

Year 6 Calculation for parents.

Tips for proficiency

Put the = sign first, followed by the calculation e.g. =
 $475.21 + 318.01$

Have a missing number in the middle of the calculation e.g.
 $3782 + \dots\dots\dots = 7206$



Addition:

Pupils need to be able to add larger numbers and numbers with a variety of decimal places. We use the column method to add. When adding numbers with a variety of decimal places, we encourage the pupils to add zeros to a number so that they have the same number of decimal places (this makes it easier to ensure that pupil set up the calculation correctly).

E.G

$$634, 573 + 29, 108 =$$

$$453.2 + 7.576 =$$

Subtraction:

Pupils need to subtract larger numbers and numbers with a variety of decimal places. We use the column method to subtract. When subtracting numbers with a variety of decimal places, we encourage the pupils to add zeros to a number so that they have the same number of decimal places (this makes it easier to ensure that pupil set up the calculation correctly). Due to the use of the column method, it is imperative that pupils can subtract from numbers such as 3006, as this involves borrowing from the thousand digit and then sharing to the hundreds and then the tens.

E.G.

$$784, 319 - 62, 402 =$$

$$672.4 - 12.98 =$$

$$4001 - 1538 =$$



Multiplication:

Pupils need to be able to multiply 4 digits up to 2 digits.

Initially, we teach pupils to multiply 4 digits by 1 and then move on to 4 digits by 2 all using the column method. As pupils are learning these methods, we also try to use easier times tables facts until they become more proficient at recalling timetable facts.

E.G

$$3215 \times 3 =$$

$$2641 \times 25 =$$



Division:

Pupils need to be able to divide up to 4 digits by 2 digits.

Initially, we teach pupils to divide 4 digits by 1 and then move on to 4 digits by 2 using short division (also called the bus shelter / bus stop method). As pupils are learning these methods, we also try to use easier times tables facts until they become more proficient at recalling timetable facts. If there is a remainder, we teach pupils to become confident at writing this as a remainder, fraction and a decimal.

E.G.

$$3479 \div 5 =$$

$$8627 \div 18 =$$

Multiplying and dividing by 10, 100 and 1000.

We encourage pupils to use the place values columns and then move the digits accordingly.

Place value columns

M HTH TTH TH H T U . 1/10 1/100 1/1000

Multiplying—move the digits to the left

Dividing—move the digits to the right

By 10 (move them one column)

By 100 (move the digits two columns)

By 1000 (move the digits three columns)

Mental multiplication and division

Ensure that the numbers you use involve timetable facts so pupils can perform these calculations mentally.

$$270000 \div 3 = 90000$$

$$400 \times 60 = 24000$$

Encourage pupils to use their times table knowledge to complete the initial calculation (as shown above) and then add the zeros.

$$270000 \div 3 = 90000$$

$$400 \times 60 = 24000$$

If dividing by a multiple of 10, then both numbers need to be divided by 10 first, and then carry out the calculation as above.

$$360,000 \div 60 =$$

$$36,000 \div 6 = 6000$$