## Examples of what children should be able to do, in relation to each (boxed) Programme of Study statement

**add and subtract numbers mentally, including a three-digit number and ones, a three-digit number and tens, three-digit number and hundreds**

**add and subtract numbers with up to three digits, using formal written methods of column addition and subtraction**

**estimate the answer to a calculation and use inverse operations to check answers**

**solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction**

Examples below, addressing combinations of the requirements above, are taken from a variety of publications.

What number is 27 more than 145? What number is 19 more than 145? Explain how you worked out these two calculations.

Work out the missing digits:

3☐ + ☐2 = 85

Work out these subtraction calculations:

72 – 5        372 – 68       270 – 3  
82 – 15      132 – 28       70 – 66

Did you use the same method for each calculation? If not, why not? Explain your methods to a friend and compare your methods with theirs.

Paul says 172 – 15 = 163. Write down an addition calculation that you could do to check this.

Paul’s working is: 170 – 10 = 160 and 5 – 2 = 3 so 172 – 15 = 163

Can you identify where Paul has gone wrong?

Layla has 45p in her money bank and 28p in her purse. How much more money does she need to buy a comic that costs £1?

Ben and Jess are answering this problem:

Mary has collected 61 key rings, Jo has 45. How many more key rings does Mary have than Jo?

Ben does the calculation 61 + 45. Jess does the calculation 61 – 45. Who is correct? Explain how you know.

Josh buys one coconut and half a kilogram of bananas. What does he pay?



        Coconut                        Bananas  
        78p                               £1.50 per kg

Show your working.

Explain your method to a friend.

Holly has these coins.



She wants to buy a notebook costing £1.50.

How much more money does she need?

I pay for a coach trip costing £7.80 with a £10 note. How much change should I get?

A film starts at 6:30 pm and ends at 8:10 pm. How many minutes does the film last?

I travel on a journey lasting 1 hour 25 minutes. The train leaves the station at 7:45 am. What time does the train arrive?

What number is 199 more than 428?

What is the difference between 1999 and 4003?

One orange costs 15p. How much wo

Would you use a mental, written or calculator method to solve each of these? Explain your choice.

23.05 + ☐ = 176.25

What is the total cost if I buy food costing £3.86 and £8.57?

These are the start and finish times of a film.

START 14:05 FINISH 16:25

How long was the film?

A packet of crisps costs 32p. Josh buys two packets.  
How much change does he get from £1?



Ryan buys sunglasses for £4.69 and a sun hat. How much change does he get from £10?

## Non-Statutory Guidance

Pupils practise solving varied addition and subtraction questions. For mental calculations with two-digit numbers, the answers could exceed 100.

Pupils use their understanding of place value and partitioning, and practise using column addition and subtraction with increasingly large numbers up to three digits to become fluent.