1,500+500=1,505 \end{aligned}$ <br> $1.005+0.05$ becomes $1,005+50=1,055 ;$ <br> $1.005+0.005$ becomes <br> $1,005+5=1,010$. |  |

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| Year 6 |  |  |  |
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|  | Block 1 | Block 2 | Block 3 |
| Strategies/ methods | Subtract numbers from numbers with up to 7 digits (with exchanging) Children consolidate their understanding of the column method, interpreting calculations presented in varied ways. They distinguish whether addition or subtraction is required, eg: 943,642-288,988 = $\qquad$ (subtraction); $\begin{aligned} & \quad+289,999=3,154.863 \\ & \text { (subtraction); } \\ & -652,347=989,899 \text { (addition); } \\ & \overline{\text { (subtraction). }} \text {. } 284,000-49,568 \end{aligned}$ | Addition of fractions with unrelated denominators (eg $1 / 2+3 / 7$ ) In Year 5 children subtracted fractions with related denominators, so only one fraction needed to be changed for the denominators to be the same. In Year 6 children need to find a common denominator. They then use learning from Year 4 (when the denominators are the same, we add the numerators). Visual representations also support the making the next whole method <br> Subtraction of fractions with unrelated denominators <br> Children use methods from earlier year groups: <br> - using improper fractions; <br> - making the previous one. <br> They also use their ability to partition the minuend. |  |

