

CALCULATIONS

Pupils should be taught to:

Use known number facts and place value to add or subtract a pair of numbers mentally

As outcomes, Year 4 pupils should, for example:

Continue to add or subtract two-digit multiples of 10

- Respond to oral questions like:
 $40 + 70$ $130 - 50$
and explain method.
- Work mentally to complete written questions like:
 $90 + \square = 130$ $\square - 50 = 80$
then explain method in writing.

Add or subtract a pair of multiples of 100, crossing 1000

- Respond to oral questions like:
 $500 + 700$ $1200 - 500$
and explain method.
- Work mentally to complete written questions like:
 $200 + 900 = \square$ $800 + \square = 1300$ $\square - 600 = 900$
then explain method in writing.

Revise adding/subtracting a multiple of 10 to/from a two- or three-digit number, without crossing the hundreds boundary

- Respond to oral questions like:
 $52 + 30$ $582 - 30$
and explain method.
- Work mentally to complete written questions like:
 $52 + 30 = \square$ $52 + \square = 82$ $\square + 30 = 82$
 $76 - 40 = \square$ $76 - \square = 36$ $\square - 40 = 36$
then explain method in writing.

Revise adding a two- or three-digit number to a multiple of 10, 100 or 1000

- Respond to oral questions like:
 $90 + 18$ $350 + 16$
 $200 + 364$ $4000 + 518$
and explain method.
- Work mentally to complete written questions like:
 $430 + 54 = \square$ $430 + \square = 484$ $\square + 54 = 484$
 $610 + 27 = \square$ $610 + \square = 637$ $\square + 27 = 637$
then explain method in writing.

Find what to add to a two- or three-digit number to make 100 or the next higher multiple of 100

- Respond to oral questions and explain method:
What must be added to 37 to make 100? 432 to make 500?
- Work mentally to complete written questions like:
 $58 + \square = 100$ $486 + \square = 500$ $731 + \square = 800$
then explain method in writing.

Find what to add to a four-digit multiple of 100 to make the next higher multiple of 1000

- Respond to oral questions like:
What must be added to 7300 to make 8000?
and explain method.
- Work mentally to complete written questions like:
 $3200 + \square = 4000$ $8400 + \square = 9000$

Use and apply these skills in a variety of contexts, in mathematics and other subjects.

As outcomes, Year 5 pupils should, for example:*Add or subtract three-digit multiples of 10*

- Respond to oral questions like:
 $570 + 250$ $620 - 380$
 and explain method.
- Work mentally to complete written questions like:
 $240 + 370 = \square$ $610 - \square = 240$ $\square - 370 = 240$
 then explain method in writing.

Add three or more three-digit multiples of 100

- Respond to oral questions like:
 $500 + 700 + 400$
 and explain method.
- Work mentally to complete written questions like:
 $800 + \square + 300 = 1500$
 then explain method in writing.

Add/subtract a single-digit multiple of 100 to/from a three- or four-digit number, crossing 1000

- Respond to oral questions like:
 $638 + 500$ $1263 - 400$
 and explain method.
- Work mentally to complete written questions like:
 $300 + 876 = \square$ $300 + \square = 1176$ $\square + 876 = 1176$
 $1382 - 400 = \square$ $1382 - \square = 982$ $\square - 400 = 982$
 then explain method in writing.

Add/subtract a three-digit multiple of 10 to/from a three-digit number, without crossing the hundreds boundary

- Respond to oral questions like:
 $230 + 364$ $460 + 518$
 and explain method.
- Work mentally to complete written questions like:
 $538 + 120 = \square$ $538 + \square = 658$ $\square + 120 = 658$
 $742 - 210 = \square$ $742 - \square = 532$ $\square - 210 = 532$
 then explain method in writing.

Continue to find what to add to a three-digit number to make the next higher multiple of 100

- Respond to oral questions and explain method:
 What must be added to 734 to make 800?
- Work mentally to complete written questions like:
 $651 + \square = 700$ $247 + \square = 300$
 then explain method in writing.

Find what to add to a decimal with units and tenths to make the next higher whole number

- Respond to oral questions like:
 What must be added to 3.4 to make 4?
 and explain method.
- Work mentally to complete written questions like:
 $4.8 + \square = 5$ $7.3 + \square = 8$
 then explain method in writing.

Use and apply these skills in a variety of contexts, in mathematics and other subjects.

As outcomes, Year 6 pupils should, for example:*Add or subtract four-digit multiples of 100*

- Respond to oral questions like:
 $5700 + 2500$ $6200 - 3800$
 and explain method.
- Work mentally to complete written questions like:
 $2400 + 8700 = \square$ $6100 - \square = 3700$
 then explain method in writing.

- Respond to oral questions and explain method:
 What must be added to 6.45 to make 7?
 And to 2.78 to make 2.8?
- Work mentally to complete written questions like:
 $4.81 + \square = 5$ $7.36 + \square = 7.4$
 then explain method in writing.

Use and apply these skills in a variety of contexts, in mathematics and other subjects.

CALCULATIONS

Pupils should be taught to:

Use known number facts and place value to add or subtract a pair of numbers mentally (continued)

As outcomes, Year 4 pupils should, for example:

Add a single digit to any three- or four-digit number, crossing the tens boundary

- Respond to oral questions like:
 $629 + 3$ $6745 + 8$
and explain method.
- Work mentally to complete written questions like:
 $357 + 7 = \square$ $368 + \square = 372$ $\square + 5 = 893$
 $2397 + 9 = \square$ $4128 + \square = 4135$ $\square + 5 = 1254$
then explain method in writing.

Subtract a single digit from a multiple of 100 or 1000

- Respond to oral questions like:
 $900 - 7$ $4000 - 3$
and explain method.
- Work mentally to complete written questions like:
 $600 - 7 = \square$ $600 - \square = 593$ $\square - 7 = 593$
 $5000 - 3 = \square$ $5000 - \square = 4997$ $\square - 3 = 4997$
then explain method in writing.

Subtract a single digit from a three- or four-digit number, crossing the tens boundary

- Respond to oral questions like:
 $905 - 7$ $4641 - 3$ $7003 - 6899$
and explain method.
- Work mentally to complete written questions like:
 $626 - 7 = \square$ $626 - \square = 619$ $\square - 7 = 619$
 $5952 - 3 = \square$ $5952 - \square = 5949$ $\square - 3 = 5949$
then explain method in writing.

Find a small difference between a pair of numbers lying either side of a multiple of 1000

- For example, work out mentally that:
 $7003 - 6988 = 15$
by counting up 2 from 6988 to 6990, then 10 to 7000, then 3 to 7003.
- Work mentally to complete written questions like:
 $6004 - 5985 = \square$ $6004 - \square = 19$ $\square - 5985 = 19$

Add or subtract any pair of two-digit numbers, including crossing the tens boundary

- Respond to oral questions like:
 $45 + 27$ $62 - 27$
and explain method.
- Work mentally to complete written questions like:
 $45 + 39 = \square$ $45 + \square = 84$ $\square + 39 = 84$
 $92 - 25 = \square$ $92 - \square = 67$ $\square - 25 = 67$
then explain method in writing.

Use and apply these skills in a variety of contexts, in mathematics and other subjects.

As outcomes, Year 5 pupils should, for example:

Find the difference between a pair of numbers lying either side of a multiple of 1000

- For example, work out mentally that:
 $7003 - 6899 = 104$
 by counting up 1 from 6899 to 6900, then 100 to 7000, then 3 to 7003.
- Work mentally to complete written questions like:
 $8004 - 7985 = \square$ $8004 - \square = 19$ $\square - 7985 = 19$

Add or subtract a pair of decimal fractions each with units and tenths, or with tenths and hundredths, including crossing the units boundary or the tenths boundary

- Respond to oral questions like:
 $5.7 + 2.5$ $6.2 - 3.8$ $0.56 + 0.72$ $0.63 - 0.48$
 and explain method.
- Work mentally to complete written questions like:
 $2.4 + 8.7 = \square$ $0.24 + \square = 0.78$
 $6.1 - 2.4 = \square$ $0.95 - \square = 0.67$
 then explain method in writing.

Use and apply these skills in a variety of contexts, in mathematics and other subjects.

As outcomes, Year 6 pupils should, for example:

Add or subtract a pair of decimal fractions each less than 1 and with up to two decimal places

- Respond to oral questions like:
 $0.05 + 0.3$ $0.7 - 0.26$
 and explain method.
- Work mentally to complete written questions like:
 $0.67 + 0.2 = \square$ $0.67 + \square = 0.87$
 $0.5 - 0.31 = \square$ $0.5 - \square = 0.19$
 then explain method in writing.

Use and apply these skills in a variety of contexts, in mathematics and other subjects.