

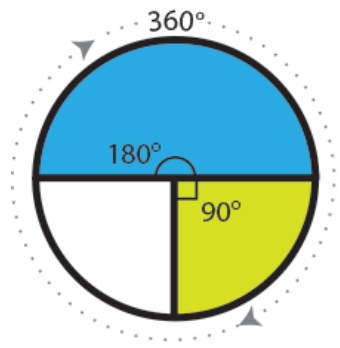
Know by heart the multiplication facts up to 12X12.

Example:  $7 \times 9 = 63$   
and  $63 \div 9 = 7$

Suggestion: Remember the times-tables skip counting rhymes from class and sing them in a range of silly voices.

Please refer to the booklet we sent home: *How to Learn Times-Table*, which is full of ideas of how to learn them. Also available on our website.

## Angles



Suggestion: Draw a straight line picture and mark the different types of angles in different colours (acute/ obtuse/ right angle/ straight line/ reflex). Remember to add a key.

## Negative Numbers

Example: Subtract 6 from 1 using a number line.

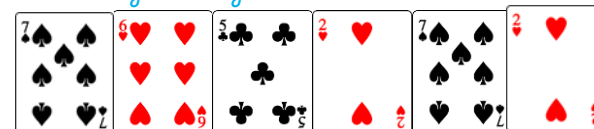


Suggestion: Play *tug of war* with a partner.

Draw a number line from -13 to +13. Place a counter on 0. Take it in turns to roll a die and move the counter. One player always adds the score on the die and the other always subtracts the score. The first to reach -13 or +13 wins the game.

Use a written method for multiplication (Please refer to our school's Calculations Policy, which is in line with Lancashire Policy)

Suggestion: Draw 6 playing cards and multiply a 4-digit number by the remaining 2-digit value (see below)



$815 \times 34$  We partition 815 into 800 and 10 and 5 and put it in a table. We partition 34 into 30 and 4 and put it in the table.

x	800	10	5
30	24000	300	150
4	3200	40	20

Multiply the numbers in the grid one by one, then add all the numbers to make 27,710.

## Add and Subtract Mentally

Suggestion: Take the numbers from two number plates on cars and either add or subtract them in your head. If you want to make a game of it, race another person to find the correct answer first.



## Roman Numerals

Example:

ROMAN NUMERALS			
1 I	11 XI	30 XXX	500 D
2 II	12 XII	40 XL	600 DC
3 III	13 XIII	50 L	700 DCC
4 IV	14 XIV	60 LX	800 DCCC
5 V	15 XV	70 LXX	900 CM
6 VI	16 XVI	80 LXXX	1,000 M
7 VII	17 XVII	90 XC	2,000 MM
8 VIII	18 XVIII	100 C	3,000 MMM
9 IX	19 XIX	200 CC	4,000 M <sup>V</sup>
10 X	20 XX	300 CCC	5,000 V
		400 CD	10,000 X

Suggestion: Choose any 2-digit number and write it using Roman Numerals. Use a safe search engine to check your answers.

## Derive Related Facts

Example:

$4 \times 0.8$  linked to  $4 \times 8$   
 $3 + 7$  linked to  $0.3 + 0.7$

Suggestion: Create a related facts web for calculations of your choice e.g.

$$6 \times 8 = 48$$

$$0.6 \times 8 = 4.8$$

$$6 \times 0.8 = 4.8$$

$$480 \div 8 = 60$$

$$480 \div 6 = 80$$

$$8 \div 0.6 = 48$$

$$2693 \times 24$$

x	2000	600	90	3
20	40000	12000	1800	60
4	8000	2400	360	12

$$\begin{array}{r}
 40000 \\
 + 8000 \\
 + 12000 \\
 + 2400 \\
 + 1800 \\
 + 360 \\
 + 60 \\
 + 12 \\
 \hline
 64632
 \end{array}$$