

Year 3 Maths Facts to Memorise

Time

- 60 seconds in a minute
 - 60 minutes in a hour
 - 30 minutes in half an hour
 - 24 hours in a day
 - 7 days in a week
 - 12 months in a year
 - 52 weeks in a year
 - 365 days in a year
 - 366 days in a leap year
 - a leap year comes every four years (2004 was a leap year so I know that 2008, 2016, etc., will also be leap years.
 - a century is 100 years
 - a millennium is 1000 years
 - tell the time to the nearest 5 minutes
 - Convert 12 hour 'analogue' times to digital, e.g. 3 o'clock = 3.00, half past 3 = 3.30, quarter past 3 = 3.15, quarter to 3 = 3.45
 - know that a.m. relates to times from midnight to midday and p.m. relates to times from midday to midnight.
- 30 days hath September,
April, June and November,
All the rest have 31,
Except February alone,
And that hath 28 days clear,
And 29 in each leap year.

Example questions:

What is the fourth month?

What is the month before June?

What time is it now?

How many minutes in quarter of an hour?

If I go swimming at 3 o'clock and stay in the pool for an hour/half an hour, what time do I get out on the digital clock?

How many seconds in 2 minutes?

How many hours in 2 days?

What time is 9.45pm on the analogue clock? Where should you be at this time?

Number

- Say if any number to 100 is odd or even. Give a number which is odd/even between, e.g. 32 and 45.
- Know the following multiplication tables both in and out of order:

2 x tables $1 \times 2 = 2$ $2 \times 2 = 4$ $3 \times 2 = 6$ $4 \times 2 = 8$ $5 \times 2 = 10$ $6 \times 2 = 12$ $7 \times 2 = 14$ $8 \times 2 = 16$ $9 \times 2 = 18$ $10 \times 2 = 20$ $11 \times 2 = 22$ $12 \times 2 = 24$	3 x tables $1 \times 3 = 3$ $2 \times 3 = 6$ $3 \times 3 = 9$ $4 \times 3 = 12$ $5 \times 3 = 15$ $6 \times 3 = 18$ $7 \times 3 = 21$ $8 \times 3 = 24$ $9 \times 3 = 27$ $10 \times 3 = 30$ $11 \times 3 = 33$ $12 \times 3 = 36$	4 x tables $1 \times 4 = 4$ $2 \times 4 = 8$ $3 \times 4 = 12$ $4 \times 4 = 16$ $5 \times 4 = 20$ $6 \times 4 = 24$ $7 \times 4 = 28$ $8 \times 4 = 32$ $9 \times 4 = 36$ $10 \times 4 = 40$ $11 \times 4 = 44$ $12 \times 4 = 48$
5 x tables $1 \times 5 = 5$ $2 \times 5 = 10$ $3 \times 5 = 15$ $4 \times 5 = 20$ $5 \times 5 = 25$ $6 \times 5 = 30$ $7 \times 5 = 35$	6 x tables $1 \times 6 = 6$ $2 \times 6 = 12$ $3 \times 6 = 18$ $4 \times 6 = 24$ $5 \times 6 = 30$ $6 \times 6 = 36$ $7 \times 6 = 42$	7 x tables $1 \times 7 = 7$ $2 \times 7 = 14$ $3 \times 7 = 21$ $4 \times 7 = 28$ $5 \times 7 = 35$ $6 \times 7 = 42$ $7 \times 7 = 49$

$8 \times 5 = 40$	$8 \times 6 = 48$	$8 \times 7 = 56$
$9 \times 5 = 45$	$9 \times 6 = 54$	$9 \times 7 = 63$
$10 \times 5 = 50$	$10 \times 6 = 60$	$10 \times 7 = 70$
$11 \times 5 = 55$	$11 \times 6 = 66$	$11 \times 7 = 77$
$12 \times 5 = 60$	$12 \times 6 = 72$	$12 \times 7 = 84$
8 x tables	9 x tables	10 x tables
$1 \times 8 = 8$	$1 \times 9 = 9$	$1 \times 10 = 10$
$2 \times 8 = 16$	$2 \times 9 = 18$	$2 \times 10 = 20$
$3 \times 8 = 24$	$3 \times 9 = 27$	$3 \times 10 = 30$
$4 \times 8 = 32$	$4 \times 9 = 36$	$4 \times 10 = 40$
$5 \times 8 = 40$	$5 \times 9 = 45$	$5 \times 10 = 50$
$6 \times 8 = 48$	$6 \times 9 = 54$	$6 \times 10 = 60$
$7 \times 8 = 56$	$7 \times 9 = 63$	$7 \times 10 = 70$
$8 \times 8 = 64$	$8 \times 9 = 72$	$8 \times 10 = 80$
$9 \times 8 = 72$	$9 \times 9 = 81$	$9 \times 10 = 90$
$10 \times 8 = 80$	$10 \times 9 = 90$	$10 \times 10 = 100$
$11 \times 8 = 88$	$11 \times 9 = 99$	$11 \times 10 = 110$
$12 \times 8 = 96$	$12 \times 9 = 108$	$12 \times 10 = 120$

Place Value

Understand that as you move up the grid numbers are multiplied by 10 and as you move down it they are divided by 10.

1000	2000	3000	4000	5000	6000	7000	8000	9000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

Example questions:

- What is 30 multiplied by 10?
- What is 8000 divided by 10?

Money

- Know 100p = £1
- Know 2 x 50p = £1
- Know 5 x 20p = £1
- Know 10 x 10p = £1
- Know 20 x 5p = £1
- Know 50 x 2p = £1

Fractions

Know how many of a given fraction equals 1 (a whole).

1 (a whole)							
1/2				1/2			
1/3			1/3			1/3	
1/4		1/4		1/4		1/4	
1/6	1/6	1/6		1/6	1/6	1/6	
1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8

Example questions:

- How many quarters in a whole?
- How many halves in 2 and 1/2?
- $4 \times ? = 1$

Convert decimals to fractions and vice versa:

- $0.5 = 1/2$
- $0.25 = 1/4$
- $0.75 = 3/4$
- $0.1 = 1/10$

Vocab

Know all the following mathematical signs and be able to do the correct calculation when alternative terms are used.

- + add, plus, and, total, altogether
- minus, take away, subtract, find the difference, less than, fewer than
- X times, multiply, lots of, groups of

- ÷ divide, share, put in groups of, halve
- = equals, makes, is the same as, totals
- > the first number is greater than the second number, e.g. $24 > 16$
- < the first number is less than the second number, e.g. $17 < 20$

Example questions:

- What is the **total** of 7 and 3?
- Freddie has 10 pencils, Amy has 4 pencils. How many **fewer** pencils does Amy have than Freddie?
- What is 2 **multiplied** by 10?
- There are 30 children in Year 2. Mr Lester wants to put them into **groups of** 10. How many groups can he make?
- Amy has 3 information books and 2 story books. What is the **total** number of books she has altogether?

Measures

Know all abbreviations:

millimetres = mm
 centimetres = cm
 metres = m
 kilometres = km
 milligrams = mg
 grams = g
 kilograms = kg
 millilitres = ml
 litres = l

Know the equivalent measures:

10 mm = 1 cm
 100 cm = 1 m
 1000 mm = 1 m
 1000 m = 1 km
 500 m = $\frac{1}{2}$ km

1000 mg = 1 g
 1000 g = 1 kg
 500 g = $\frac{1}{2}$ kg

1000 ml = 1l
 500 ml = $\frac{1}{2}$ l

2D Shapes

Name and recognise all the 2d shapes from Years 1 and 2, both regular and irregular forms.

3D shapes

Name and recognise all the 3d shapes from Years 1 and 2, and give their properties (number of faces, edges and vertices (corners)).