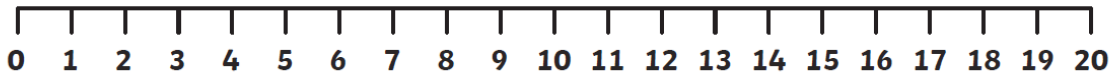
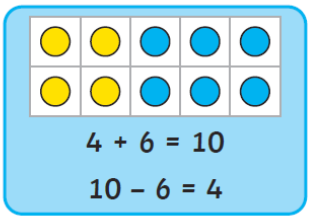
Green Class

Addition and Subtraction: Stage 1

Addition and Subtraction — Knowledge Organiser



Number Bonds

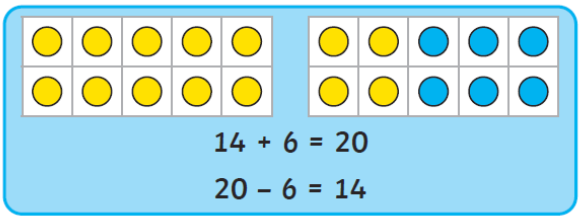


4 + 6 = 10

10 − 6 = 4

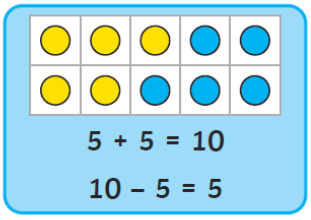
4 + 6 < 14 + 6

14 = 20 − 6



14 + 6 = 20

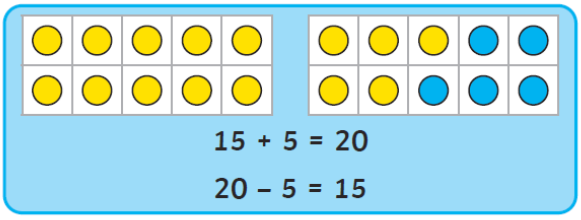
20 − 6 = 14



5 + 5 = 10

10 − 5 = 5

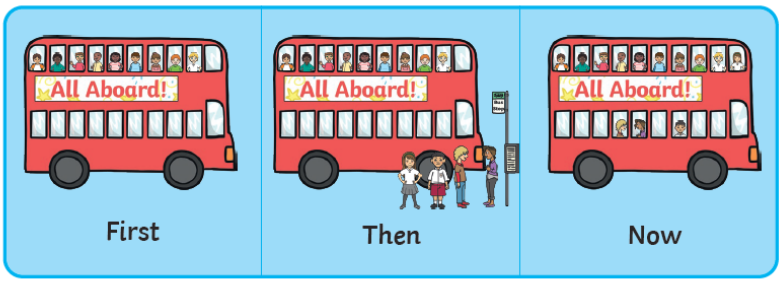
20 − 5 > 20 − 6

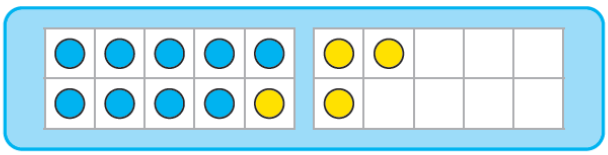


15 + 5 = 20

20 − 5 = 15

Addition and Subtraction — Knowledge Organiser

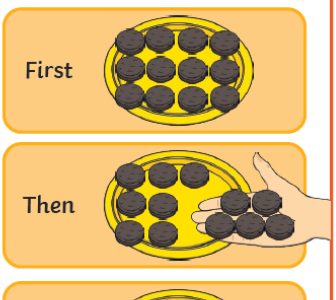


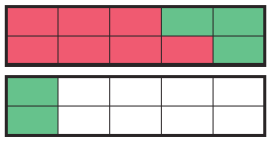


I partitioned 4 into 1 and 3.

9 + 1 = 10

10 + 3 = 13





I partitioned 5 into 2 and 3.

12 − 2 = 10

10 − 3 = 7

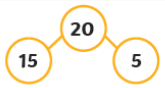
Addition and Subtraction: Stage 2

Addition and Subtraction — Knowledge Organiser

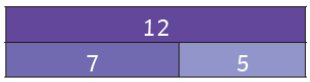
Key Vocabulary

- 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

Addition and Subtraction Bonds to 20



15 + 5 = 20
20 – 5 = 15
20 – 15 = 5



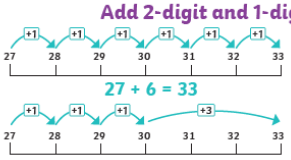
7 + 5 = 12
12 – 5 = 7
12 – 7 = 5

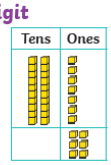
4 + 3 = 7

15 – 7 = 8

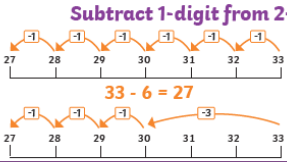
Methods

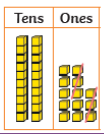
Add 2-digit and 1-digit





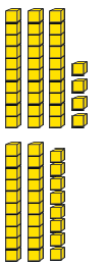
Subtract 1-digit from 2-digit





Add 2-digit numbers

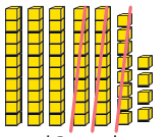
34 + 28 = 62



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

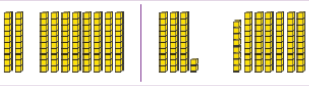
62 – 28 = 34



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



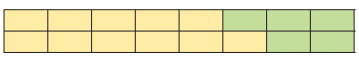
32 + 68 = 100
3 tens and 2 ones + 6 tens and 8 ones
= 9 tens and 10 ones = 10 tens =one hundred

Addition and Subtraction — Knowledge Organiser

Mental Methods

Compare Number Sentences

6 + 4 < 6 + 5

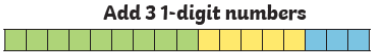


5 + 3 = 6 + 2

Related facts

5 + 4 = 9 so 50 + 40 = 90

Add 3 1-digit numbers



9 + 5 + 3 = 17

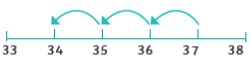
More or Less/ Add and Subtract 1s and 10s

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.

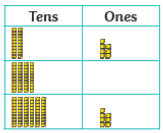
10 less	Number	10 more
1	11	21
34	44	54

Take care when crossing hundreds:

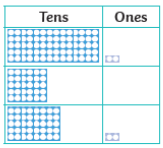
86	96	106	116

Add and Subtract 10s

10	30	50	70	90
3	33	63	93	



27
+ 40
67

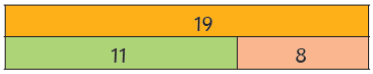


72
- 30
42

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.

Multiplication and Division: Stage 1

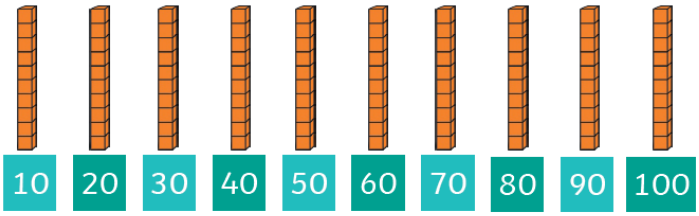
Count in 2s

2 4 6 8 10

Counting in 5s

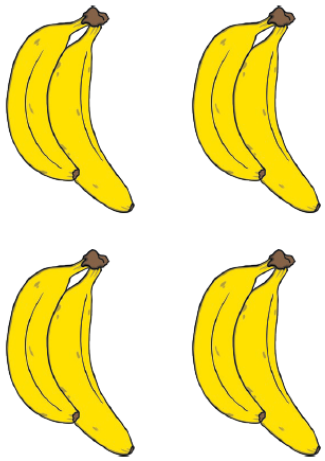
5 10 15 20 25 30 35 40 45 50 55 60

Count in 10s



10 20 30 40 50 60 70 80 90 100

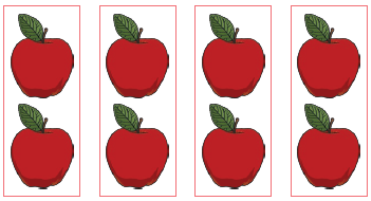
Make Equal Groups



There are 4 equal groups of 2 bananas.

Multiplication and Division Knowledge Organiser

Add Equal Groups



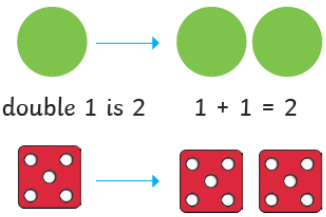
2 + 2 + 2 + 2 = 8 apples

Make Arrays

4 rows of 5 = 20 cookies

5 columns of 4 = 20 cookies

Make Doubles

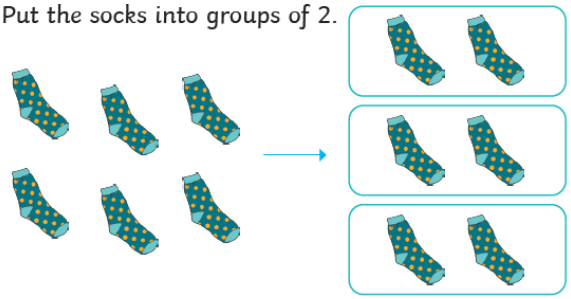


double 1 is 2 1 + 1 = 2

double 5 is 10 5 + 5 = 10

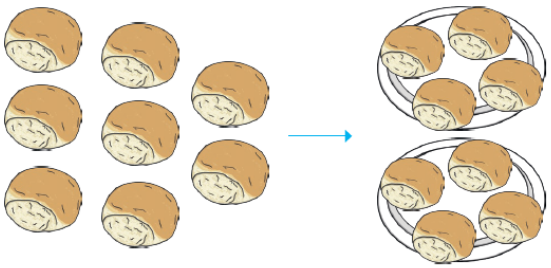
Group Equally

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

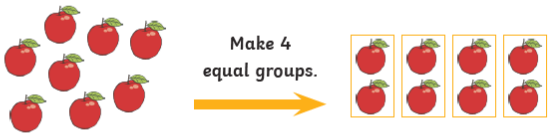
5 equal groups with 3 in each group

2 equal groups with 4 in each group

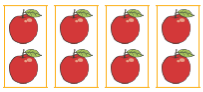
4 equal groups of 10

6 equal amounts of 5 pence

Make Equal Groups



Add Equal Groups



2 + 2 + 2 + 2 = 8 apples

The Multiplication Symbol

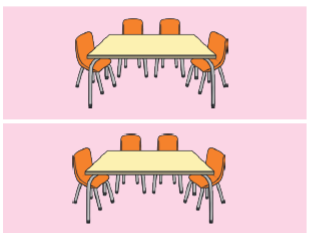
4 × 2 = 8
2 × 4 = 8
8 apples

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

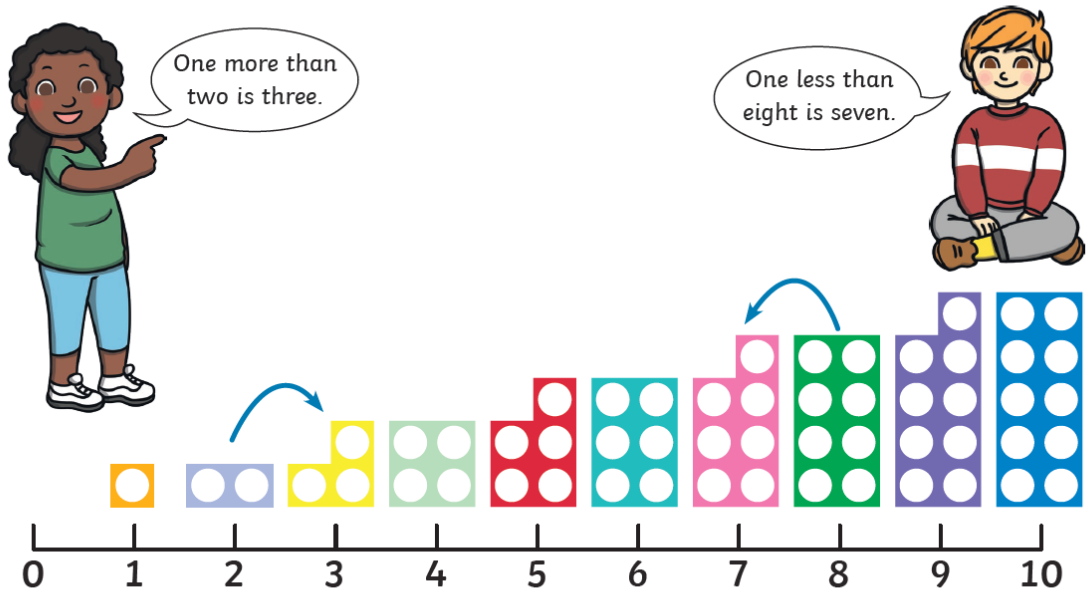
7 lots of 10p = 70p

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

Number and Place Value: Stage 1

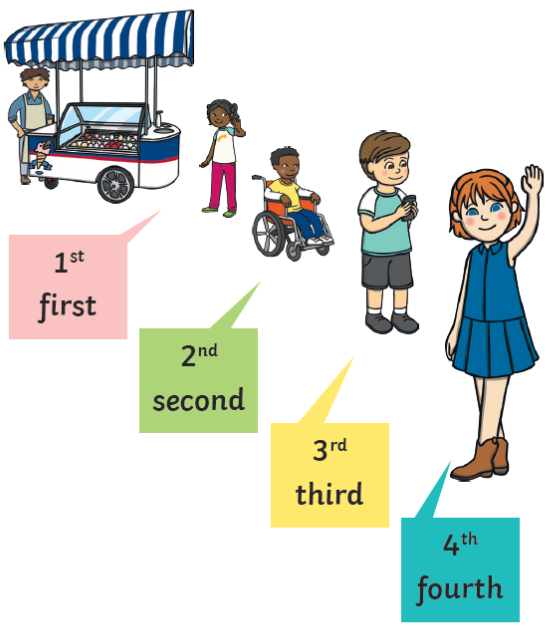
Number and Place Value Knowledge Organiser

One More and One Less



Number and Place Value Knowledge Organiser

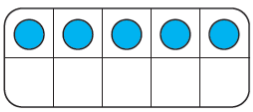
Ordering



Comparing

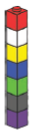
5 = 5

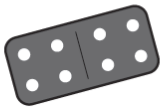
equals



4 < 7

less than

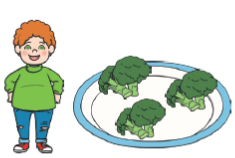




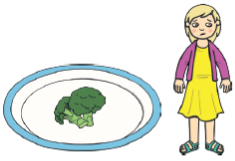
8 > 2

greater than

two



Lewis has the **most**.

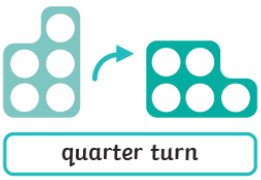


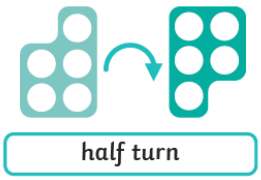
Olive has the **fewest**.

Position and Direction: Stage 1/2

Position and Direction — **Knowledge Organiser**

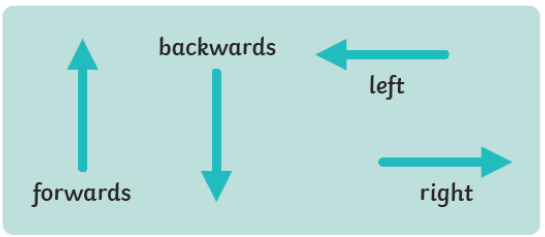
Describing Movement


quarter turn


half turn

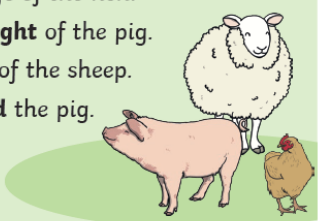

three-quarter turn

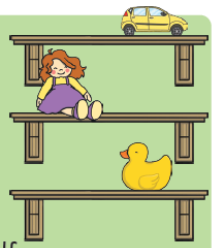

full turn



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.





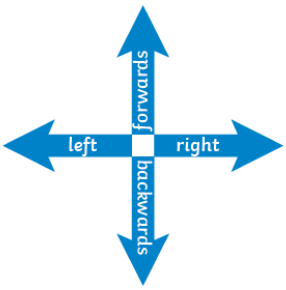
The duck is **below** the doll.
The car is **above** the doll.
The car is on the **top** shelf.
The doll is on the **middle** shelf.
The duck is on the **bottom** shelf.
The doll is **between** the car and the duck.

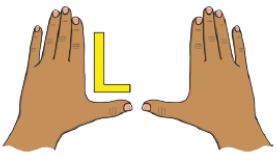
Position and Direction — **Knowledge Organiser**

Key Vocabulary

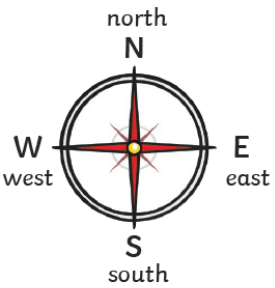
- forwards
- backwards
- left
- right
- north
- south
- east
- west
- quarter turn
- half turn
- three-quarter turn
- clockwise
- anticlockwise
- pattern
- sequence

Describing Straight-Line Movement





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

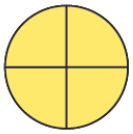


Describing Turns


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**.

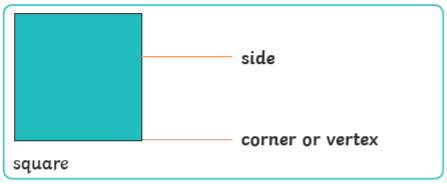
Properties of Shape: Stage 2

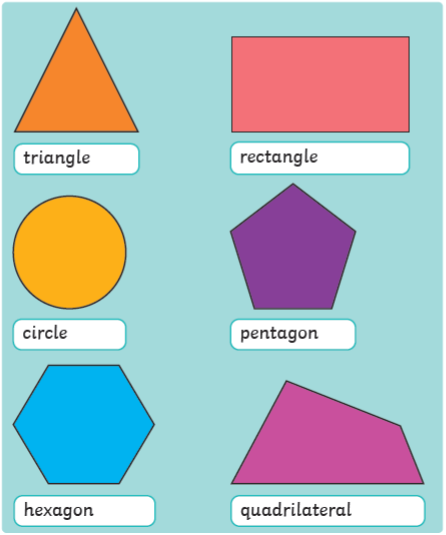
Geometry: Properties of Shape — **Knowledge Organiser**

Key Vocabulary

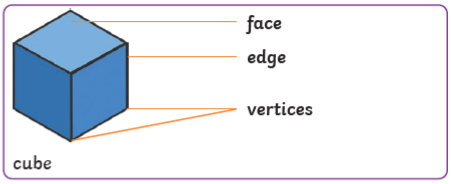
- two-dimensional (2D)
- three-dimensional (3D)
- flat
- solid
- corner
- apex
- vertex
- vertices
- side
- edge
- face
- curved
- straight
- round
- line of symmetry
- vertical
- pattern

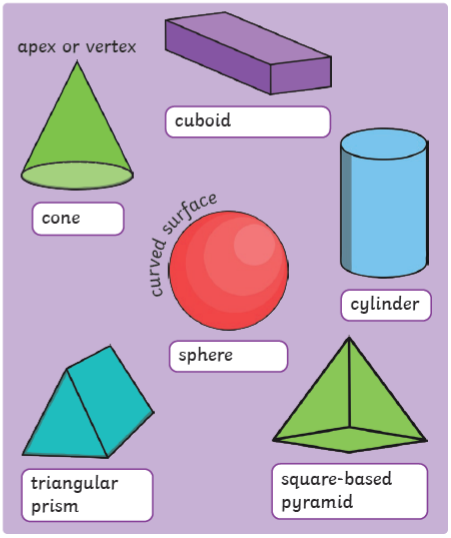
Recognise and Describe 2D Shapes





Recognise and Describe 3D Shapes

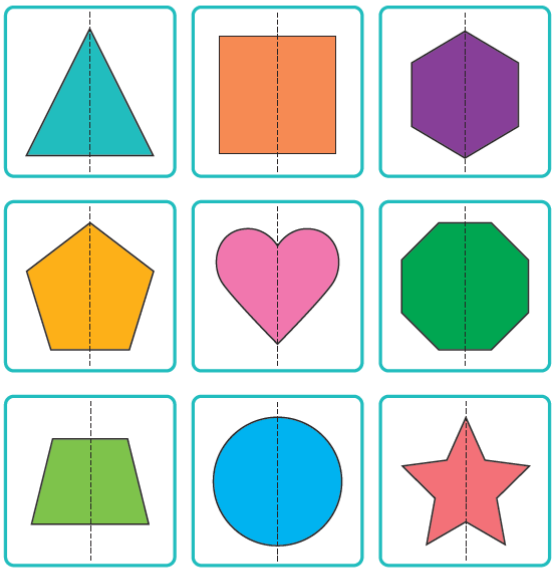




Geometry: Properties of Shape — **Knowledge Organiser**

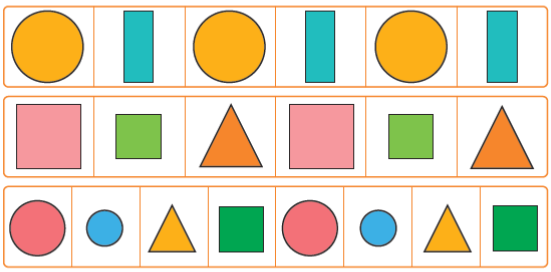
Lines of Symmetry

These 2D shapes have a vertical line of symmetry.

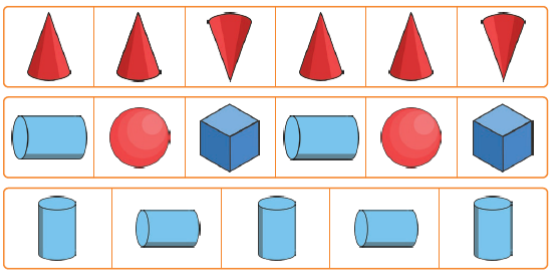


Repeating Shape Patterns

2D Patterns



3D Patterns



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 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

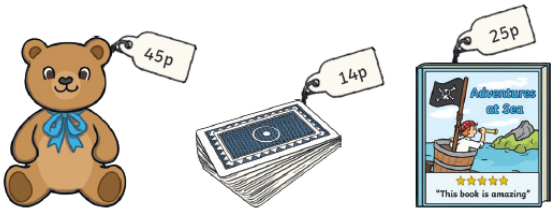
Compare Amounts

75p > 74p

£9 and 50p < £10

Money — **Knowledge Organiser**

Find the Total



Lucy bought a teddy bear and some playing cards.

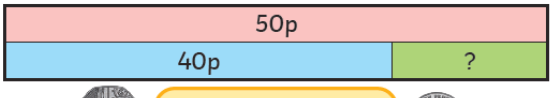
45p	+	14p	=	59p

Timek bought two books.

25p	+	25p	=	50p

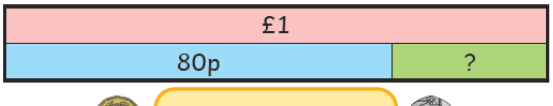
Find the Change

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.

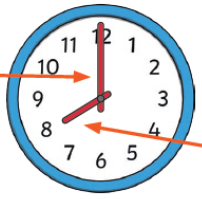
Days of the Week
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

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.