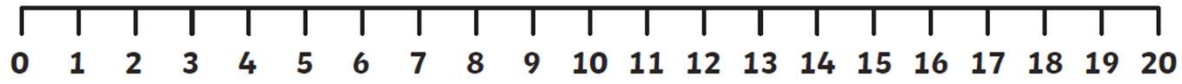
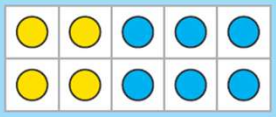

Green Class

Addition and subtraction: Stage 1

Addition and Subtraction Knowledge Organiser



Number Bonds

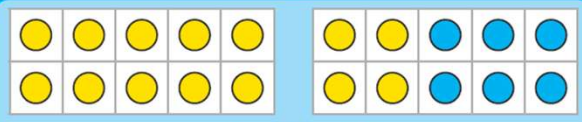


4 + 6 = 10

10 – 6 = 4

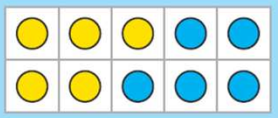
4 + 6 < 14 + 6

14 = 20 – 6



14 + 6 = 20

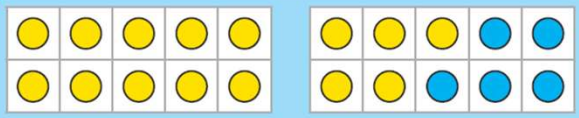
20 – 6 = 14



5 + 5 = 10

10 – 5 = 5

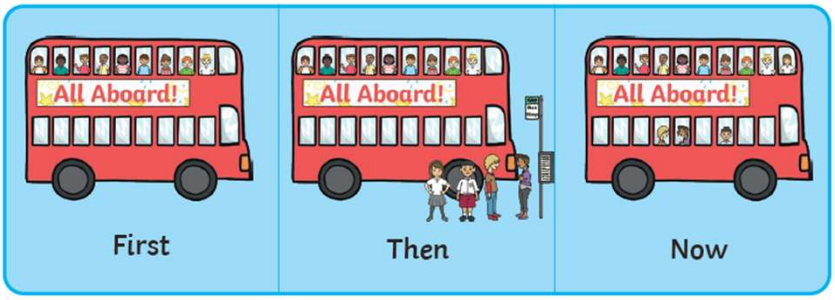
20 – 5 > 20 – 6

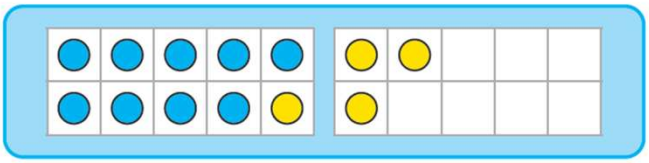


15 + 5 = 20

20 – 5 = 15

Addition and Subtraction Knowledge Organiser

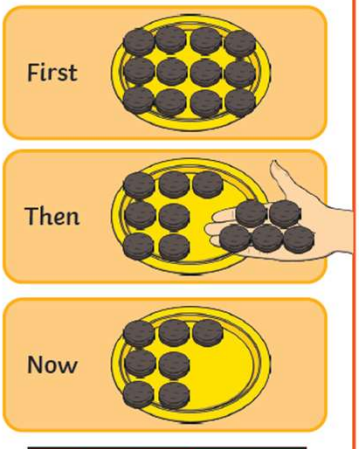


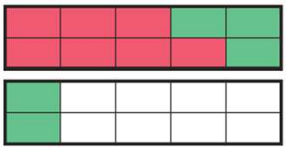


I partitioned 4 into 1 and 3.

9 + 1 = 10

10 + 3 = 13





I partitioned 5 into 2 and 3.

12 – 2 = 10

10 – 3 = 7

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Addition and subtraction: Stage 2

Addition and Subtraction — Knowledge Organiser

Key Vocabulary

- Add
- Total
- Make
- Plus
- Sum
- More
- Altogether
- Difference
- Leave
- Subtract
- Difference between
- Less
- Minus
- Take away
- Mentally, Orally
- Column Addition
- Column Subtraction
- Estimate
- Inverse operation
- Solve problems
- Number facts
- Place Value

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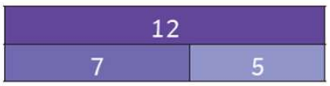
Addition and Subtraction Bonds to 20

15 + 5 = 20
20 – 5 = 15
20 – 15 = 5



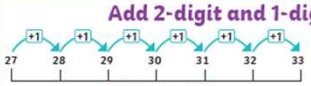
7 + 5 = 12
12 – 5 = 7
12 – 7 = 5

4 + 3 = 7

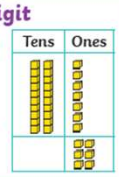
15 – 7 = 8

Methods

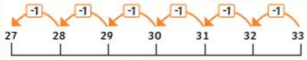
Add 2-digit and 1-digit



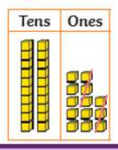
27 + 6 = 33



Subtract 1-digit from 2-digit

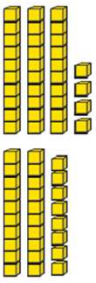


33 - 6 = 27



Add 2-digit numbers

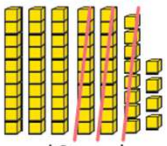
34 + 28 = 62



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

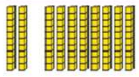
62 – 28 = 34



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

Addition and Subtraction Bonds to 100

2 + 8 = 10
so 20 + 80 = 100



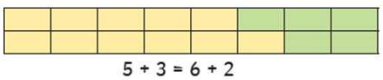
32 + 68 = 100
3 tens and 2 ones + 6 tens and 8 ones
= 9 tens and 10 ones = 10 tens =one hundred

Addition and Subtraction — Knowledge Organiser

Mental Methods

Compare Number Sentences

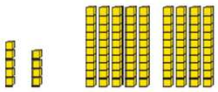
6 + 4 < 6 + 5



5 + 3 = 6 + 2

Related facts

5 + 4 = 9 so 50 + 40 = 90



Add 3 1-digit numbers

9 + 5 + 3 = 17

More or Less/ Add and Subtract 1s and 10s

Add and subtract 1s

24 + 1 = 25
24 + 2 = 26
24 + 3 = 27

24	25	26	27	28	29	30	31

37 – 1 = 36
37 – 2 = 35
37 – 3 = 34

There are 7 flowers in a vase. One more is added. Now there are 8 flowers.

10 More or Less

30	40	50	60	70	80
47	57	67	77	87	97

The ones digit stays the same.

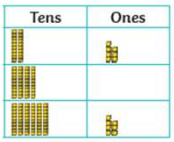
10 less	Number	10 more
1	11	21
34	44	54

Take care when crossing hundreds:

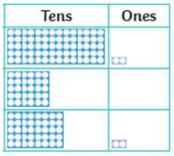
86	96	106	116

Add and Subtract 10s

10	30	50	70	90
3	33	63	93	



27
+ 40
67

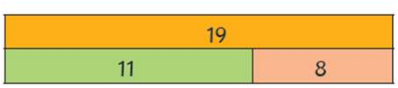


72
- 30
42

Crossing hundreds:

74	94	114	134

Check Calculations



19 – 8 = 11 can be checked using 8 + 11 = 19

32 + 5 = 82 x Spot that 5 tens have been added not 5 ones

28 – 26 = 12 x Spot that 28 and 26 are very close together, so difference won't be 12.

37 – 4 = 41 x Spot that if subtracting 4 the answer will be smaller.

68 – 40 = 64 x Spot that 4 ones have been subtracted and not 4 tens.

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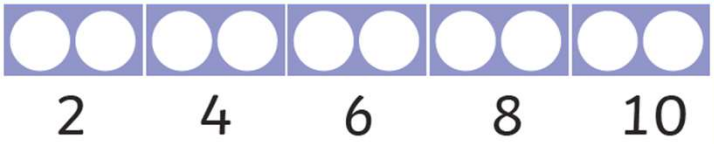
Multiplication and Division: Stage 1

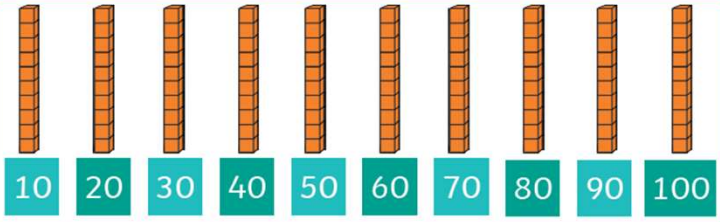
Multiplication and Division — **Knowledge Organiser**

Count in 2s

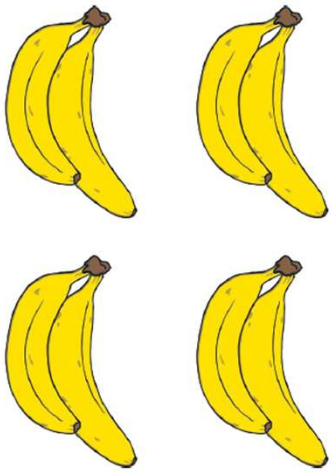


Counting in 5s

Count in 10s



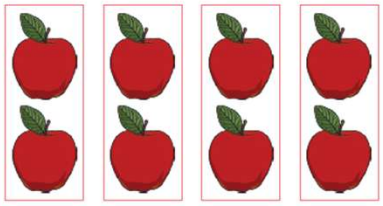
Make Equal Groups



There are 4 equal groups of 2 bananas.

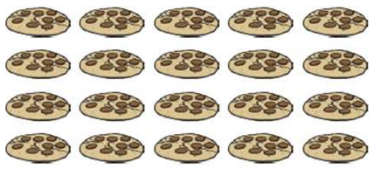
Multiplication and Division — **Knowledge Organiser**

Add Equal Groups



2 + 2 + 2 + 2 = 8 apples

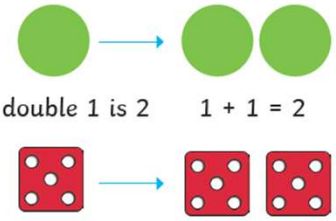
Make Arrays



4 rows of 5 = 20 cookies

5 columns of 4 = 20 cookies

Make Doubles

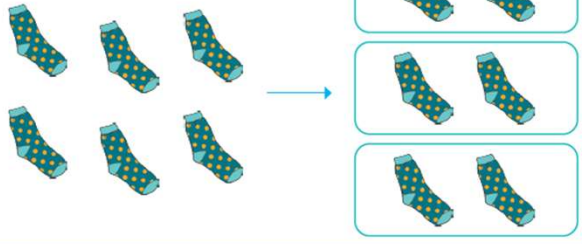


double 1 is 2 — 1 + 1 = 2

double 5 is 10 — 5 + 5 = 10

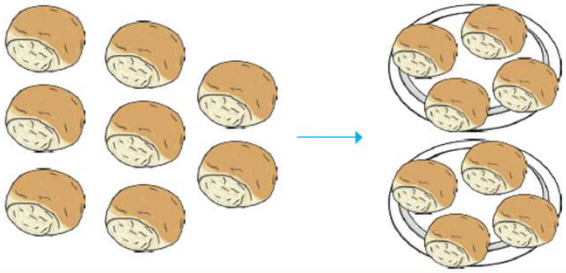
Group Equally

Put the socks into groups of 2.



Share Equally

Share the buns equally between the 2 plates.



Multiplication and Division: Stage 2

Multiplication and Division — Knowledge Organiser

Key Vocabulary

- groups
- equal groups
- lots of
- arrays
- repeated addition
- multiplication
- times tables

Recognise Equal Groups

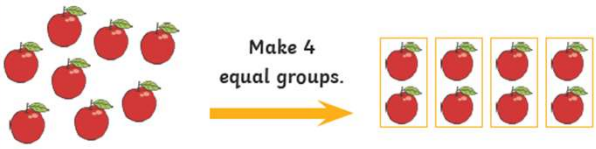
5 equal groups with 3 in each group

2 equal groups with 4 in each group

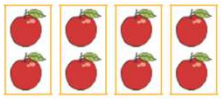
4 equal groups of 10

6 equal amounts of 5 pence

Make Equal Groups



Add Equal Groups



2 + 2 + 2 + 2 = 8 apples

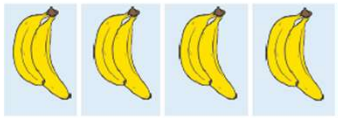
The Multiplication Symbol

4 × 2 = 8
2 × 4 = 8
8 apples

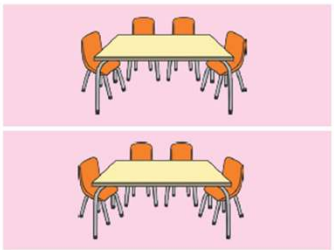
2 x 5 = 10
5 x 2 = 10
10 cookies

Multiplication and Division — Knowledge Organiser

Multiplication from Pictures



4 lots of 2 = 8



2 lots of 4 = 8

Use Arrays

4 rows of 10 = 40
10 columns of 4 = 40

The 2 Times Table

6 lots of 2 = 12

2	4	6	8	10	12	14	16	18	20	22	24

The 5 Times Table

9 lots of 5 = 45

5	10	15	20	25	30	35	40	45	50	55	60

The 10 Times Table

7 lots of 10p = 70p

10	20	30	40	50	60	70	80	90	100	110	120

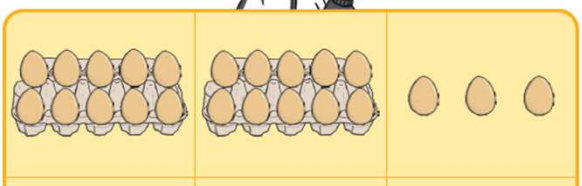
Number and Place Value: Stage 1

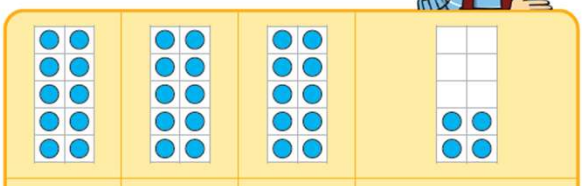
Number and Place Value to 50 — Knowledge Organiser

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

One more than 43 is 44

49 is one less than 50





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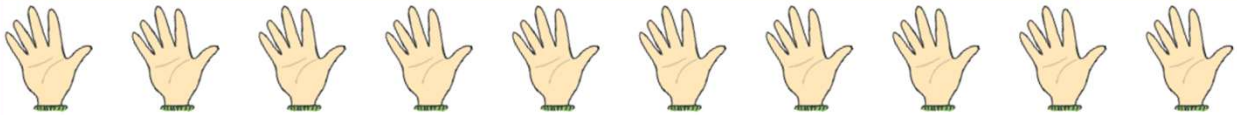
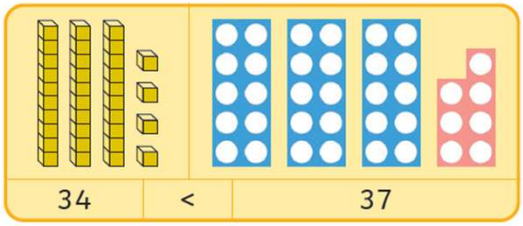
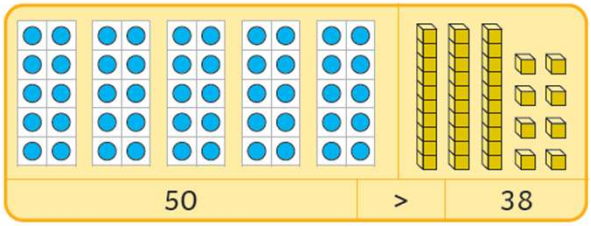
Number and Place Value to 50 — Knowledge Organiser

Counting in Fives

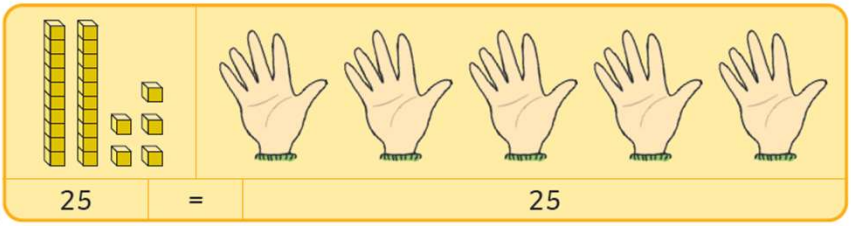


Comparing Numbers





< is less than
= is equal to
> is more than



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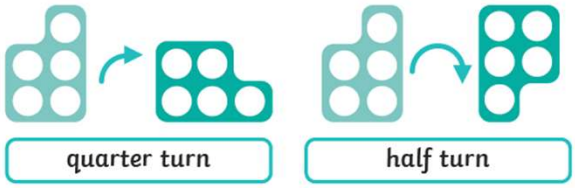
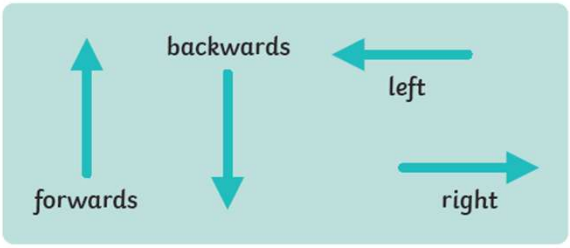
Position and Direction: Stage 1/2

Position and Direction — **Knowledge Organiser**

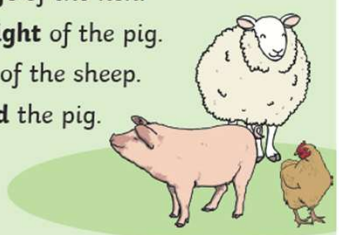
Describing Movement

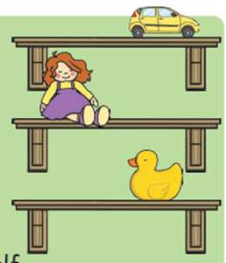




Describing Position

The pig is to the **left** of the hen.
The hen is to the **right** of the pig.
The pig is in **front** of the sheep.
The sheep is **behind** the pig.





The duck is **below** the doll.
The car is **above** the doll.
The car is on the **top** shelf.
The doll is on the **middle** shelf.
The duck is on the **bottom** shelf.
The doll is **between** the car and the duck.

Position and Direction — **Knowledge Organiser**

Key Vocabulary

- forwards
- backwards
- left
- right
- north
- south
- east
- west
- quarter turn
- half turn
- three-quarter turn
- clockwise
- anticlockwise
- pattern
- sequence

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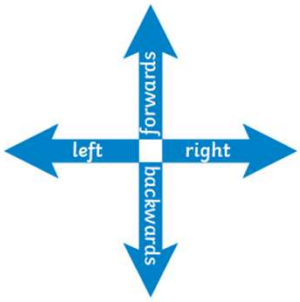
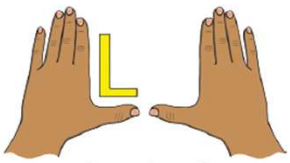
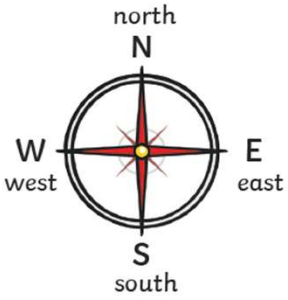
Describing Straight-Line Movement

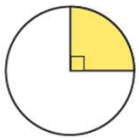




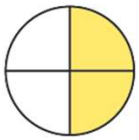
Left and Right
The hand that makes an **L** shape is the **left hand**.



Describing Turns

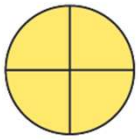


quarter turn



half turn

three-quarter turn



full turn

clockwise

anticlockwise

If the turn is in the same direction as the hands of a clock, it is **clockwise**.

If the turn is in the opposite direction to the hands of a clock, it is **anticlockwise**.

Money: Stage 1

Money **Knowledge Organiser**

UK Coins

1p
one
penny coin

2p
two
pence coin

5p
five
pence coin

10p
ten
pence coin

20p
twenty
pence coin

50p
fifty
pence coin

£1
one
pound coin

£2
two
pound coin

UK Notes

£5
5 pound

£10
10 pound

£20
20 pound

Counting in Coins

= 5p

= 4p

= 15p

= 20p

Money: Stage 2

Money — **Knowledge Organiser**

Key Vocabulary

pence
pound
coin
note
total
amount
change
difference
price
cost
pay
owe

Pence

1p	2p	5p
1 penny	2 pence	5 pence
10p	**20p**	**50p**
10 pence	20 pence	50 pence

Pounds

£1	£2	£5
1 pound	2 pounds	5 pounds
£10	**£20**	**£50**
10 pounds	20 pounds	50 pounds

Pounds and Pence

Equal Amounts

20p = 20p = 20p

£1 = £1 = £1

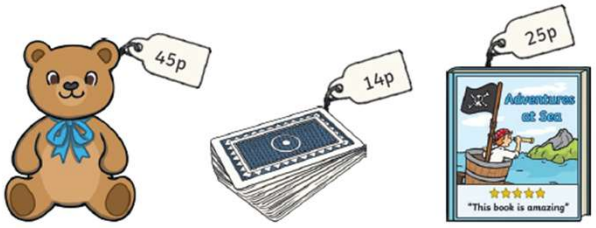
Compare Amounts

75p > 74p

£9 and 50p < £10

Money — **Knowledge Organiser**

Find the Total



Lucy bought a teddy bear and some playing cards.

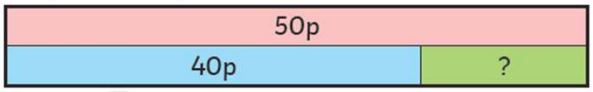
45p	+	14p	=	59p

Timek bought two books.

25p	+	25p	=	50p

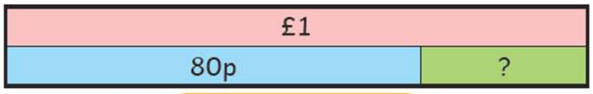
Find the Change

Lucy bought a jigsaw with a 50p coin. How much change did she get?



50p – 40p = 10p

Timek bought a plant and a toy car. He paid with a £1 coin. How much change did he get?



£1 – 80p = 20p

Time: Stage 1

Time — **Knowledge Organiser**

Before and After

before ← → after


first


next


finally

First, I brush my teeth.

Next, I look at a book.

Finally, I go to sleep.

I brush my teeth **before** I look at a book.

I go to sleep **after** I look at a book.

Days of the Week

Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

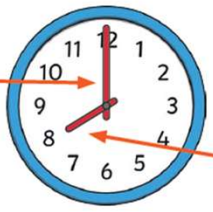
Months of the Year

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

Time — **Knowledge Organiser**

Telling the Time

The **long hand** is the **minute hand**.



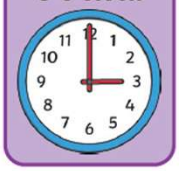
The **short hand** is the **hour hand**.

The time is **8 o'clock**.

Telling the Time to the Hour

At the hour, the **minute hand** points to 12.

3 o'clock



6 o'clock

9 o'clock

The **hour hand** points to the hour.

Telling the Time to the Half Hour

At half past, the **minute hand** is half way round the clock pointing to the 6.

half past 1

half past 11

half past 7

The hour hand will be halfway between one hour and the next.

Comparing Time

A  is faster than a  .

A  is slower than a  .

4 o'clock is **earlier** than half past 4.

Half past 4 is **later** than 4 o'clock.

Time: Stage 2

Time — Knowledge Organiser

Key Vocabulary

- time
- clock
- hours
- minutes
- hand
- o'clock
- half past
- quarter past
- quarter to
- five minutes
- duration
- shorter
- longer

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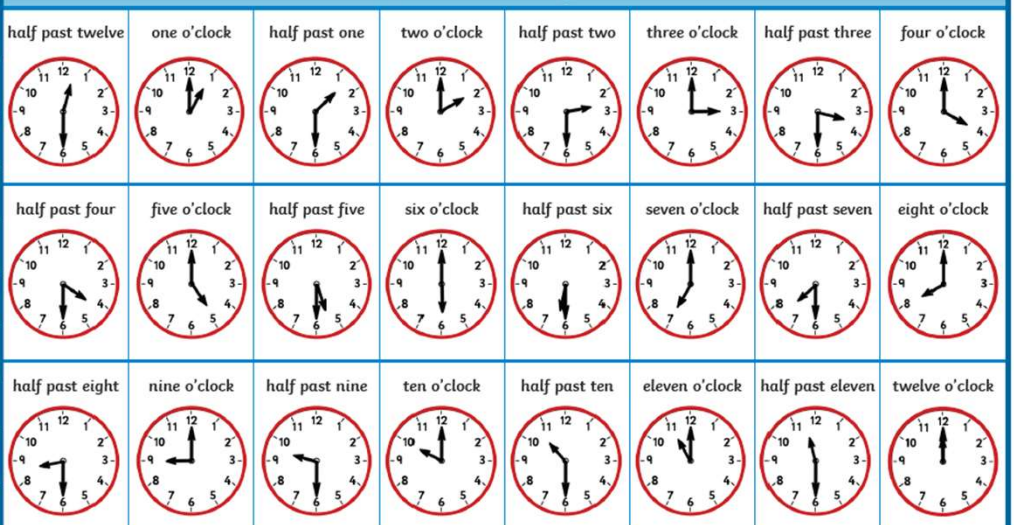
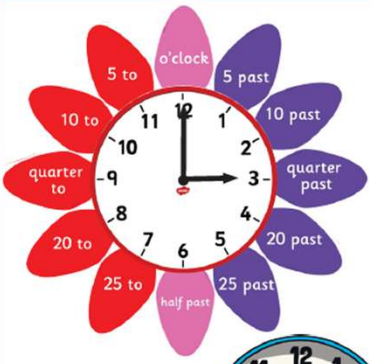
O'Clock and Half Past



Past and To

Time — Knowledge Organiser

Telling Time to 5 Minutes



Hour Hand
The short hand points to the hour. If this hand is pointing between hours, it is either past the earlier hour or to the later hour.

Minute Hand
The long hand points to the minutes past or to the hour.

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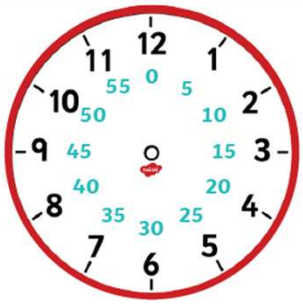
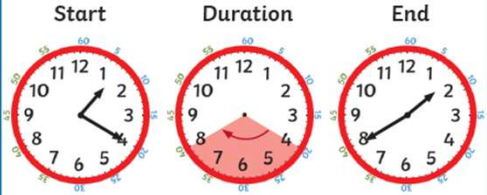
O'Clock and Half Past



There are **60 minutes** in an hour.

There are **24 hours** in a day.

Find Durations of Time



20 minutes has passed.

Compare Durations of Time

Compare the time using the vocabulary 'longer' and 'shorter'.