



Maths Automaticity at EFPS

Parent Guide
2025



What is Maths Automaticity?

In short, this is the ability to recall maths facts with minimal counting or working out. When children can automatically recall number facts, they can use calculation methods more quickly and accurately which, in turn, improves their confidence and ability in mathematics.

The best way to improve maths automaticity is to practice facts in short bursts, a little and often and keep it fun!

This guide outlines the maths facts that will help children to access the maths curriculum in each year group at EFPS.

A Reynolds





EYFS

Number ELG

- Be able to make each number up to 10 using objects
- Recognise quantities (subitise) up to 5 without counting e.g spots on a dice
- Know number bonds up to 5 (0+5, 1+4, 2+3)
- Know some number bonds to 10, including double facts.

Numerical Patterns ELG

- Verbally count beyond 20
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts.
- Show how quantities can be distributed equally

Useful Online Links:

- [Even and Odd Numbers Song for Kids | Odds and Evens for Grades 2 & 3](#)
 - [I Know My Number Bonds 10 | Number Bonds to 10 | Addition Song for Kids | Jack Hartmann](#)
 - [Numberblocks - BBC iPlayer](#)
- 



Year 1

The following additions are within 10 (see Mental addition Facts page)

- 
- I can add 1 to a 1 digit number. (e.g. $7 + 1$ and $1 + 7$)
 - I know doubles of numbers up to 5. (e.g. $4 + 4$, $5 + 5$)
 - I can add 2 to a 1 digit number. (e.g. $4 + 2$ and $2 + 4$)
 - I know number bonds to 10 (e.g. $8 + 2$ and $2 + 8$)
 - I can add 10 to a number (e.g. $5 + 10$ and $10 + 5$)
 - I can add 0 to a number (e.g. $3 + 0$ and $0 + 3$)
 - I can add near doubles (e.g. $3 + 4$ and $4 + 3$)
 - I can add 1 digit numbers (e.g. $5 + 3$, $3 + 5$, $6 + 3$, $3 + 6$)

The following are linked to Multiplication and Division

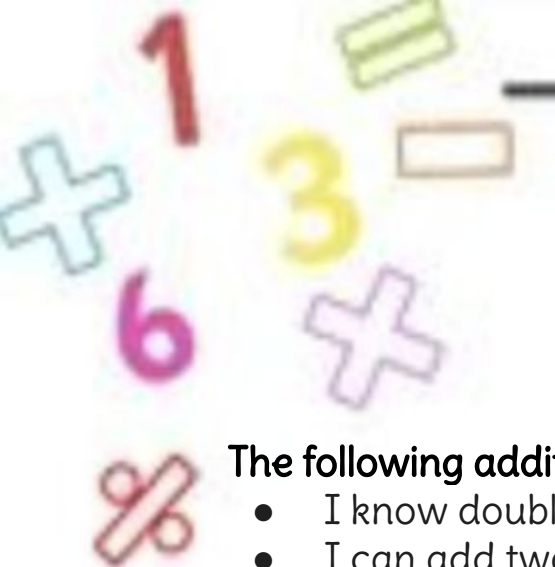
- I can skip count forward and back in 2's up to 24
- I can skip count forward and back in 5's up to 60
- I can skip count forward and back in 10's up to 120
-

The following are linked to measures and shape

- I can recognise coin denominations and their value
- I can name 2d shapes—rectangle, triangle, circle, square
- I can name 3d shapes—cuboid, cube, sphere, pyramid
- I can name the days of the week
- I can name the months of the year
- I can tell the analogue time to the nearest hour and $\frac{1}{2}$ hour

Useful Online Links:

- [Supermovers](#)
 - [Number blocks](#)
 - [ictgames || Number Facts](#)
 - [Daily 10 - Mental Maths Challenge - Topmarks](#)
- 



Year 2



The following additions are bridging 10

- I know doubles of numbers to 20 (e.g. $7 + 7$)
- I can add two 1 digit numbers Bridging 10 (e.g. $4 + 8$ and $8 + 4$)
- I can add near doubles (e.g. $5 + 6$ and $6 + 5$)
- I know number bonds to 20 (e.g. $18 + 2$ and $12 + 8$)
- I can add/subtract 10 to/from any 2 digit number e.g. $34 + 10$
- I know 1 more/1 less than any 2 digit number e.g. $34 + 1$

The following are linked to Multiplication and Division

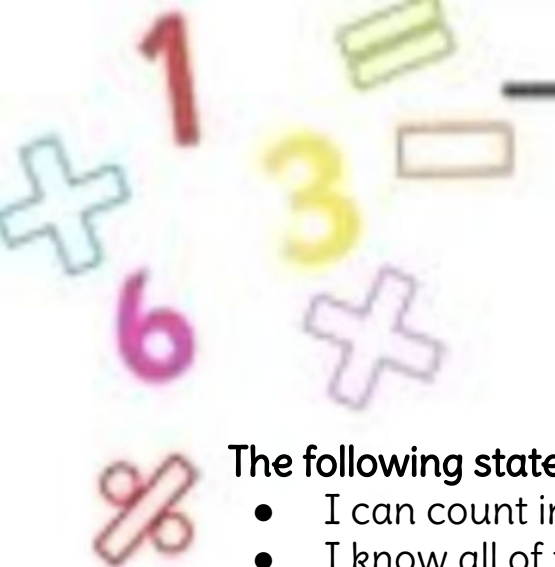
- I can recall multiplication facts for the 2 times table
- I can recall division facts for the 2 times table
- I can recall multiplication facts for the 10 times table
- I can recall division facts for the 10 times table
- I can recall multiplication facts for the 5 times table
- I can recall division facts for the 5 times table
- I can recall odd and even numbers

The following are linked to measures and shape

- I can tell the time to the nearest quarter hour.
- I can tell the time to the nearest 5 mins
- I know the properties of 2D shape (sides, lines of symmetry, corners) —rectangle, triangle, circle, square, pentagon, hexagon
- I know the properties of 3D shape (edges, vertices, faces)—cuboid, cubes, pyramids, spheres, cylinders

Useful Online Links:

- [Supermovers](#)
 - [Number blocks](#)
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 - [Times Tables Songs 1-12 for Kids | 23 Minute Compilation from Silly School Songs!](#)
 - [Daily 10 - Mental Maths Challenge - Topmarks](#)
 - <https://ttrockstars.com/>
- 



Year 3



The following statements are linked to number

- I can count in 50's and 100's up to 1000
- I know all of the calculations used in Column addition
- I know all of the calculations used in Column subtraction
- I can add 2 digit to 1 digit numbers bridging powers of 10 mentally (e.g $24 + 8$)

The following are linked to Multiplication and Division

- I know the multiplication and division facts for the 2, 5 and 10 times table.(From Year 2)
- I can recall multiplication facts for the 3 times table
- I can recall division facts for the 3 times table
- I can recall multiplication facts for the 4 times table
- I can recall division facts for the 4 times table
- I can recall multiplication facts for the 8 times table
- I can recall division facts for the 8 times table
- I know $100 \div 2$, $100 \div 4$, $100 \div 5$ & $100 \div 10$

The following are linked to measures and shape

- I know how many seconds in a minute
- I know how many days in each month
- I know how many days in a year and a leap year
- I can tell the time—5 minutes and 1 minute.
- I can identify right angle, horizontal, vertical, perpendicular and parallel lines

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- 



Year 4



The following statements are linked to Number

- I know the number bonds to 100.
- I can round numbers to the nearest 10 100 and 1000
- I can read numbers up to 10,000

The following statements are linked to Multiplication and Division

- I know the multiplication and division facts for the 2,5 and 10 times (Year 2)
- I know the multiplication and division facts for the 3, 4 and 8 times tables (Year 3)
- I know the multiplication and division facts for the 6 times table.
- I know the multiplication and division facts for the 7 times table.
- I know the multiplication and division facts for the 9 times tables.
- I know the multiplication and division facts for the 11 times tables.
- I can multiply and divide single-digit numbers by 10.
- I can multiply and divide single-digit numbers by 100.

The following statements are linked to fractions

- I can recognise decimal equivalents of fractions.

The following are linked to measures and shape

- I can recognise obtuse, acute and right angles..
- I can convert between an analogue and a digital clock.

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 - <https://ttrockstars.com/>
 - <https://www.mymaths.co.uk/>
- 



Year 5



The following statements are linked to number

- I know decimal number bonds to 1.
- I know decimal number bonds to 10.
- I know the multiplication and division facts for all times tables up to 12×12 .
- I can read numbers up to 1 million
- I can identify prime numbers up to 20.
- I can recall square numbers up to 122
- I can recall square roots up to 144.
- I can find factor pairs of a number.

The following statements are linked to fractions

- I can recognise decimal equivalents of fractions.

The following are linked to measures and shape

- I can recall metric conversions.
- I can recognise properties of 2D and 3D shapes.
- I can convert time—hours, minutes, days, weeks etc
- I can identify different triangles.

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 - [Daily 10 - Mental Maths Challenge - Topmarks](#)
 - <https://ttrockstars.com/>
 - <https://www.mymaths.co.uk/>
 - [Guardians: Defenders of Mathematica - KS2 Maths game - BBC Bitesize](#)
- 



Year 6

The following statements are linked to number

- I know the multiplication facts for all times tables up to 12×12
- know the division facts for all times tables up to 12×12 .
- I can read numbers up to ten million.
- I can identify common factors of a pair of numbers.
- I can convert between decimals and fractions.
- I can convert between fractions and percentages.
- I can convert between decimals and percentages.
- I can identify prime numbers up to 50.
- I can multiply numbers by 10 and 100, including decimals.
- I can read and write Roman Numerals.
-

The following statements are linked to fractions

- I can recognise fraction, decimal & percentage equivalents.

The following are linked to measures and shape

- I can recall metric conversions.
- I can identify and name angles—acute, right, obtuse and reflex.

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 - [Daily 10 - Mental Maths Challenge - Topmarks](#)
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Year 1 & 2

Mental Addition Facts

ADD	0	1	2	3	4	5	6	7	8	9	10	
0	0+0	0+1	0+2	0+3	0+4	0+5	0+6	0+7	0+8	0+9	0+10	Adding 0
1	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10	Adding 1
2	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8	2+9	2+10	Adding 2
3	3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7	3+8	3+9	3+10	Doubles
4	4+0	4+1	4+2	4+3	4+4	4+5	4+6	4+7	4+8	4+9	4+10	Bonds to 10
5	5+0	5+1	5+2	5+3	5+4	5+5	5+6	5+7	5+8	5+9	5+10	Adding 10
6	6+0	6+1	6+2	6+3	6+4	6+5	6+6	6+7	6+8	6+9	6+10	Near Doubles
7	7+0	7+1	7+2	7+3	7+4	7+5	7+6	7+7	7+8	7+9	7+10	Bridging/ Compensating
8	8+0	8+1	8+2	8+3	8+4	8+5	8+6	8+7	8+8	8+9	8+10	
9	9+0	9+1	9+2	9+3	9+4	9+5	9+6	9+7	9+8	9+9	9+10	
10	10+0	10+1	10+2	10+3	10+4	10+5	10+6	10+7	10+8	10+9	10+10	

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- [Number blocks](#)
- [ictgames || Number Facts](#)
- [Daily 10 - Mental Maths Challenge - Topmarks](#)



Year 2 & 3

Column Addition Facts

Facts needed for column addition

+	0	1	2	3	4	5	6	7	8	9	10
0	0+0	0+1	0+2	0+3	0+4	0+5	0+6	0+7	0+8	0+9	0+10
1	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10
2	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8	2+9	2+10
3	3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7	3+8	3+9	3+10
4	4+0	4+1	4+2	4+3	4+4	4+5	4+6	4+7	4+8	4+9	4+10
5	5+0	5+1	5+2	5+3	5+4	5+5	5+6	5+7	5+8	5+9	5+10
6	6+0	6+1	6+2	6+3	6+4	6+5	6+6	6+7	6+8	6+9	6+10
7	7+0	7+1	7+2	7+3	7+4	7+5	7+6	7+7	7+8	7+9	7+10
8	8+0	8+1	8+2	8+3	8+4	8+5	8+6	8+7	8+8	8+9	8+10
9	9+0	9+1	9+2	9+3	9+4	9+5	9+6	9+7	9+8	9+9	9+10
10	10+0	10+1	10+2	10+3	10+4	10+5	10+6	10+7	10+8	10+9	10+10

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Year 2 & 3

Column Subtraction

Facts

Calculations used in column subtraction																			
-	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
9	18 - 9	17-9	16-9	15-9	14-9	13-9	12-9	11-9	10-9	9-9									
8		17-8	16-8	15-8	14-8	13-8	12-8	11-8	10-8	9-8	8-8								
7			16-7	15-7	14-7	13-7	12-7	11-7	10-7	9-7	8-7	7-7							
6				15-6	14-6	13-6	12-6	11-6	10-6	9-6	8-6	7-6	6-6						
5					14-5	13-5	12-5	11-5	10-5	9-5	8-5	7-5	6-5	5-5					
4						13-4	12-4	11-4	10-4	9-4	8-4	7-4	6-4	5-4	4-4				
3							12-3	11-3	10-3	9-3	8-3	7-3	6-3	5-3	4-3	3-3			
2								11-2	10-2	9-2	8-2	7-2	6-2	5-2	4-2	3-2	2-2		
1									10-1	9-1	8-1	7-1	6-1	5-1	4-1	3-1	2-1	1-1	
0										9-0	8-0	7-0	6-0	5-0	4-0	3-0	2-0	1-0	0-0

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Year 2 - 4

All Multiplication Facts

MULTIPLICATION			
1x $1 \times 0 = 0$ $1 \times 1 = 1$ $1 \times 2 = 2$ $1 \times 3 = 3$ $1 \times 4 = 4$ $1 \times 5 = 5$ $1 \times 6 = 6$ $1 \times 7 = 7$ $1 \times 8 = 8$ $1 \times 9 = 9$ $1 \times 10 = 10$ $1 \times 11 = 11$ $1 \times 12 = 12$	2x $2 \times 0 = 0$ $2 \times 1 = 2$ $2 \times 2 = 4$ $2 \times 3 = 6$ $2 \times 4 = 8$ $2 \times 5 = 10$ $2 \times 6 = 12$ $2 \times 7 = 14$ $2 \times 8 = 16$ $2 \times 9 = 18$ $2 \times 10 = 20$ $2 \times 11 = 22$ $2 \times 12 = 24$	3x $3 \times 0 = 0$ $3 \times 1 = 3$ $3 \times 2 = 6$ $3 \times 3 = 9$ $3 \times 4 = 12$ $3 \times 5 = 15$ $3 \times 6 = 18$ $3 \times 7 = 21$ $3 \times 8 = 24$ $3 \times 9 = 27$ $3 \times 10 = 30$ $3 \times 11 = 33$ $3 \times 12 = 36$	4x $4 \times 0 = 0$ $4 \times 1 = 4$ $4 \times 2 = 8$ $4 \times 3 = 12$ $4 \times 4 = 16$ $4 \times 5 = 20$ $4 \times 6 = 24$ $4 \times 7 = 28$ $4 \times 8 = 32$ $4 \times 9 = 36$ $4 \times 10 = 40$ $4 \times 11 = 44$ $4 \times 12 = 48$
5x $5 \times 0 = 0$ $5 \times 1 = 5$ $5 \times 2 = 10$ $5 \times 3 = 15$ $5 \times 4 = 20$ $5 \times 5 = 25$ $5 \times 6 = 30$ $5 \times 7 = 35$ $5 \times 8 = 40$ $5 \times 9 = 45$ $5 \times 10 = 50$ $5 \times 11 = 55$ $5 \times 12 = 60$	6x $6 \times 0 = 0$ $6 \times 1 = 6$ $6 \times 2 = 12$ $6 \times 3 = 18$ $6 \times 4 = 24$ $6 \times 5 = 30$ $6 \times 6 = 36$ $6 \times 7 = 42$ $6 \times 8 = 48$ $6 \times 9 = 54$ $6 \times 10 = 60$ $6 \times 11 = 66$ $6 \times 12 = 72$	7x $7 \times 0 = 0$ $7 \times 1 = 7$ $7 \times 2 = 14$ $7 \times 3 = 21$ $7 \times 4 = 28$ $7 \times 5 = 35$ $7 \times 6 = 42$ $7 \times 7 = 49$ $7 \times 8 = 56$ $7 \times 9 = 63$ $7 \times 10 = 70$ $7 \times 11 = 77$ $7 \times 12 = 84$	8x $8 \times 0 = 0$ $8 \times 1 = 8$ $8 \times 2 = 16$ $8 \times 3 = 24$ $8 \times 4 = 32$ $8 \times 5 = 40$ $8 \times 6 = 48$ $8 \times 7 = 56$ $8 \times 8 = 64$ $8 \times 9 = 72$ $8 \times 10 = 80$ $8 \times 11 = 88$ $8 \times 12 = 96$
9x $9 \times 0 = 0$ $9 \times 1 = 9$ $9 \times 2 = 18$ $9 \times 3 = 27$ $9 \times 4 = 36$ $9 \times 5 = 45$ $9 \times 6 = 54$ $9 \times 7 = 63$ $9 \times 8 = 72$ $9 \times 9 = 81$ $9 \times 10 = 90$ $9 \times 11 = 99$ $9 \times 12 = 108$	10x $10 \times 0 = 0$ $10 \times 1 = 10$ $10 \times 2 = 20$ $10 \times 3 = 30$ $10 \times 4 = 40$ $10 \times 5 = 50$ $10 \times 6 = 60$ $10 \times 7 = 70$ $10 \times 8 = 80$ $10 \times 9 = 90$ $10 \times 10 = 100$ $10 \times 11 = 110$ $10 \times 12 = 120$	11x $11 \times 0 = 0$ $11 \times 1 = 11$ $11 \times 2 = 22$ $11 \times 3 = 33$ $11 \times 4 = 44$ $11 \times 5 = 55$ $11 \times 6 = 66$ $11 \times 7 = 77$ $11 \times 8 = 88$ $11 \times 9 = 99$ $11 \times 10 = 110$ $11 \times 11 = 121$ $11 \times 12 = 132$	12x $12 \times 0 = 0$ $12 \times 1 = 12$ $12 \times 2 = 24$ $12 \times 3 = 36$ $12 \times 4 = 48$ $12 \times 5 = 60$ $12 \times 6 = 72$ $12 \times 7 = 84$ $12 \times 8 = 96$ $12 \times 9 = 108$ $12 \times 10 = 120$ $12 \times 11 = 132$ $12 \times 12 = 144$

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Year 2 - 4

All Division Facts

DIVISION

ONES	TWOS	THREES	FOURS	FIVES	SIXES
$1 \div 1 = 1$	$2 \div 2 = 1$	$3 \div 3 = 1$	$4 \div 4 = 1$	$5 \div 5 = 1$	$6 \div 6 = 1$
$2 \div 1 = 2$	$4 \div 2 = 2$	$6 \div 3 = 2$	$8 \div 4 = 2$	$10 \div 5 = 2$	$12 \div 6 = 2$
$3 \div 1 = 3$	$6 \div 2 = 3$	$9 \div 3 = 3$	$12 \div 4 = 3$	$15 \div 5 = 3$	$18 \div 6 = 3$
$4 \div 1 = 4$	$8 \div 2 = 4$	$12 \div 3 = 4$	$16 \div 4 = 4$	$20 \div 5 = 4$	$24 \div 6 = 4$
$5 \div 1 = 5$	$10 \div 2 = 5$	$15 \div 3 = 5$	$20 \div 4 = 5$	$25 \div 5 = 5$	$30 \div 6 = 5$
$6 \div 1 = 6$	$12 \div 2 = 6$	$18 \div 3 = 6$	$24 \div 4 = 6$	$30 \div 5 = 6$	$36 \div 6 = 6$
$7 \div 1 = 7$	$14 \div 2 = 7$	$21 \div 3 = 7$	$28 \div 4 = 7$	$35 \div 5 = 7$	$42 \div 6 = 7$
$8 \div 1 = 8$	$16 \div 2 = 8$	$24 \div 3 = 8$	$32 \div 4 = 8$	$40 \div 5 = 8$	$48 \div 6 = 8$
$9 \div 1 = 9$	$18 \div 2 = 9$	$27 \div 3 = 9$	$36 \div 4 = 9$	$45 \div 5 = 9$	$54 \div 6 = 9$
$10 \div 1 = 10$	$20 \div 2 = 10$	$30 \div 3 = 10$	$40 \div 4 = 10$	$50 \div 5 = 10$	$60 \div 6 = 10$
$11 \div 1 = 11$	$22 \div 2 = 11$	$33 \div 3 = 11$	$44 \div 4 = 11$	$55 \div 5 = 11$	$66 \div 6 = 11$
$12 \div 1 = 12$	$24 \div 2 = 12$	$36 \div 3 = 12$	$48 \div 4 = 12$	$60 \div 5 = 12$	$72 \div 6 = 12$
SEVENS	EIGHTS	NINES	TENS	ELEVENS	TWELVES
$7 \div 7 = 1$	$8 \div 8 = 1$	$9 \div 9 = 1$	$10 \div 10 = 1$	$11 \div 11 = 1$	$12 \div 12 = 1$
$14 \div 7 = 2$	$16 \div 8 = 2$	$18 \div 9 = 2$	$20 \div 10 = 2$	$22 \div 11 = 2$	$24 \div 12 = 2$
$21 \div 7 = 3$	$24 \div 8 = 3$	$27 \div 9 = 3$	$30 \div 10 = 3$	$33 \div 11 = 3$	$36 \div 12 = 3$
$28 \div 7 = 4$	$32 \div 8 = 4$	$36 \div 9 = 4$	$40 \div 10 = 4$	$44 \div 11 = 4$	$48 \div 12 = 4$
$35 \div 7 = 5$	$40 \div 8 = 5$	$45 \div 9 = 5$	$50 \div 10 = 5$	$55 \div 11 = 5$	$60 \div 12 = 5$
$42 \div 7 = 6$	$48 \div 8 = 6$	$54 \div 9 = 6$	$60 \div 10 = 6$	$66 \div 11 = 6$	$72 \div 12 = 6$
$49 \div 7 = 7$	$56 \div 8 = 7$	$63 \div 9 = 7$	$70 \div 10 = 7$	$77 \div 11 = 7$	$84 \div 12 = 7$
$56 \div 7 = 8$	$64 \div 8 = 8$	$72 \div 9 = 8$	$80 \div 10 = 8$	$88 \div 11 = 8$	$96 \div 12 = 8$
$63 \div 7 = 9$	$72 \div 8 = 9$	$81 \div 9 = 9$	$90 \div 10 = 9$	$99 \div 11 = 9$	$108 \div 12 = 9$
$70 \div 7 = 10$	$80 \div 8 = 10$	$90 \div 9 = 10$	$100 \div 10 = 10$	$110 \div 11 = 10$	$120 \div 12 = 10$
$77 \div 7 = 11$	$88 \div 8 = 11$	$99 \div 9 = 11$	$110 \div 10 = 11$	$121 \div 11 = 11$	$132 \div 12 = 11$
$84 \div 7 = 12$	$96 \div 8 = 12$	$108 \div 9 = 12$	$120 \div 10 = 12$	$132 \div 11 = 12$	$144 \div 12 = 12$

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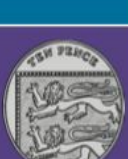
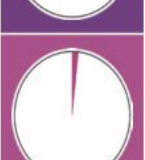
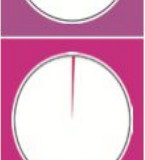
36
essential
facts

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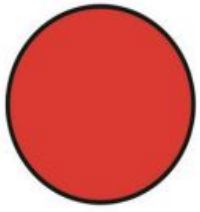


Year 4 to 6

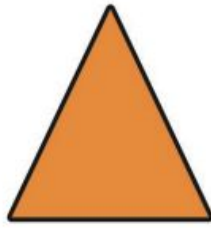
Fractions, Decimals, Percentages and Money Equivalents (£ and p)

	=	1	=	1	=	100%	=	£1.00 or 100p	=	
	=	$\frac{1}{2}$	=	0.5	=	50%	=	£0.50 or 50p	=	
	=	$\frac{1}{3}$	=	0.3	=	33.3%	=	-	=	-
	=	$\frac{1}{4}$	=	0.25	=	25%	=	-	=	-
	=	$\frac{1}{5}$	=	0.2	=	20%	=	£0.20 or 20p	=	
	=	$\frac{1}{8}$	=	0.125	=	12.5%	=	-	=	-
	=	$\frac{1}{10}$	=	0.1	=	10%	=	£0.10 or 10p	=	
	=	$\frac{1}{20}$	=	0.05	=	5%	=	£0.05 or 5p	=	
	=	$\frac{1}{50}$	=	0.02	=	2%	=	£0.02 or 2p	=	
	=	$\frac{1}{100}$	=	0.01	=	1%	=	£0.01 or 1p	=	

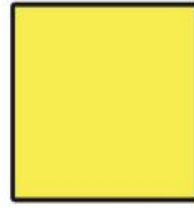
2D and 3D Shapes



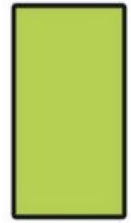
circle



triangle



square



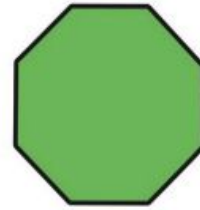
rectangle



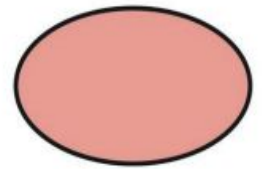
pentagon



hexagon



octagon



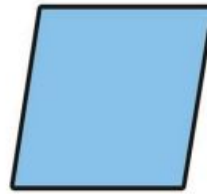
oval



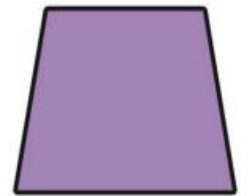
rhombus



semicircle



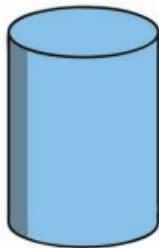
parallelogram



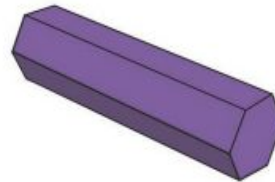
trapezium



square-based
pyramid



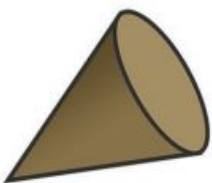
cylinder



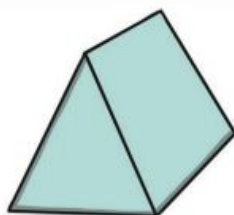
hexagonal prism



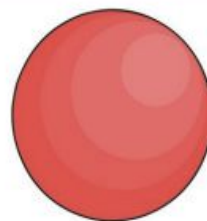
cube



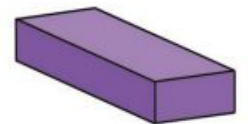
cone



triangular prism



sphere



cuboid

Days of the Week and Months of the Year

Monday

Thursday

Tuesday

Friday

Wednesday

Saturday

Sunday

January

February

March

April

May

June

July

August

September

October

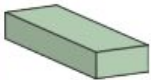
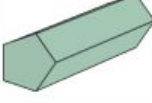
November

December

2D SHAPES

Name		Sides	Vertices
triangle		3	3
square		4	4
rectangle		4	4
pentagon		5	5
hexagon		6	6
rhombus		4	4
trapezium		4	4
parallelogram		4	4
octagon		8	8

3D SHAPES

Name	Surfaces		Edges		Vertices	Picture
	Flat	Curved	Flat	Curved		
sphere	0	1	0	0	0	
cube	6	0	12	0	8	
cuboid	6	0	12	0	8	
cone	1	1	0	1	1	
cylinder	2	1	0	2	0	
square-based pyramid	5	0	8	0	5	
tetrahedron	4	0	6	0	4	
triangular prism	5	0	9	0	6	
pentagonal prism	7	0	15	0	10	
hexagonal prism	8	0	18	0	12	
octagonal prism	10	0	24	0	16	
octahedron	8	0	12	0	6	

British Coins and Notes



1p

one penny

2p

two pence

5p

five pence

10p

ten pence

20p

twenty pence

50p

fifty pence

£1

one pound

£2

two pounds



£5

five pounds



£10

ten pounds



£20

twenty pounds



£50

fifty pounds

ODD AND EVEN NUMBERS

ODD NUMBERS

All odd numbers end with one of the following digits –

1
3
5
7
9

Examples:

11	13	15	17	19
21	23	25	27	29
31	33	35	37	39
41	43	45	47	49
51	53	55	57	59
61	63	65	67	69
71	73	75	77	79
81	83	85	87	89
91	93	95	97	99

EVEN NUMBERS

All even numbers end with one of the following digits –

0
2
4
6
8

Examples:

10	12	14	16	18
20	22	24	26	28
30	32	34	36	38
40	42	44	46	48
50	52	54	56	58
60	62	64	66	68
70	72	74	76	78
80	82	84	86	88
90	92	94	96	98

PRIME NUMBERS

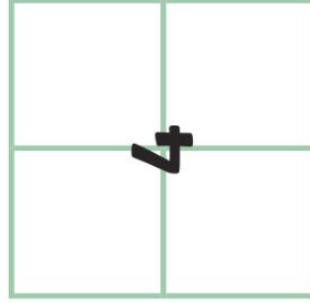
A prime number is a whole number which can only be divided by itself and 1.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

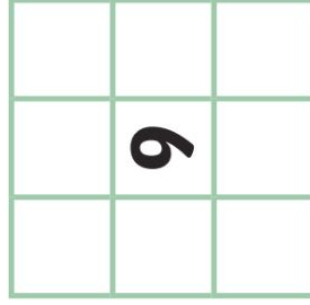
SQUARE NUMBERS



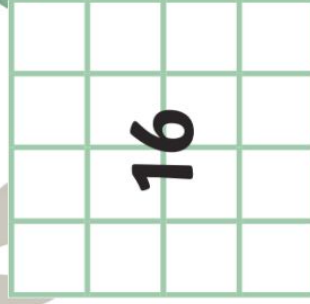
1



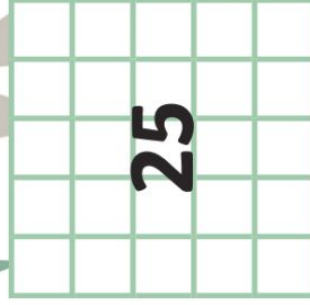
4



9

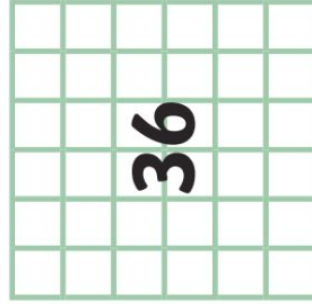


16

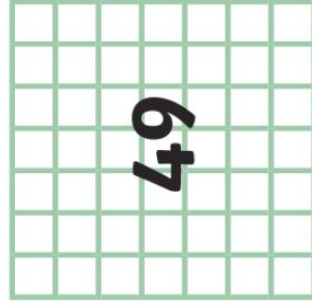


25

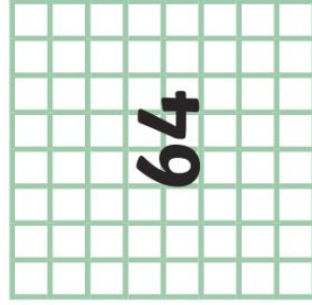
$$1^2 \ 1 \times 1 = 1 \quad 2^2 \ 2 \times 2 = 4 \quad 3^2 \ 3 \times 3 = 9 \quad 4^2 \ 4 \times 4 = 16 \quad 5^2 \ 5 \times 5 = 25$$



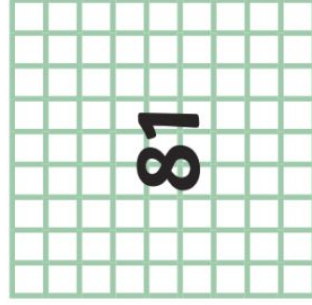
36



49

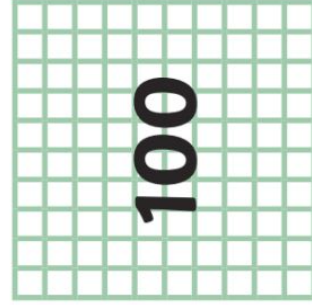


64

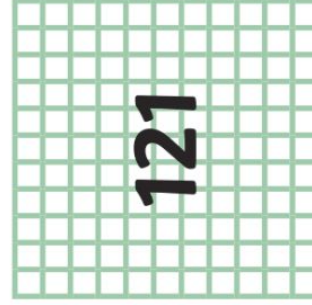


81

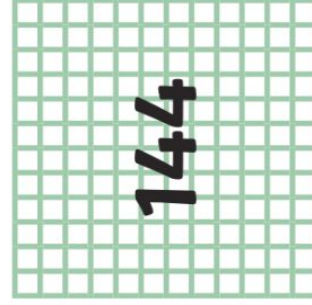
$$6^2 \ 6 \times 6 = 36 \quad 7^2 \ 7 \times 7 = 49 \quad 8^2 \ 8 \times 8 = 64 \quad 9^2 \ 9 \times 9 = 81$$



100



121



144

$$10^2 \ 10 \times 10 = 100 \quad 11^2 \ 11 \times 11 = 121 \quad 12^2 \ 12 \times 12 = 144$$

ROMAN NUMERALS

Can you count by only using letters?

I	1	XXX	30
II	2	XL	40
III	3	L	50
IV	4	LX	60
V	5	LXX	70
VI	6	LXXX	80
VII	7	XC	90
VIII	8	C	100
IX	9	D	500
X	10	M	1000
XX	20	MD	1500

A decorative border of green and grey leaves surrounds the central text area.

TIME

60 seconds = 1 minute

60 minutes = 1 hour

24 hours = 1 day

7 days = 1 week

365 days = 1 year

52 weeks = 1 year

10 years = 1 decade

100 years = 1 century

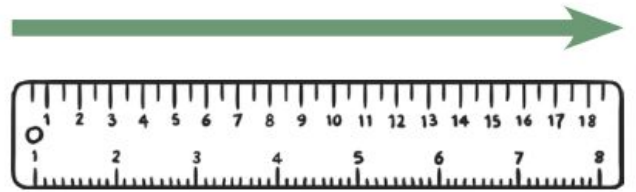
1000 years = 1 millennium

TYPES OF LINES

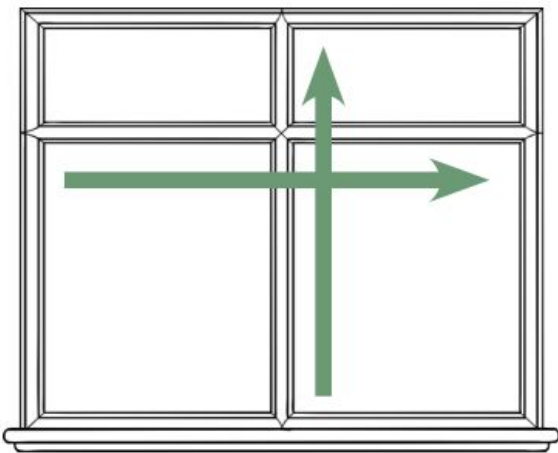
VERTICAL



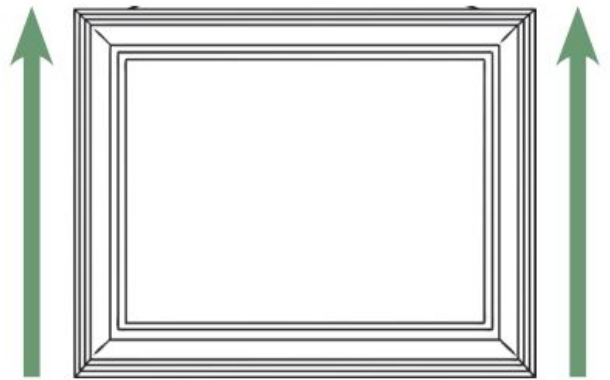
HORIZONTAL



PERPENDICULAR

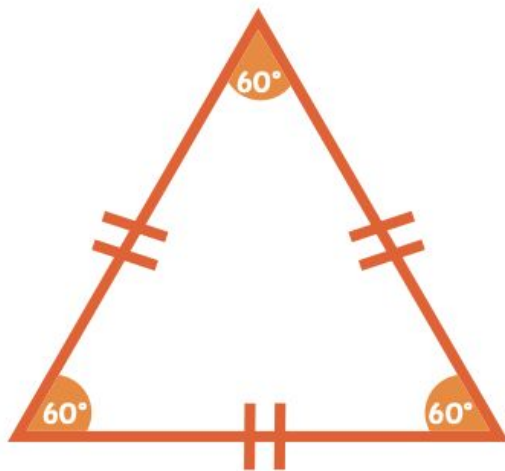


PARALLEL



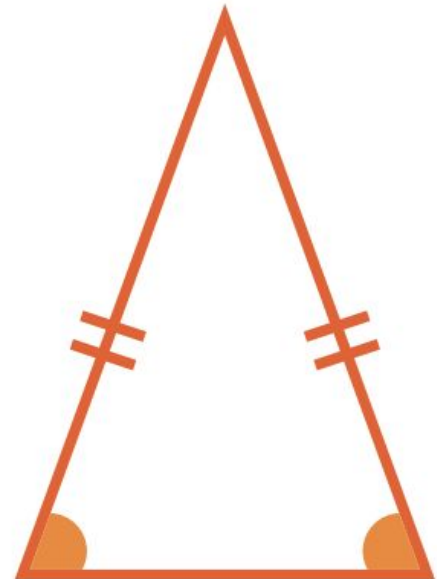
Types of Triangle

equilateral



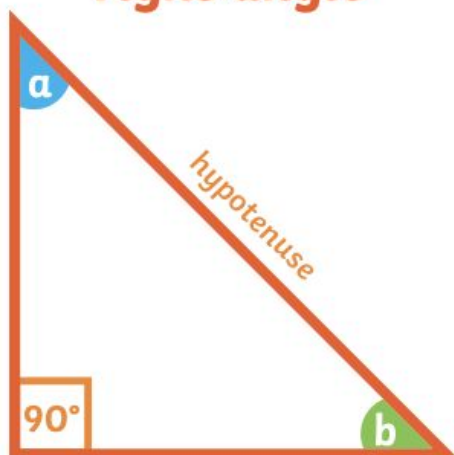
3 equal sides
3 equal angles (60°)

isosceles



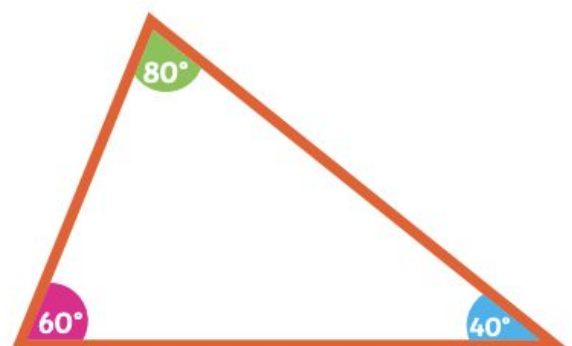
2 equal sides
2 equal angles

right angle

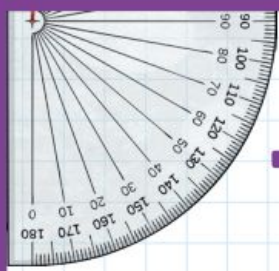


One angle is a right angle (90°)
Two other angles add up to 90°
The longest side is called the hypotenuse.

scalene



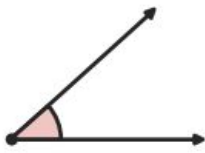
All sides are different
All angles are different.



Types of Angles

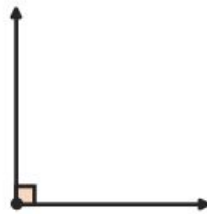
Acute Angles

Between 0° and 90°



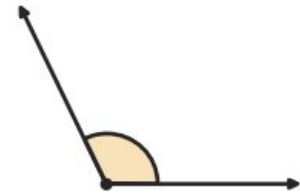
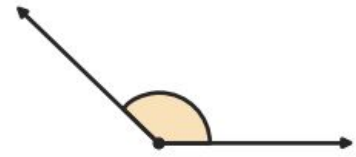
Right Angle

90°



Obtuse Angles

Between 90° and 180°



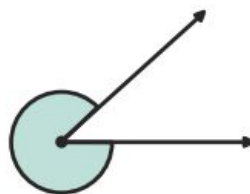
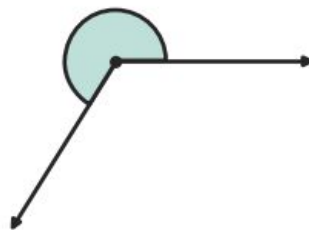
Straight Angle

180°



Reflex Angle

Between 180° and 360°



Full Revolution

360°



Converting Units

Knowledge Organiser

Key Vocabulary

mass

gram

kilogram

capacity

volume

millilitre

centilitre

litre

millimetre

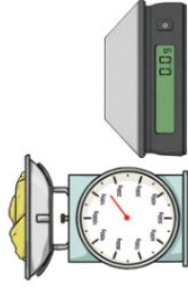
centimetre

kilometre



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Converting Mass



$\times 1000$

kg

$\div 1000$

g

$$1000\text{g} = 1\text{kg}$$

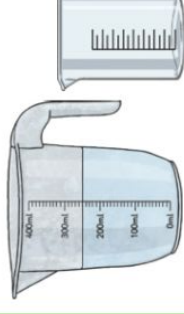
$$\frac{1}{10}\text{kg} = 0.1\text{kg} = 100\text{g}$$

$$\frac{1}{4}\text{kg} = 0.25\text{kg} = 250\text{g}$$

$$\frac{1}{2}\text{kg} = 0.5\text{kg} = 500\text{g}$$

$$\frac{3}{4}\text{kg} = 0.75\text{kg} = 750\text{g}$$

Converting Capacity



$\times 1000$

l

$\div 1000$

ml

$$1000\text{ml} = 1\text{ litre}$$

$$\frac{1}{10}\text{l} = 0.1\text{l} = 100\text{ml}$$

$$\frac{1}{4}\text{l} = 0.25\text{l} = 250\text{ml}$$

$$\frac{1}{2}\text{l} = 0.5\text{l} = 500\text{ml}$$

$$\frac{3}{4}\text{l} = 0.75\text{l} = 750\text{ml}$$

$$\frac{1}{100}\text{l} = 0.01\text{l} = 10\text{ml}$$

Converting Length



$\times 1000$

km

$\div 1000$

m

$\times 100$

cm

$\div 100$

$\times 10$

mm

$\div 10$

$$1000\text{ metres} = 1\text{ kilometre}$$

$$100\text{cm} = 1\text{m}$$

$$10\text{mm} = 1\text{cm}$$

$$\frac{1}{10}\text{km} = 0.1\text{km} = 100\text{m}$$

$$\frac{1}{4}\text{km} = 0.25\text{km} = 250\text{m}$$

$$\frac{1}{2}\text{km} = 0.5\text{km} = 500\text{m}$$

$$\frac{3}{4}\text{km} = 0.75\text{km} = 750\text{m}$$