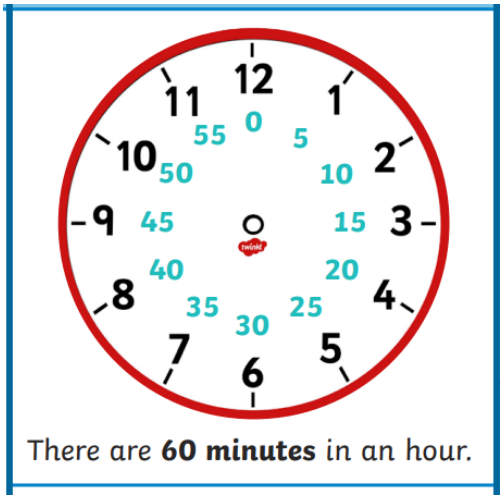
Time 'Learn by Heart' Facts

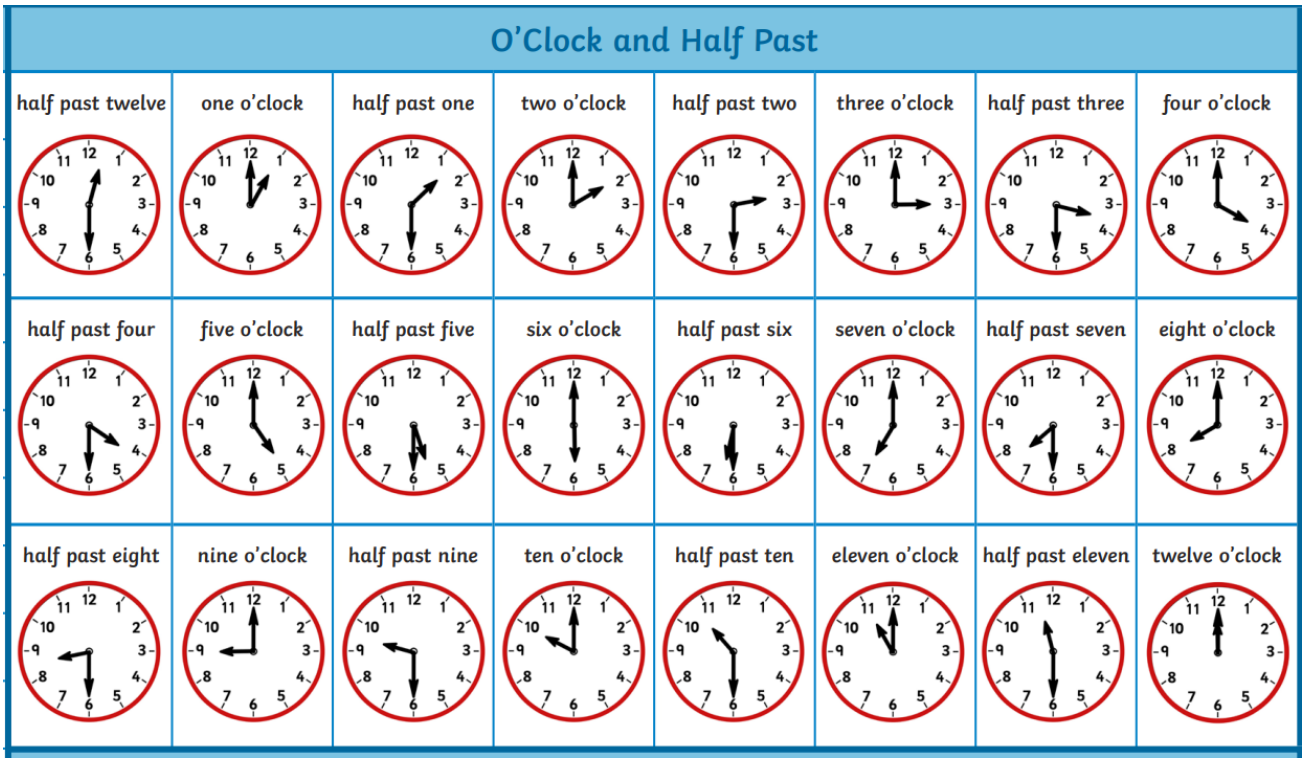
Children in Year 2 need to be able to tell the time to the hour and half past the hour. They also need to know the facts below:

- 60 minutes = 1 hour
- 30 minutes = half an hour
- 7 days = 1 week
-

Children can convert 12 hour analogue times to digital e.g.:

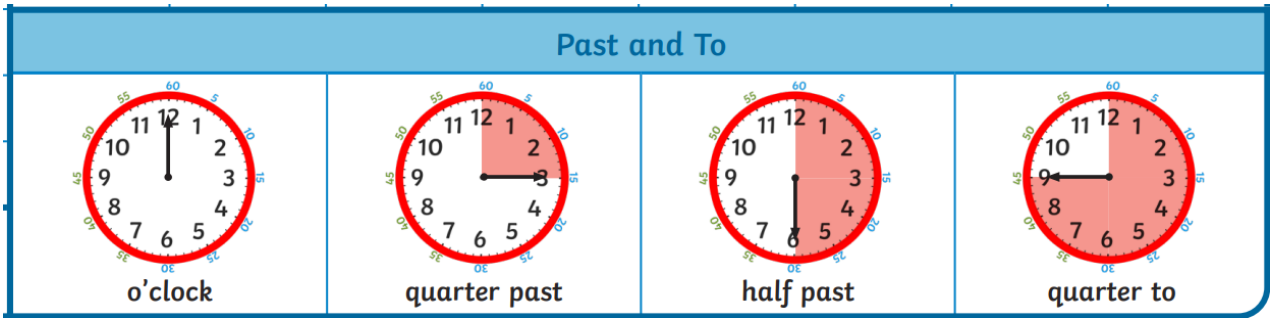
- 12 o'clock = 12.00
- 1 o'clock = 1.00
- 2 o 'clock = 2.00
- 3 o'clock = 3.00
- 4 o' clock = 4.00
- 5 o'clock = 5:00
- 6 o'clock = 6:00
- Half past 5 = 5:30
- Half past 6 = 6:30
- Half past 7 = 7:30
- Half past 8 = 8.30
- Half past 9 = 9:30
- Half past 10 = 10.30





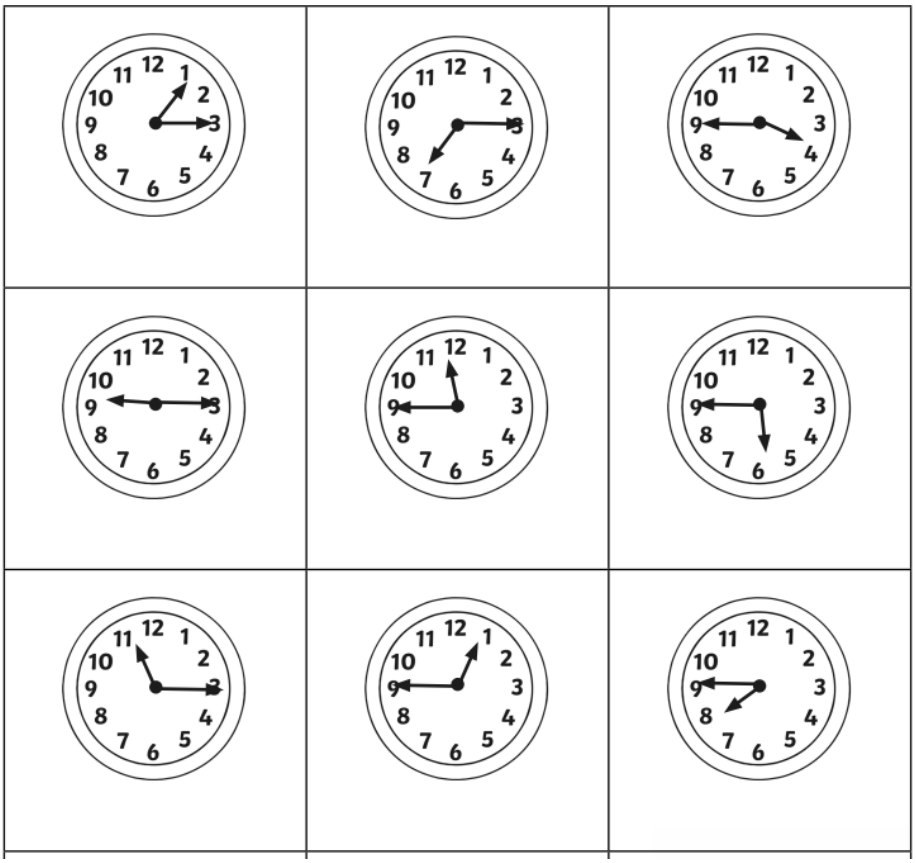
Time 'Learn by Heart' Facts

Try to support your child to understand how to tell the time using an analogue clock when the time is <u>quarter to</u> or <u>quarter past</u> the hour.

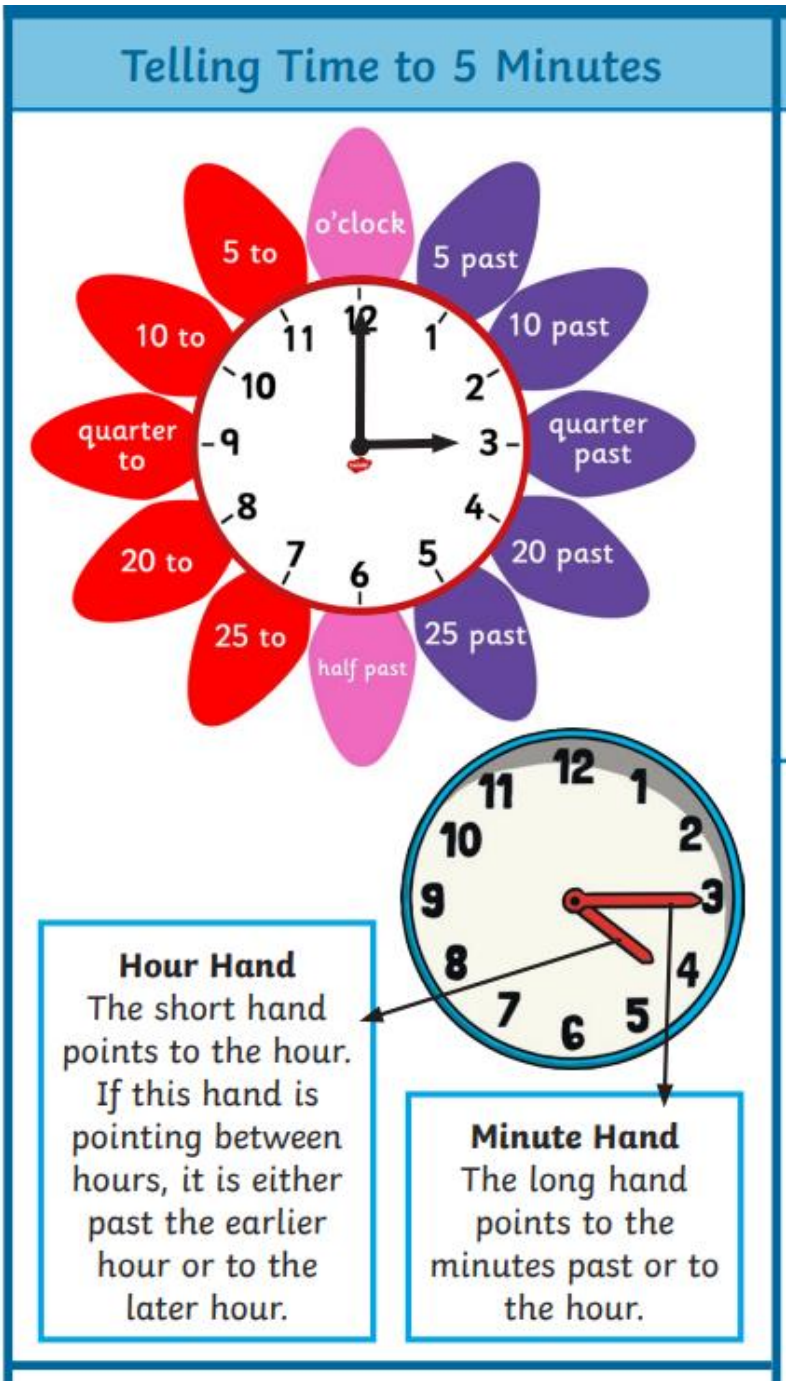


Draw clock faces and ask your child to tell you the time at these points of the day. Alternatively, support your child to learn the times on the clocks below.

Write down the time each clock is showing on the line underneath.



Telling the Time to Five Minutes – Learn by Heart Facts



Help your child to understand what each 'number' on the clock corresponds to (in relation to the five-minute intervals) when the MINUTE hand is pointing to it.

For example:

1 – 5 past.....

2 = 10 past.....

3 = Quarter past.....

4 = 20 past.....

5 = 25 past.....

6 = Half past.....

7 = 25 to.....

8 = 20 to.....

9 = Quarter to.....

10 = 10 to.....

11= 5 to.....

Length and Height 'Learn by Heart' Facts

Children in Year Two need to know the measures and vocabulary shown below. Look around the house and in the outside environment and ask children to tell you what they think certain things you spot would be measured in. Try to use the vocabulary of 'taller', ;shorter', 'longer' etc.

Centimeter = cm

Meter = m

Taller

Smaller

Shorter

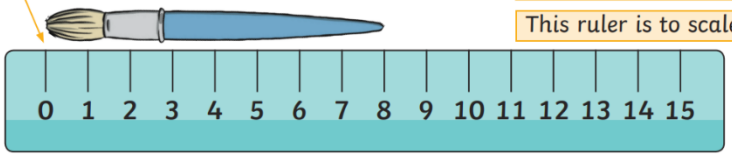
longer

Measuring in Centimetres

Measure from zero.

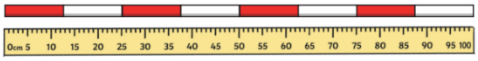
This ruler measures in **centimetres (cm)**. The paintbrush is 8cm long.

This ruler is to scale.



Measuring in Metres

We can measure the length or height of larger objects in **metres (m).**
The girl is 1m and 20cm tall.

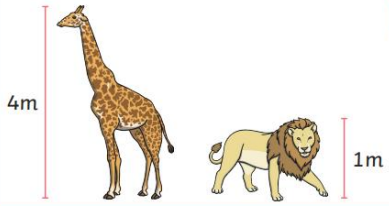


We can use metre sticks, trundle wheels or tape measures.
1 metre = 100 centimetres

Comparing Height

The giraffe is **taller** than the lion.
The lion is **shorter** than the giraffe.

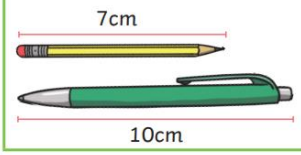
4m >1m



Comparing Length

The pencil is **shorter** than the pen.
The pen is **longer** than the pencil.

7cm<10cm



Days of the Week 'Learn by Heart' Facts

Children need to know the order of the days of the week and to be able to name each day starting with a capital letter.

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

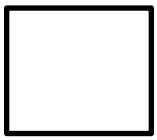
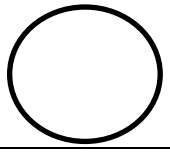
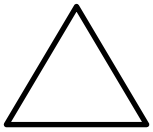
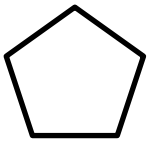
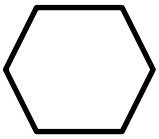
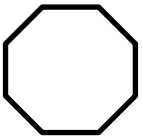
Months of the Year 'Learn by Heart' Facts

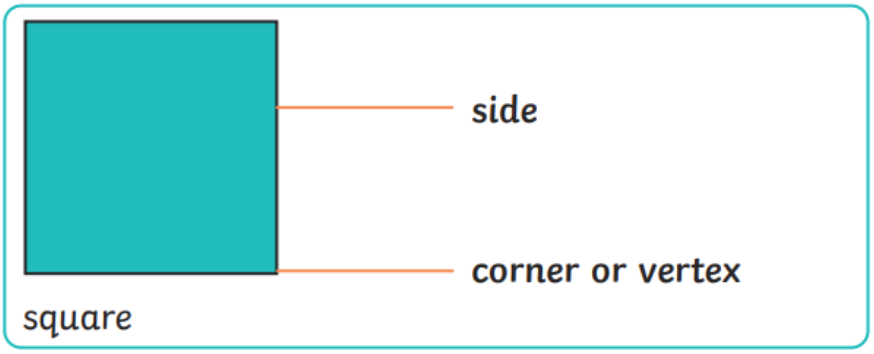
Children need to be able to name (starting with a capital letter) and order the months of the year:

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

2D Shape 'Learn by Heart' Facts

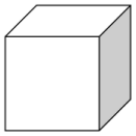
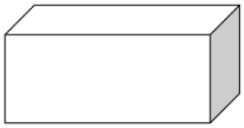
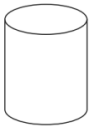
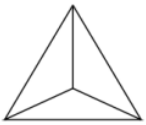
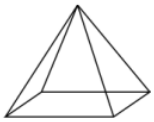
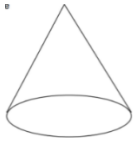
Children can name and recognize the following 2D shapes and know their properties. They can also recognize the shapes within their environment.

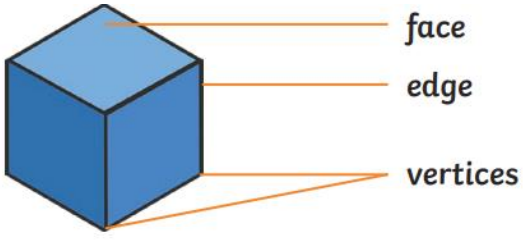
Shape		Sides	Corners (Vertices)
Square		**4**	**4**
Rectangle		**4**	**4**
Circle		**1**	**0**
Triangle		**3**	**3**
Pentagon		**5**	**5**
Hexagon		**6**	**6**
Octogon		**8**	**8**



3D Shape 'Learn by Heart' Facts

Children can name and recognise the following 3D shapes and give their properties (number of faces, edges and vertices (corners). They are also able to recognise these shapes in the environment (e.g. a tin of baked beans and a tin of tuna are both cylinders).

Shape		Faces	Edges	Vertices
Cube		6	12	8
Cuboid		6	12	8
Cylinder		3	2	0
Triangular based pyramid		4	6	4
Square based pyramid		5	8	5
Sphere		1	0	0
Cone		2	1	1



cube

Number Bonds to 20 (+) 'Learn by Heart' Facts

Children should know the following facts.The aim is for them to recall these facts instantly:

0 + 20 = 20	20 + 0 = 20
1 + 19 = 20	19 + 1 = 20
2 + 18 = 20	18 + 2 = 20
3 + 17 = 20	17 + 3 = 20
4 + 16 = 20	16 + 4 = 20
5 + 15 = 20	15 + 5 = 20
6 + 14 = 20	14 + 6 = 20
7 + 13 = 20	13 + 7 = 20
8 + 12 = 20	12 + 8 = 20
9 + 11 = 20	11 + 9 = 20
10 + 10 = 20	

Key Vocabulary

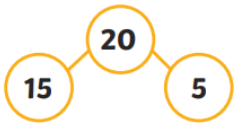
What do I **add** to 5 to make 20?

What is 20 **take away** 6?

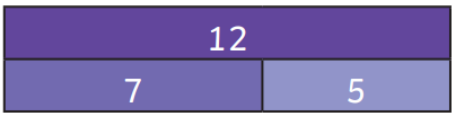
What is 3 **less than** 20?

How many more than 16 is 20?

Addition and Subtraction Bonds to 20

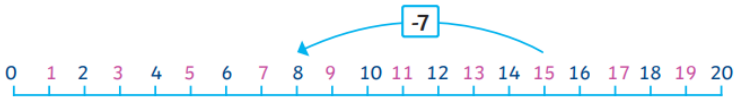


15 + 5 = 20
20 – 5 = 15
20 – 15 = 5



7 + 5 = 12
12 – 5 = 7
12 – 7 = 5

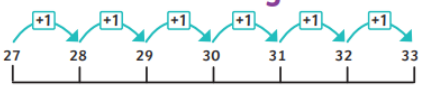
4 + 3 = 7



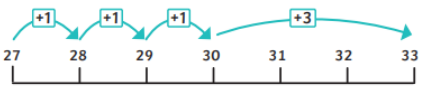
15 – 7 = 8

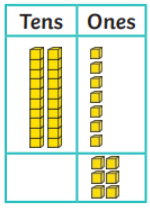
Methods

Add 2-digit and 1-digit

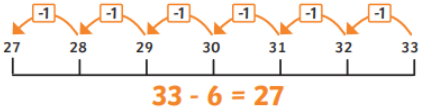


27 + 6 = 33

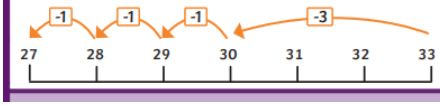


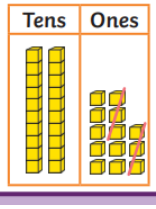


Subtract 1-digit from 2-digit



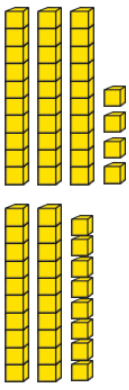
33 - 6 = 27





Add 2-digit numbers

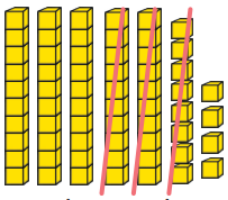
34 + 28 = 62



3 tens and 4 ones add 2 tens and 8 ones equals 5 tens and 12 ones becomes 6 tens and 2 ones

Subtract 2-digit numbers

62 – 28 = 34



6 tens and 2 ones becomes 5 tens and 12 ones subtract 2 tens and 8 ones equals 3 tens and 4 ones

Number Bonds to 20 (-) 'Learn by Heart' Facts

Children should know the following facts. The aim is for them to recall these facts instantly:

- 20 – 0 = 20 — 20 – 20 = 0
- 20 – 1 = 19 — 20 – 19 = 1
- 20 – 2 = 18 — 20 - 18 = 2
- 20 – 3 = 17 — 20 – 17 = 3
- 20 – 4 = 16 — 20 – 16 = 4
- 20 – 5 = 15 — 20 – 15 = 5
- 20 – 6 = 14 — 20 – 14 = 6
- 20 – 7 = 13 — 20 – 13 = 7
- 20 – 8 = 12 — 20 – 12 = 8
- 20 – 9 = 11 — 20 – 11 = 9
- 20 – 10 = 10

They should be able to answer these questions in any order, including missing number questions e.g. 19 + ○ = 20 or 20 - ○ = 8.

Key Vocabulary

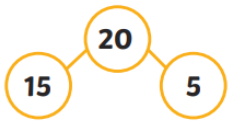
What do I **add** to 5 to make 20?

What is 20 **take away** 6?

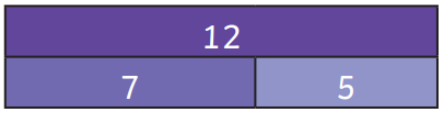
What is 3 **less than** 20?

How many more than 16 is 20?

Addition and Subtraction Bonds to 20

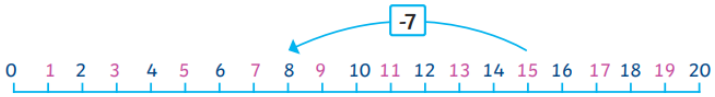


15 + 5 = 20
20 – 5 = 15
20 – 15 = 5



7 + 5 = 12
12 – 5 = 7
12 – 7 = 5

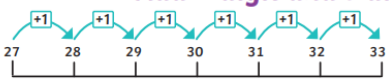
4 + 3 = 7



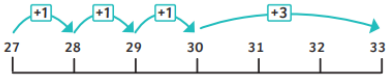
15 – 7 = 8

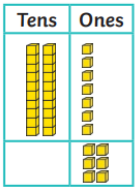
Methods

Add 2-digit and 1-digit

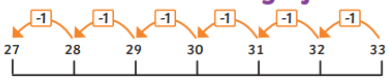


27 + 6 = 33

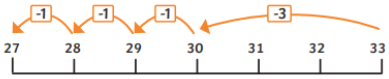


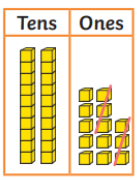


Subtract 1-digit from 2-digit



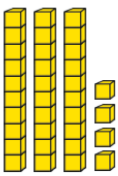
33 - 6 = 27





Add 2-digit numbers

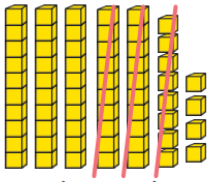
34 + 28 = 62



3 tens and 4 ones add 2 tens and 8 ones equals 5 tens and 12 ones becomes 6 tens and 2 ones

Subtract 2-digit numbers

62 – 28 = 34



6 tens and 2 ones becomes 5 tens and 12 ones subtract 2 tens and 8 ones equals 3 tens and 4 ones

Two times table 'Learn by Heart' Facts

Children should know multiplication facts for the two times table.

MULTIPLICATION

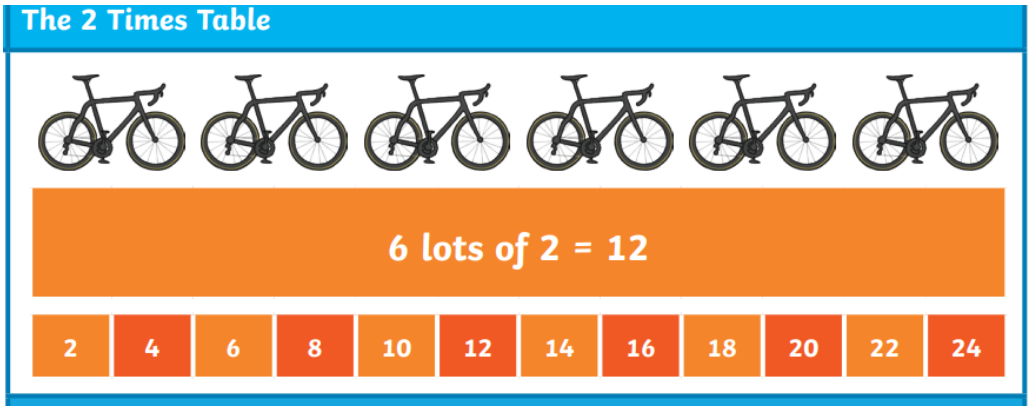
2 × 1 = 2
2 × 2 = 4
2 × 3 = 6
2 × 4 = 8
2 × 5 = 10
2 × 6 = 12
2 × 7 = 14
2 × 8 = 16
2 × 9 = 18
2 × 10 = 20
2 × 11 = 22
2 × 12 = 24

Key Vocabulary

What is 2 **multiplied by** 7?

What is 2 **times** 9?

What is 12 **divided by** 2?



Two times table 'Learn by Heart' Facts

Children should know multiplication facts for the two times table.

MULTIPLICATION

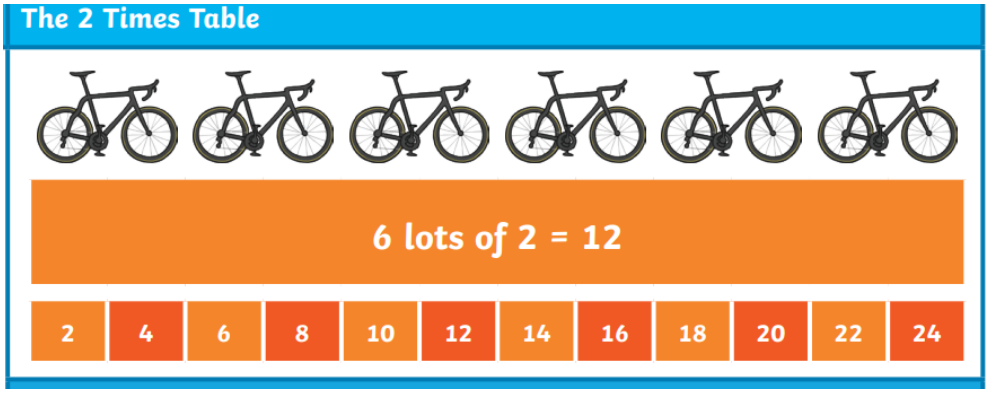
2 × 1 = 2
2 × 2 = 4
2 × 3 = 6
2 × 4 = 8
2 × 5 = 10
2 × 6 = 12
2 × 7 = 14
2 × 8 = 16
2 × 9 = 18
2 × 10 = 20
2 × 11 = 22
2 × 12 = 24

Key Vocabulary

What is 2 **multiplied by** 7?

What is 2 **times** 9?

What is 12 **divided by** 2?



Two times table 'Learn by Heart' Facts

Children should know the division facts for the two times table.

DIVISION

$2 \div 2 = 1$
$4 \div 2 = 2$
$6 \div 2 = 3$
$8 \div 2 = 4$
$10 \div 2 = 5$
$12 \div 2 = 6$
$14 \div 2 = 7$
$16 \div 2 = 8$
$18 \div 2 = 9$
$20 \div 2 = 10$
$22 \div 2 = 11$
$24 \div 2 = 12$

Key Vocabulary

What is 2 **multiplied by** 7?

What is 2 **times** 9?

What is 12 **divided by** 2?

Two times table 'Learn by Heart' Facts

Children should know multiplication and division facts for the two times table.

DIVISION

$2 \div 2 = 1$
$4 \div 2 = 2$
$6 \div 2 = 3$
$8 \div 2 = 4$
$10 \div 2 = 5$
$12 \div 2 = 6$
$14 \div 2 = 7$
$16 \div 2 = 8$
$18 \div 2 = 9$
$20 \div 2 = 10$
$22 \div 2 = 11$
$24 \div 2 = 12$

Key Vocabulary

What is 2 **multiplied by** 7?

What is 2 **times** 9?

What is 12 **divided by** 2?

Doubles of Numbers to 20 'Learn by Heart' Facts (Part 1)

Children should know how to double numbers to 20. The aim is for children to recall the following facts instantly:

0 + 0 = 0
1 + 1 = 1
2 + 2 = 4
3 + 3 = 6
4 + 4 = 8
5 + 5 = 10
6 + 6 = 12
7 + 7 = 14
8 + 8 = 16
9 + 9 = 18
10 + 10 = 20

Doubles of Numbers to 20 'Learn by Heart' Facts (PART 1)

Children should know how to double numbers to 20. The aim is for children to recall the following facts instantly:

0 + 0 = 0
1 + 1 = 1
2 + 2 = 4
3 + 3 = 6
4 + 4 = 8
5 + 5 = 10
6 + 6 = 12
7 + 7 = 14
8 + 8 = 16
9 + 9 = 18
10 + 10 = 20

Doubles of Numbers to 20 'Learn by Heart' Facts (PART 2)

Children should know how to double numbers to 20. The aim is for children to recall the following facts instantly:

11 + 11 = 22
12 + 12 = 24
13 + 13 = 26
14 + 14 = 28
15 + 15 = 30
16 + 16 = 32
17 + 17 = 34
18 + 18 = 36
19 + 19 = 38
20 + 20 = 40

Doubles of Numbers to 20 'Learn by Heart' Facts (PART 2)

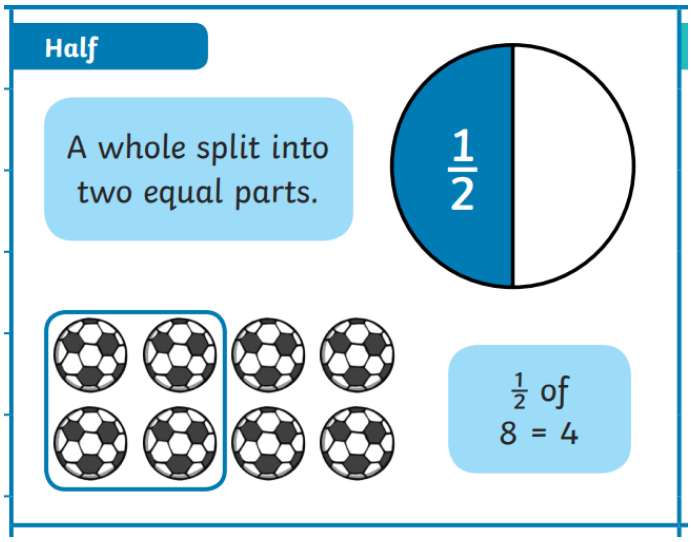
Children should know how to double numbers to 20. The aim is for children to recall the following facts instantly:

11 + 11 = 22
12 + 12 = 24
13 + 13 = 26
14 + 14 = 28
15 + 15 = 30
16 + 16 = 32
17 + 17 = 34
18 + 18 = 36
19 + 19 = 38
20 + 20 = 40

Halves of Numbers to 20 'Learn by Heart' Facts

Children should know halves of numbers to 20. The aim is for children to recall the following facts instantly:

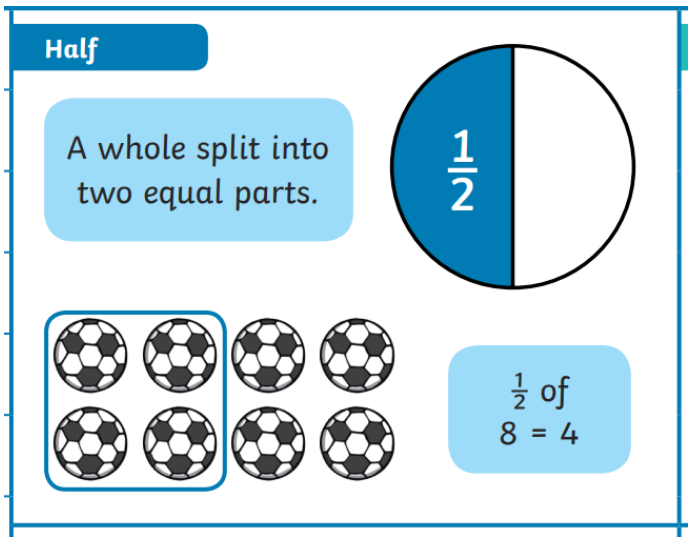
½ of 0 = 0
½ of 2 = 1
½ of 4 = 2
½ of 6 = 3
½ of 8 = 4
½ of 10 = 5
½ of 12 = 6
½ of 14 = 7
½ of 16 = 8
½ of 18 = 9
½ of 20 = 10



Halves of Numbers to 20 'Learn by Heart' Facts

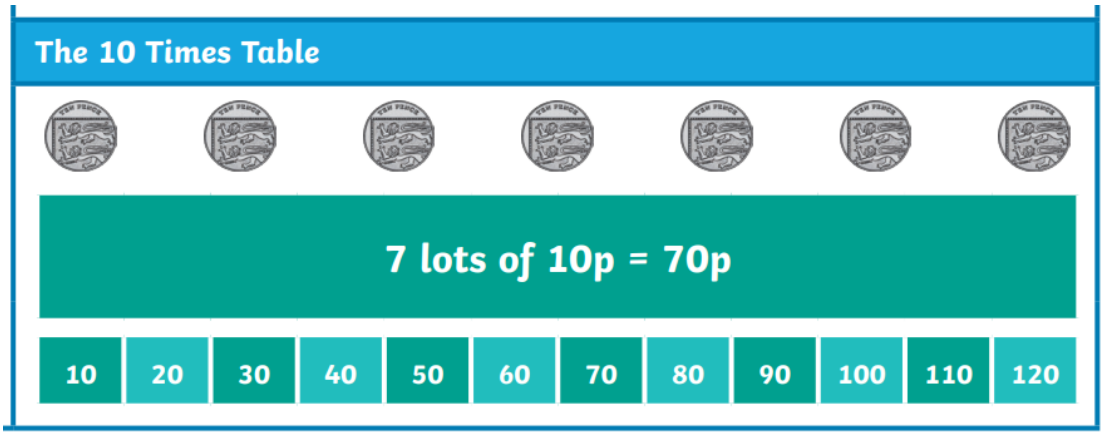
Children should know halves of numbers to 20. The aim is for children to recall the following facts instantly:

½ of 0 = 0
½ of 2 = 1
½ of 4 = 2
½ of 6 = 3
½ of 8 = 4
½ of 10 = 5
½ of 12 = 6
½ of 14 = 7
½ of 16 = 8
½ of 18 = 9
½ of 20 = 10



Ten Times Table Multiplication 'Learn by Heart' Facts

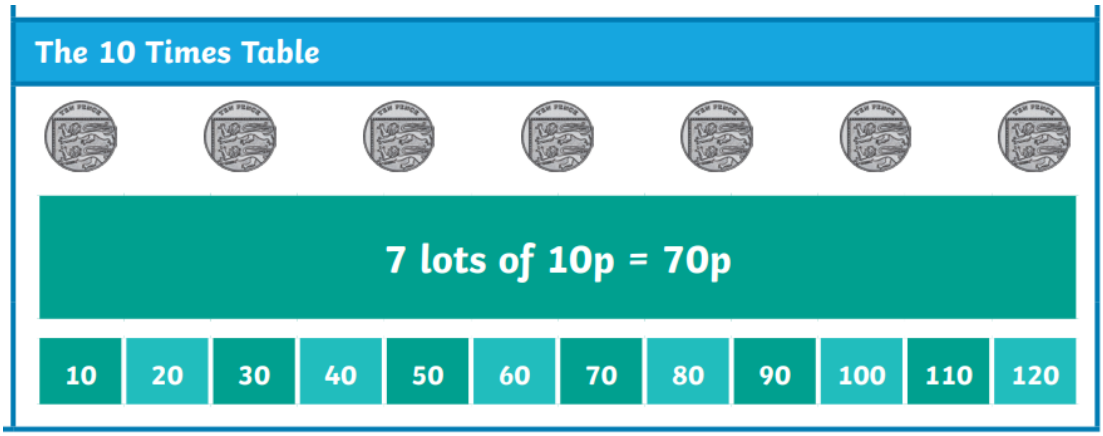
10 × 1 = 10
10 × 2 = 20
10 × 3 = 30
10 × 4 = 40
10 × 5 = 50
10 × 6 = 60
10 × 7 = 70
10 × 8 = 80
10 × 9 = 90
10 × 10 = 100
10 × 11 = 110
10 × 12 = 120



Children should be able to answer these questions in any order, including missing number questions e.g. 10 × ○ = 80.

Ten Times Table Multiplication 'Learn by Heart' Facts

10 × 1 = 10
10 × 2 = 20
10 × 3 = 30
10 × 4 = 40
10 × 5 = 50
10 × 6 = 60
10 × 7 = 70
10 × 8 = 80
10 × 9 = 90
10 × 10 = 100
10 × 11 = 110
10 × 12 = 120



Children should be able to answer these questions in any order, including missing number questions e.g. 10 × ○ = 80.

Ten Times Table Division 'Learn by Heart' Facts

10 ÷ 10 = 1
20 ÷ 10 = 2
30 ÷ 10 = 3
40 ÷ 10 = 4
50 ÷ 10 = 5
60 ÷ 10 = 6
70 ÷ 10 = 7
80 ÷ 10 = 8
90 ÷ 10 = 9
100 ÷ 10 = 10
110 ÷ 10 = 11
120 ÷ 10 = 12

Children should be able to answer these questions in any order, including missing number questions e.g. 10 x ○ = 80 or ○ ÷ 10 = 6.

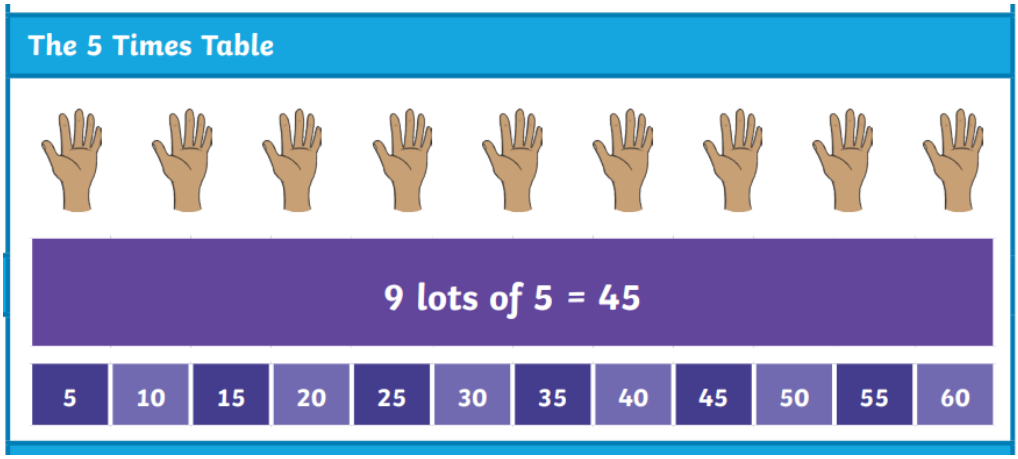
Ten Times Table Division 'Learn by Heart' Facts

10 ÷ 10 = 1
20 ÷ 10 = 2
30 ÷ 10 = 3
40 ÷ 10 = 4
50 ÷ 10 = 5
60 ÷ 10 = 6
70 ÷ 10 = 7
80 ÷ 10 = 8
90 ÷ 10 = 9
100 ÷ 10 = 10
110 ÷ 10 = 11
120 ÷ 10 = 12

Children should be able to answer these questions in any order, including missing number questions e.g. 10 x ○ = 80 or ○ ÷ 10 = 6.

Five Times Table Multiplication 'Learn by Heart' Facts

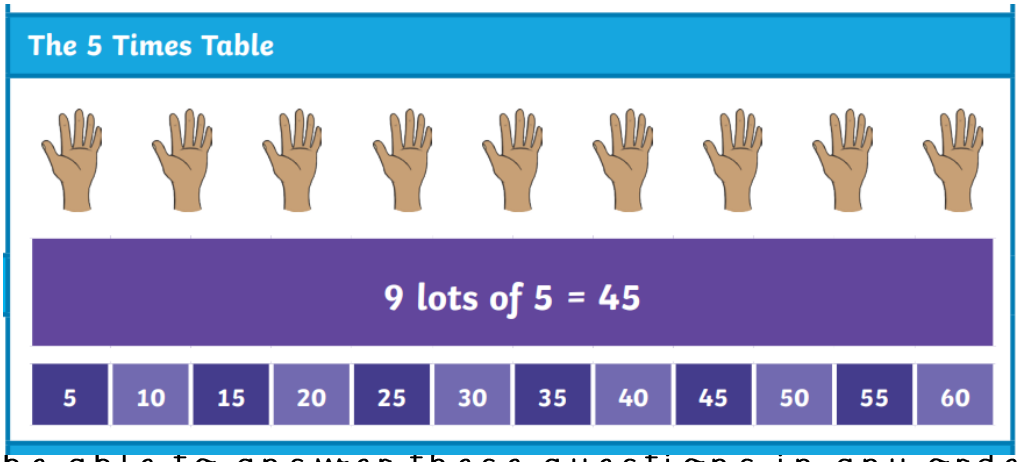
5 × 1 = 5	or	1 x 5 = 5
5 × 2 = 10		2 x 5 = 10
5 × 3 = 15		3 x 5 = 15
5 × 4 = 20		
5 × 5 = 25		
5 × 6 = 30		
5 × 7 = 35		
5 × 8 = 40		
5 × 9 = 45		
5 × 10 = 50		
5 × 11 = 55		
5 × 12 = 60		



Children should be able to answer these questions in any order, including missing number questions e.g. 5 x ○ = 40

Five Times Table Multiplication 'Learn by Heart' Facts

5 × 1 = 5	or	1 x 5 = 5
5 × 2 = 10		2 x 5 = 10
5 × 3 = 15		3 x 5 = 15
5 × 4 = 20		
5 × 5 = 25		
5 × 6 = 30		
5 × 7 = 35		
5 × 8 = 40		
5 × 9 = 45		
5 × 10 = 50		
5 × 11 = 55		
5 × 12 = 60		



Children should be able to answer these questions in any order, including missing number questions e.g. 5 x ○ = 40

Five Times Table Division 'Learn by Heart' Facts

5 ÷ 5 = 1
10 ÷ 5 = 2
15 ÷ 5 = 3
20 ÷ 5 = 4
25 ÷ 5 = 5
30 ÷ 5 = 6
35 ÷ 5 = 7
40 ÷ 5 = 8
45 ÷ 5 = 9
50 ÷ 5 = 10
55 ÷ 5 = 11
60 ÷ 5 = 12

Children should be able to answer these questions in any order, including missing number questions e.g. 5 × ○ = 40 or ○ ÷ 5 = 9.

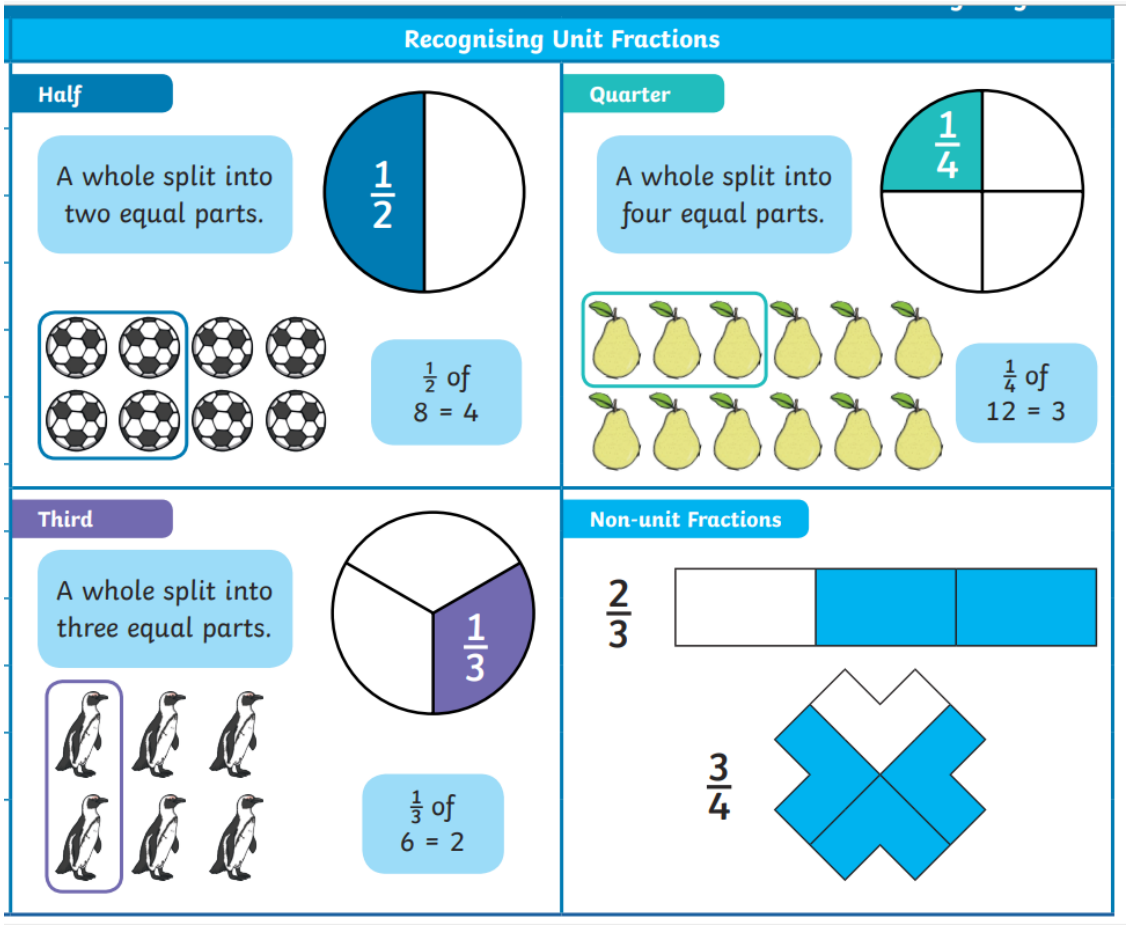
Five Times Table Division 'Learn by Heart' Facts

5 ÷ 5 = 1
10 ÷ 5 = 2
15 ÷ 5 = 3
20 ÷ 5 = 4
25 ÷ 5 = 5
30 ÷ 5 = 6
35 ÷ 5 = 7
40 ÷ 5 = 8
45 ÷ 5 = 9
50 ÷ 5 = 10
55 ÷ 5 = 11
60 ÷ 5 = 12

Children should be able to answer these questions in any order, including missing number questions e.g. 5 × ○ = 40 or ○ ÷ 5 = 9.

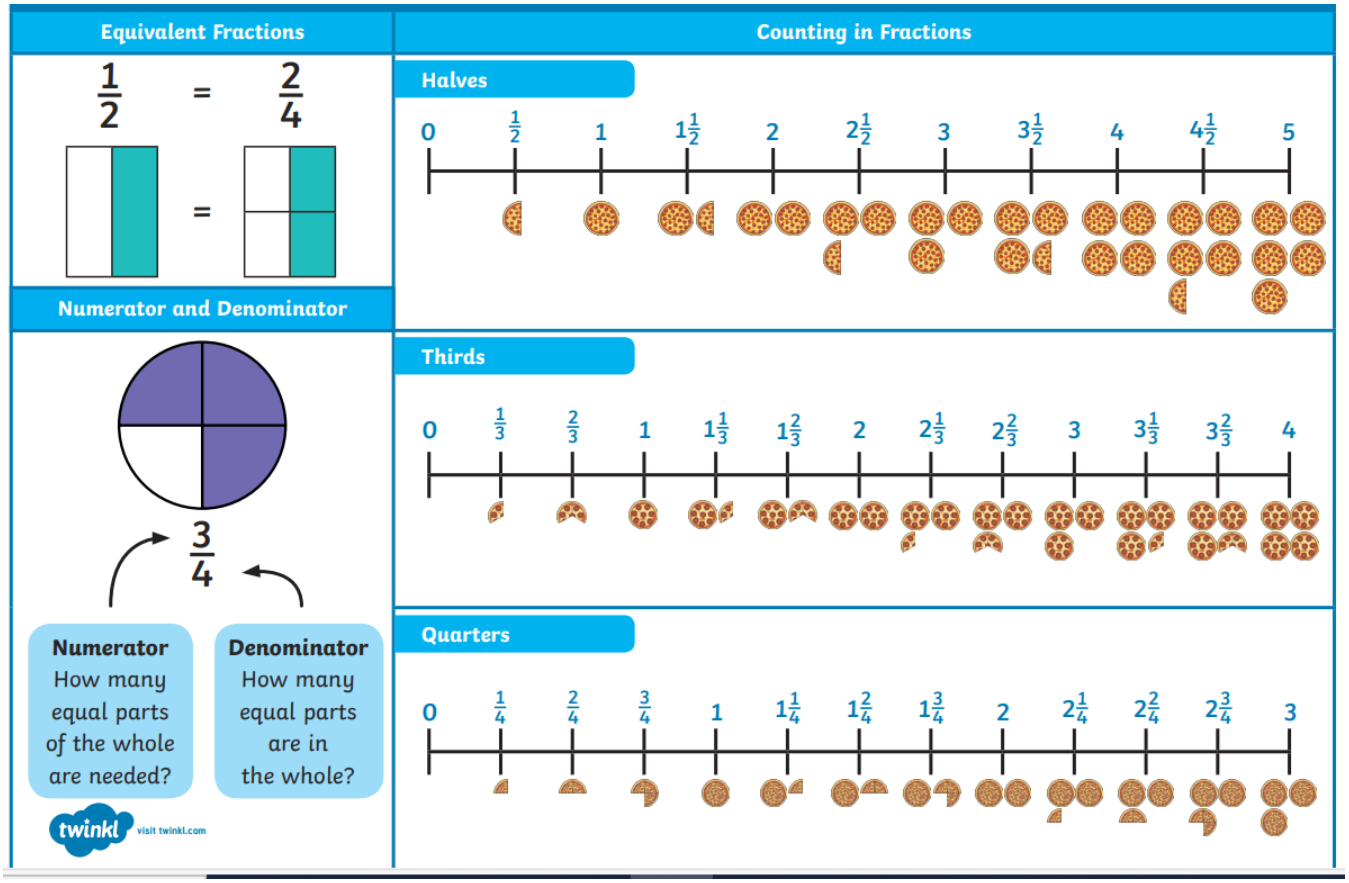
Fractions 'Learn by Heart' Facts (PART I)

Children need to be able to recognize and represent and recognise 1/3, ¼ and 1/2. Can you make fractions using food, play-doh or anything else that you can find in the home! Sharing food is perfect for this!



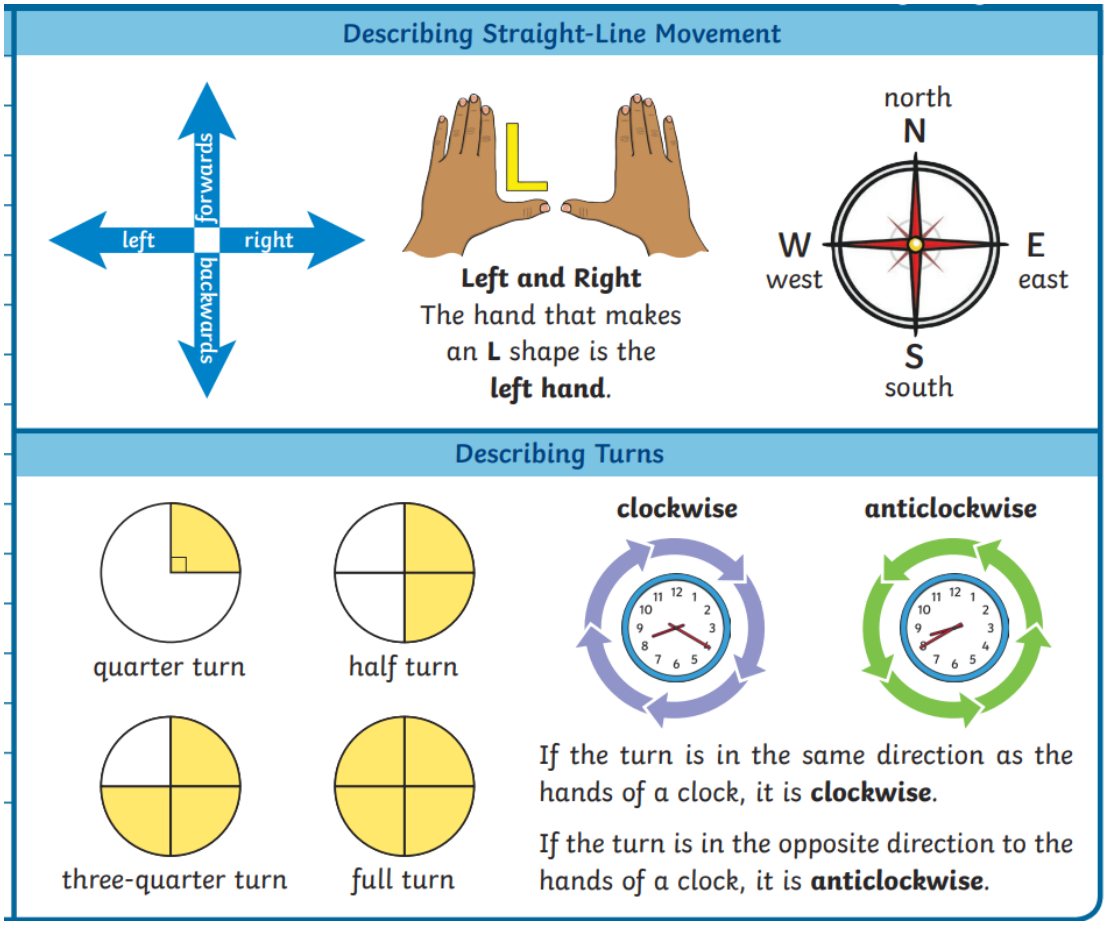
Fractions 'Learn by Heart' Facts (PART 2)

Children need to be able to count in fractions of halves, thirds and quarters. Use the resource below to support counting in fractions.



Position and Direction 'Learn by Heart' Facts

In Year 2, children need to be able to understand what is left and what is right. They also need to understand and name the parts of a compass (just North, East, South and West). When describing turs, they need to understand and be able to foolw the language used below. They could practise turning in the house following adult instructions!



Money 'Learn by Heart' Facts

In Year 2, children should be able to recognise and name all of the coins used in the United Kingdom. They should also be able to make equal amounts of a given amount using different coins (see below). Ask your child if they can name or make amounts using coins that you may have at home!

Pence

1p
1 penny

2p
2 pence

5p
5 pence

10p
10 pence

20p
20 pence

50p
50 pence

Pounds

£1
1 pound

£2
2 pounds

£5
5 pounds

£10
10 pounds

£20
20 pounds

£50
50 pounds

Pounds and Pence

Equal Amounts

20p = 20p = 20p

£1 = £1 = £1

Compare Amounts

75p > 74p

£9 and 50p < £10

Mass 'Learn by Heart' Facts

Children in Year 2 need to use and understand the vocabulary below. You could weigh objects in the home using scales and ask your child questions to support their understanding of the vocabulary e.g. Is a pencil lighter or heavier than a book?

Key Vocabulary
mass
gram
kilogram
lighter
heavier

Mass

We use scales to measure **grams**.

A gram is a small unit of measurement that we use to measure how heavy or light something is.

We can write gram as **g**.

We measure the following using grams:

15g > 10g

We also use scales to measure **kilograms**.

A kilogram is a larger unit of measurement that we use to measure how light or heavy something is.

We can write kilogram as **kg**.

We measure the following using kilograms:

1kg < 3kg

Capacity 'Learn by Heart' Facts

Children in Year 2 need to use and understand the vocabulary below. You could talk objects in the home that have these measures written on them (milk) and ask your child questions to support their understanding of the vocabulary e.g. Is the milk bottle half full? Which jug will hold the most water?

capacity
volume
millilitre
litre

Capacity

Capacity is the amount of liquid a container can hold.

Volume is how much liquid is in the container.

Millilitres

We can use a measuring cylinder to measure very small volumes.

We measure these in millilitres. We write this as ml.

1000ml = 1l

Litres

We can use a jug to measure larger volumes.

We measure these in litres. We write this as l.

1000ml = 1l

quarter full | half full | full