Marking guidance

↓ NC objective in a year below ↑ NC objective in a year above * Key question

Qu.	National curriculum objectives	Progression map outcome	Answers	Marks	Possible errors	Advice
1	**Y5.NAS.2** Add and subtract numbers mentally with increasingly large numbers	**AS** **Add and subtract numbers mentally with increasingly large numbers.**	a) 378 702 b) 570 321	1	Errors are possible if children line up the digits incorrectly, if solving these calculations using column addition and subtraction.	Encourage children to recognise when they can use place-value knowledge to simply carry out an addition or subtraction. A good knowledge of place value is an essential pre-requisite for this, so practise reading and writing large numbers (up to 6 digits).
2	**Y5.NMD.7** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	**MD** Multiply and divide numbers by 10 and 100, including decimal numbers and those leading to decimal answers. **Multiply and divide numbers mentally drawing upon known facts.**	a) 46 300 b) 0·72	1	Possible errors for part (a) include 4630 or 46·300 and for part (b) include 7·2 or 0·072.	Use a place-value grid to practise moving digits left or right for multiplying and dividing respectively. This is particularly useful for ensuring that children see that, when decimals are involved, the decimal point itself doesn't move.

3*	**Y5.NAS.2** Add and subtract numbers mentally with increasingly large numbers	**AS** Add whole numbers and one place decimals using appropriate mental strategies.	a) 31 b) 16·1	1	Answers of 30 for part (a) and 15·1 for part (b) suggest children are using a column method (sometimes doing that mentally) without exchanging the 1s digit appropriately.	These questions are best solved as mental calculations using knowledge of complements. Children should always be asking: *what is the best method to use here?* They should rehearse a range of different calculation strategies.
4	**Y5.NMD.5** Multiply and divide numbers mentally drawing upon known facts	**MD** **Multiply and divide numbers mentally drawing upon known facts.**	a) 84 b) 108 c) 6 d) 8	1	Poor recall of 12 times-table facts may result in a range of incorrect answers. Where children get parts (a) and (b) correct but not parts (c) and (d), they are most likely not applying multiplication facts to division.	If children are finding 12 times-table facts difficult to recall, encourage them to link the facts to what they know, e.g. $5 \times 12 = 60$, so $72 \div 12 = 6$ (one more 12 than 60), or to use 6 times-table facts and double, e.g. $9 \times 6 = 54$ so $9 \times 12 = 108$.
5*	**Y5.NMD.8** Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	**MD** **Recognise and use square numbers and their notation (^{2}).**	a) 58 b) 77	1	A possible error is that children will add or subtract the numbers before finding the square, giving answers of 100 and 49, respectively.	Modelling this visually using squared paper should counter this error.