

Year 2

2/1 Know the 2, 3, 5, 10 times tables

0 x 2 = 0	0 x 5 = 0
1 x 2 = 2	1 x 5 = 5
2 x 2 = 4	2 x 5 = 10
3 x 2 = 6	3 x 5 = 15
4 x 2 = 8	4 x 5 = 20
5 x 2 = 10	5 x 5 = 25
6 x 2 = 12	6 x 5 = 30
7 x 2 = 14	7 x 5 = 35
8 x 2 = 16	8 x 5 = 40
9 x 2 = 18	9 x 5 = 45
10 x 2 = 20	10 x 5 = 50
11 x 2 = 22	11 x 5 = 55
12 x 2 = 24	12 x 5 = 60

0 x 10 = 0	0 x 3 = 0
1 x 10 = 10	1 x 3 = 3
2 x 10 = 20	2 x 3 = 6
3 x 10 = 30	3 x 3 = 9
4 x 10 = 40	4 x 3 = 12
5 x 10 = 50	5 x 3 = 15
6 x 10 = 60	6 x 3 = 18
7 x 10 = 70	7 x 3 = 21
8 x 10 = 80	8 x 3 = 24
9 x 10 = 90	9 x 3 = 27
10 x 10 = 100	10 x 3 = 30
11 x 10 = 110	11 x 3 = 33
12 x 10 = 120	12 x 3 = 36

Count in 10s

tens	units
3	7

Counting up in tens this digit changes:

37 47 57 67 77 87

2/2 Place value

tens	units
2	8

28 means 2 tens and 8 units (ones)
20 and 8

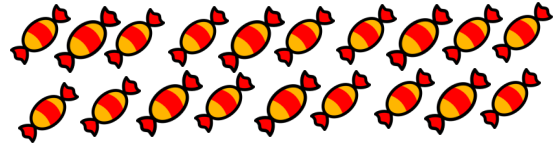
2/3 Estimate numbers

- Eyeball estimate



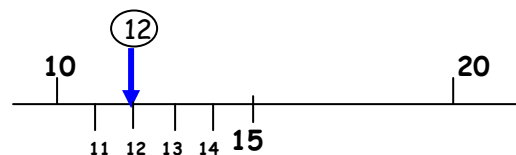
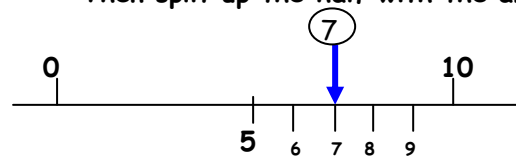
Here are 3 sweets

Use this to estimate larger amounts



- Estimate on a number line

Fill in the half way number first
Then split up the half with the arrow



2/4 Order numbers

Ten	Unit
3	7
3	2
7	6
6	2



- ◆ Begin at the tens and compare

76 is the biggest

62 is next biggest

Ten	Unit
3	7
3	2
7	6
6	2

- ◆ Move to the units and compare

Order is: 76 62 37 32

2/4 (continued) Inequality symbols



We say: 9 is bigger than 5

We write: 9 > 5

We say: 5 is smaller than 9

We write: 5 < 9

2/5 Numbers in figures and words

1	one
2	two
3	three
4	four
5	five
6	six
7	seven
8	eight
9	nine
10	ten

11	eleven
12	twelve
13	thirteen
14	fourteen
15	fifteen
16	sixteen
17	seventeen
18	eighteen
19	nineteen

20	twenty
21	twenty one
22	twenty two
23	twenty three
24	twenty four
25	twenty five
26	twenty six
27	twenty seven
28	twenty eight
29	twenty nine

30	thirty
40	forty
50	fifty
60	sixty
70	seventy
80	eighty
90	ninety
100	one hundred

2/6 Addition & subtraction problems

Words for ADD

altogether	sum of	total	plus
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Words for SUBTRACT

take away	how many left?	difference
how many more?	how many less?	

2/7 Addition facts to 10

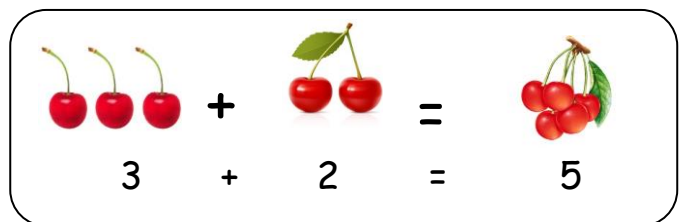
10	9	8	7	6	5	4	3	2	1
9	8	7	6	5	4	3	2	1	
8	7	6	5	4	3	2	1		
7	6	5	4	3	2	1			
6	5	4	3	2	1				
5	4	3	2	1					
4	3	2	1						
3	2	1							
2	1								
1									

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

Addition facts to 20

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

Subtraction is the inverse of addition



$$5 - 2 = 3$$



$$5 - 3 = 2$$

2/8 Add & subtract

$20 + 8 = 28$

$$\begin{array}{r} 20 \\ + 8 \\ \hline 28 \end{array}$$

$28 - 3 = 25$

$$\begin{array}{r} 28 \\ - 3 \\ \hline 25 \end{array}$$

$28 - 10 = 18$

$$\begin{array}{r} 28 \\ - 10 \\ \hline 18 \end{array}$$

$28 - 13 = 15$

$$\begin{array}{r} 28 \\ - 13 \\ \hline 15 \end{array}$$

2/9 Add & subtract

$7 + 3 = 10$ is the same as $3 + 7$

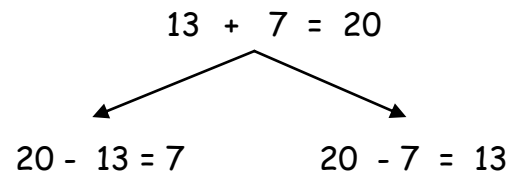


$10 - 7 = 3$ is NOT the same as $7 - 10$



2/10 Add & subtract

Fact family for add and subtract



2/11 2, 5, 10 times tables

♦ See 2/1

Odds & even numbers

- Even numbers - can be paired up



Tip - the last digit always 0 2 4 6 8

- Odd numbers - cannot be paired up



Tip - the last digit always 1 3 5 7 9

2/12 Multiply & divide

Words for MULTIPLY

times

product

double

triple

Words for DIVIDE

share

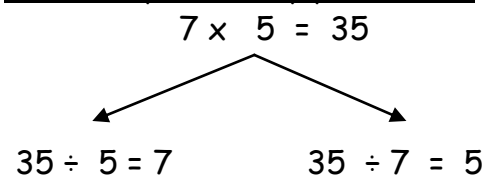
split

Words for EQUALS

is

gives

Fact family for multiply and divide



2/13 Multiply & divide

$7 \times 5 = 35$ is the same as 5×7



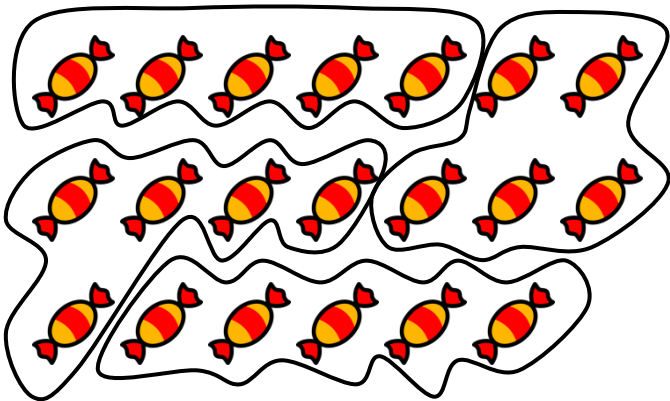
$35 \div 7 = 5$ is NOT the same as $7 \div 35$



2/14 Multiply & divide

Example1: Here are 20 sweets to share
Each child gets 5 sweets
How many children are there?

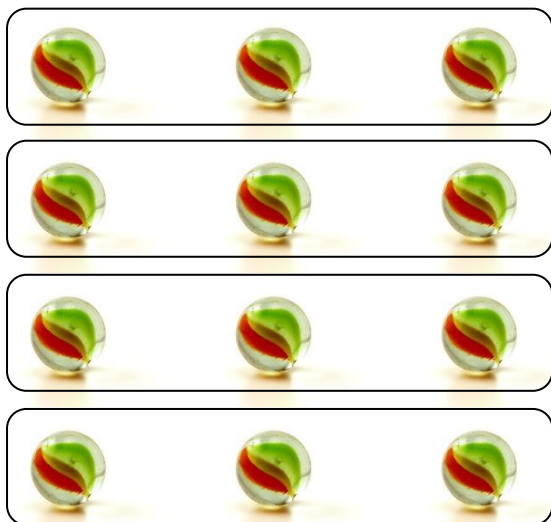
Divide them up into groups of 5 sweets-like this



There must be 4 children

Example2: Here are 12 marbles to share
There are 4 children.
How many marbles does each get?

Divide them up into 4 groups - like this



Each child gets 3 marbles

Repeated addition (Multiplication)



Here are 3 footballers.

How many legs do they have altogether?

Addition sentence

$$2 + 2 + 2 = 6$$

Multiplication sentence

$$3 \times 2 = 6$$

Repeated addition is the same as multiplication

Addition sentence

$$5 + 5 + 5 + 5 = 20$$

Multiplication sentence

$$4 \times 5 = 20$$

$$10 + 10 + 10 = 30$$

$$3 \times 10 = 30$$

Repeated subtraction (Division)

Repeated subtraction is the same as division

15

$$\begin{array}{r} 15 \\ -5 \end{array} (1)$$

10

$$\begin{array}{r} 10 \\ -5 \end{array} (2)$$

5

$$\begin{array}{r} 5 \\ -5 \end{array} (3)$$

0

This is the same as
 $15 \div 5 = 3$

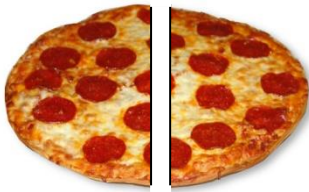
Because 5 has been
subtracted 3 times
to get to 0

2/15 & 16 Fractions

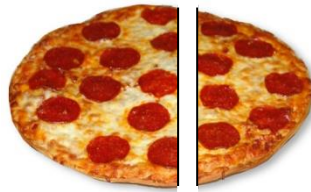
To work out a half

Split into two equal parts

YES



NO!!!!

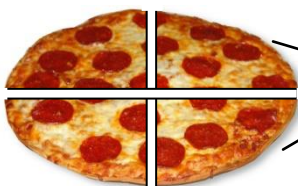


$$10 \text{ sweets} \div 2 = 5 \text{ sweets}$$

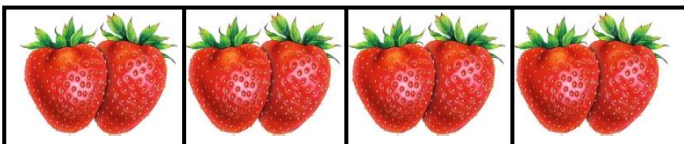
$$\text{OR } \frac{1}{2} \text{ of } 10 = 10 \div 2 = 5$$

To work out a quarter

Split into four equal parts



$$\frac{2}{4} = \frac{1}{2}$$



$$8 \text{ strawberries} \div 4 = 2 \text{ strawberries}$$

$$\text{OR } \frac{1}{4} \text{ of } 8 = 8 \div 4 = 2$$

2/17 Units of measure

METRIC units of length are:

Millimetre (mm)



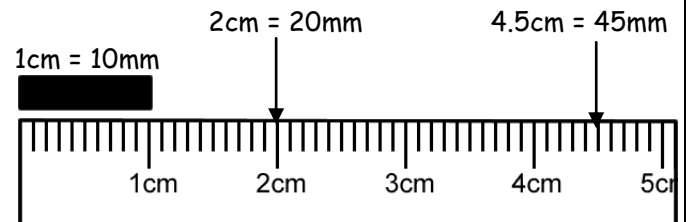
Centimetre (cm)



Metre (m)



Kilometre (km)



- ◆ A big stride is about a metre



- ◆ Distance to Dublin is measured in kilometres



METRIC units of mass are:

Gram (g)



Kilogram (kg)



$$1 \text{ kilogram (kg)} = 1000 \text{ grams (g)}$$

- ◆ An apple weighs 150grams



- ◆ Baby chimp weighs 3kg



2/17 Units of measure (continued)

METRIC units of capacity (liquids) are:

Millilitre (ml)



Centilitre (cl)



Litre (l)

- ◆ A medicine spoon holds 5ml



- ◆ A 5-litre bucket

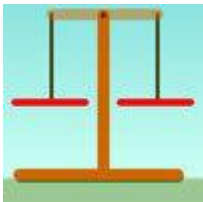


- ◆ Fuel for the car is measured in litres



2/18 Compare units of measure

Think of the units of mass then order:



a bar of chocolate
your teacher
a blown-up balloon
a loaf of bread

A blown-up balloon < a bar of chocolate < a loaf of bread < your teacher

Think of the units of length used then order:



How high you could jump in the air
How far you can kick a football
How far you can run in $\frac{1}{2}$ minute
Length of a bug

Length of a bug < you could jump in the air < you can kick a football < you can run in half a minute

2/19 Money

To write amounts of money

£3 or £3.00

50p or £0.50

£3.50 or 350p **BUT never £3.50p or £3.5**

Value of coins



1p or £0.01

2p or £0.02

5p or £0.05

10p or £0.10

20p or £0.20

50p or £0.50

£1 or £1.00

£2 or £2.00

2/20 Bills and change

To add amounts of money

$$\begin{aligned} & 24p + 32p \\ = & 20p + 4p + 30p + 2p \\ = & 20p + 30p + 4p + 2p \\ = & 50p + 6p \\ = & 56p \end{aligned}$$

To find change from £1

Subtraction method

$$\begin{aligned} & \text{£1} - 56p \\ = & \text{£}1 - 50p - 6p \\ = & 50p - 6p \\ = & 44p \end{aligned}$$

Add-on method

$$\begin{aligned} 56p + 4p &= 60p \\ 60p + 40p &= \text{£}1 \\ = & 4p + 40p \\ = & 44p \end{aligned}$$

2/21 Sequence of time

Smallest

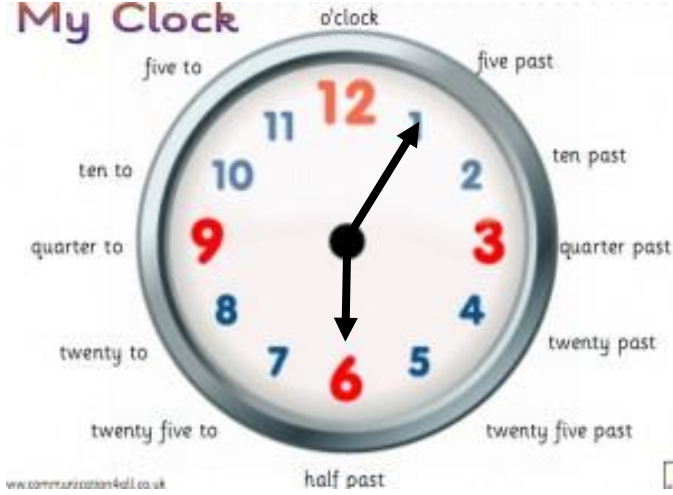


Largest

Second(s) 60
Minute(min) 60
Hour(h) 24
Day 7
Week 4
Month 12
Year

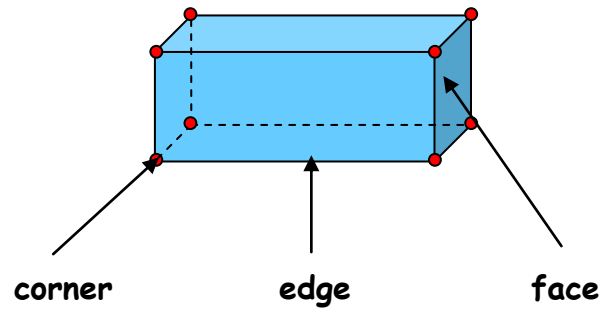
2/22 Write time

My Clock



The time shown is:

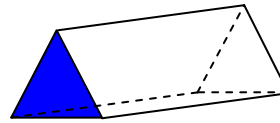
5 past 6 OR 6:05



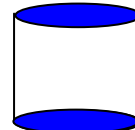
2/25 2D shapes on 3D shapes



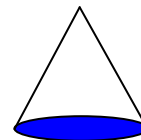
6 faces - all rectangles



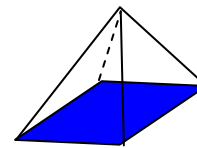
5 faces - 2 triangles
- 3 rectangles



3 faces - 2 circles
- 1 curved surface



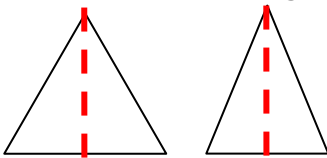
2 faces - 1 circle
- 1 curved surface



5 faces - 1 rectangle
- 4 triangles

2/23 2D shapes

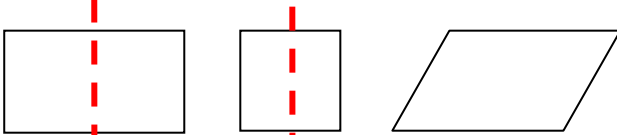
◆ 3 sides - Triangles



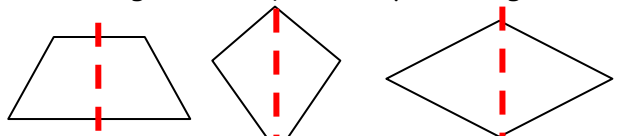
A vertical line of symmetry

equilateral isosceles

◆ 4 sides - Quadrilaterals

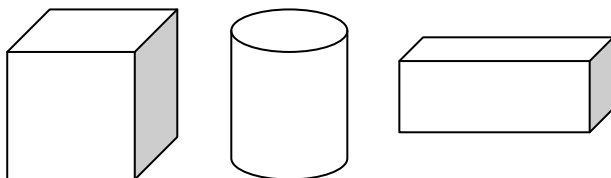


rectangle square parallelogram

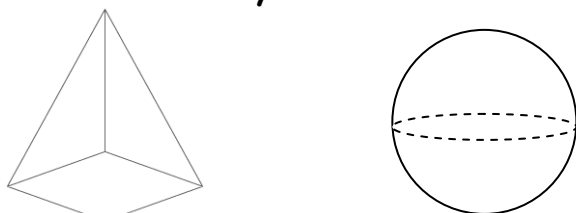


trapezium kite rhombus

2/24 3D shapes

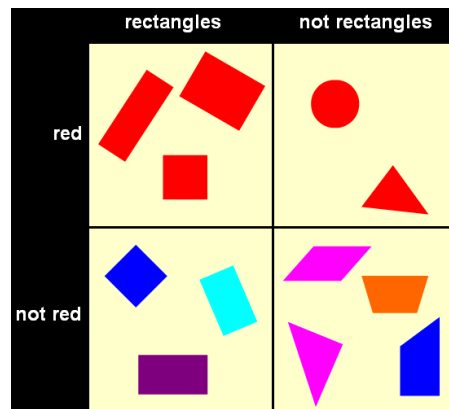


cube cylinder cuboid

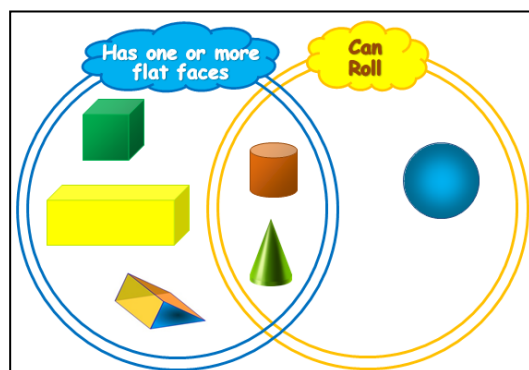


pyramid sphere

2/26 To sort 2D shapes and 3D shapes



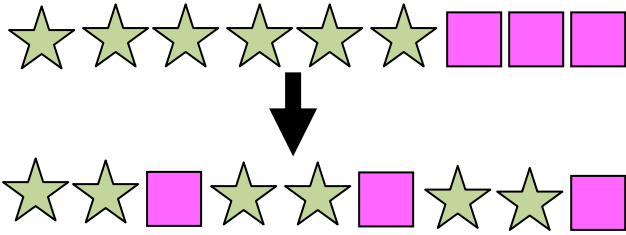
Carroll diagram



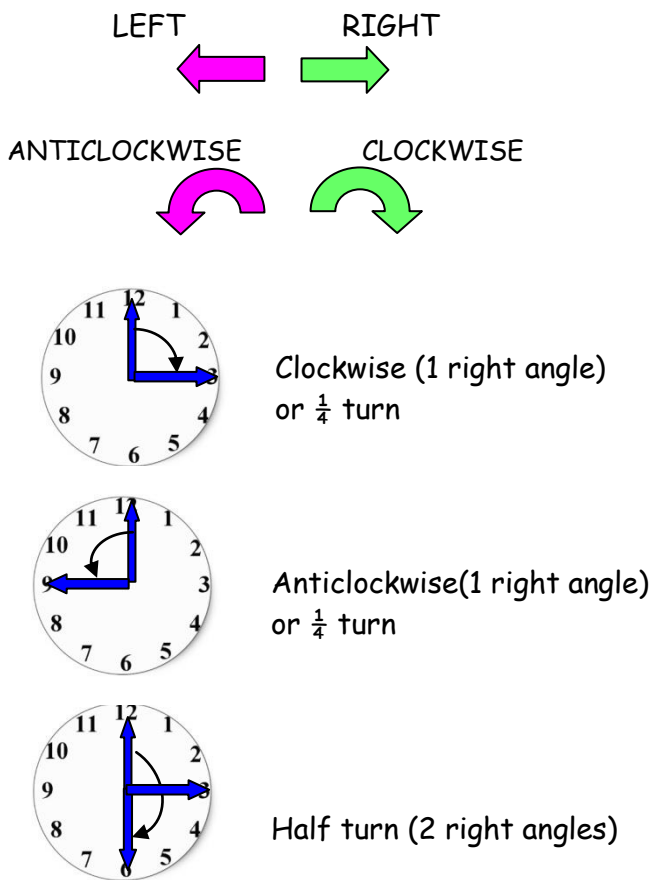
Venn diagram

2/27 Sequence of shapes

Make these shapes into a pattern

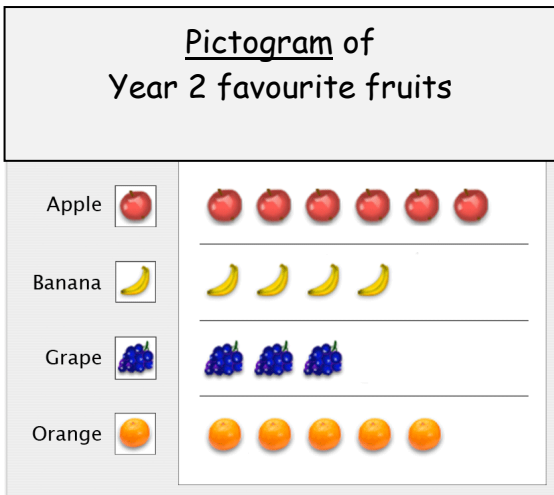


2/28 Describe position, direction & movement



2/29 Tables and graphs

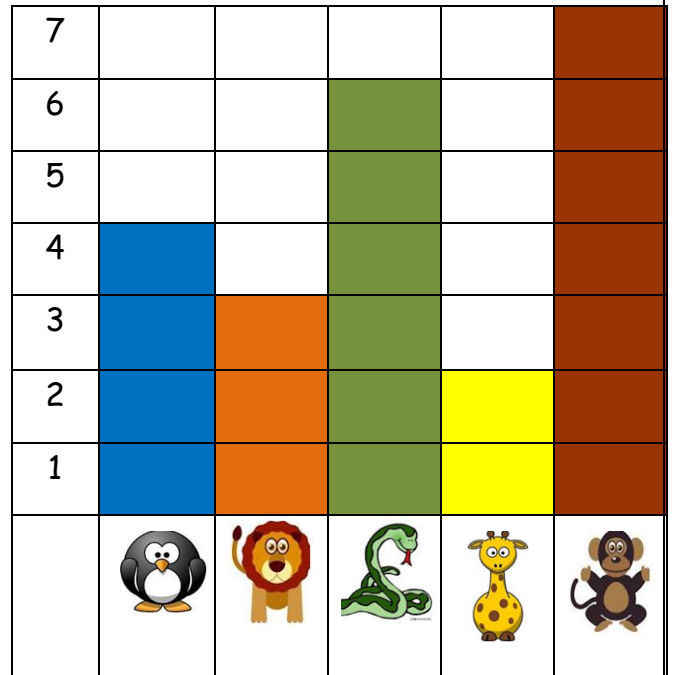
Pictogram of Year 2 favourite fruits



Tally chart showing animals in the zoo

Animal	Tally	Number of animals
Penguin	IIII	4
Lion	III	3
Snake	IIII I	6
Giraffe	II	2
Monkey	IIII II	7

Block graph to show animals in the zoo



2/30 Questions about tables and graphs

Example:

Questions about 'Animals in the zoo'

1. How many animals are there altogether?

$4+3+6+2+7=22$

2. How many more monkeys are there than lions?

$7-3=4$

3. What animal is there least of?

giraffe