Year 2 Maths Help and Tips

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	Ones
3	7

Counting up in tens this digit changes:

37   **4**7   **5**7   **6**7   **7**7   **8**7

2/2 Place value

tens	Ones
2	8

28 means **2 tens** and **8 ones**
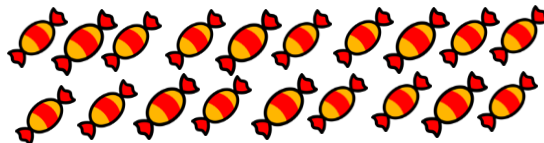   **20**   and   **8**

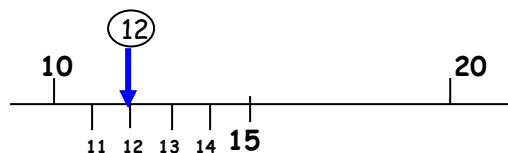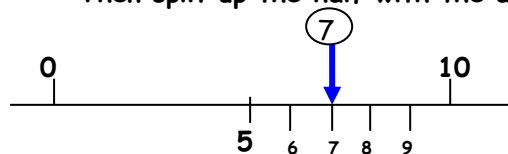## 2/3 Estimate numbers

- **Eyeball estimate**

Here are 3

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	Ones
3	7
3	2
7	6
6	2

- Begin at the tens and compare

76 is the biggest
62 is next biggest

Ten	Ones
3	7
3	2
~~7~~	~~6~~
~~6~~	~~2~~

- Move to the ones and compare

Order is: 76   62   37   32

2/4 (continued) Inequality symbols

| less than | equal to | greater than |
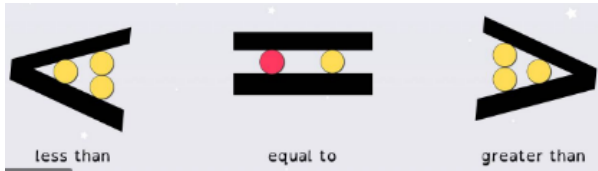
We say: **9** **is bigger than** 5

We write: 9 **>** 5

We say **5** **is smaller than** 9

2/5 Numbers in figures and words

1	one	11	eleven
2	two	12	twelve
3	three	13	thirteen
4	four	14	fourteen
5	five	15	fifteen
6	six	16	sixteen
7	seven	17	seventeen
8	eight	18	eighteen
9	nine	19	nineteen
10	ten		

20	twenty	30	thirty
21	twenty one	40	forty
22	twenty two	50	fifty
23	twenty three	60	sixty
24	twenty four	70	seventy
25	twenty five	80	eighty
26	twenty six	90	ninety
27	twenty seven	100	one hundred
28	twenty eight		
29	twenty nine		

2/6 Addition & subtraction problems
Words for ADD

| altogether | sum of | total | plus |

Words for SUBTRACT

| take away | how many left? | difference |

| how many more? | how many less? |

2/7 Addition facts to 10
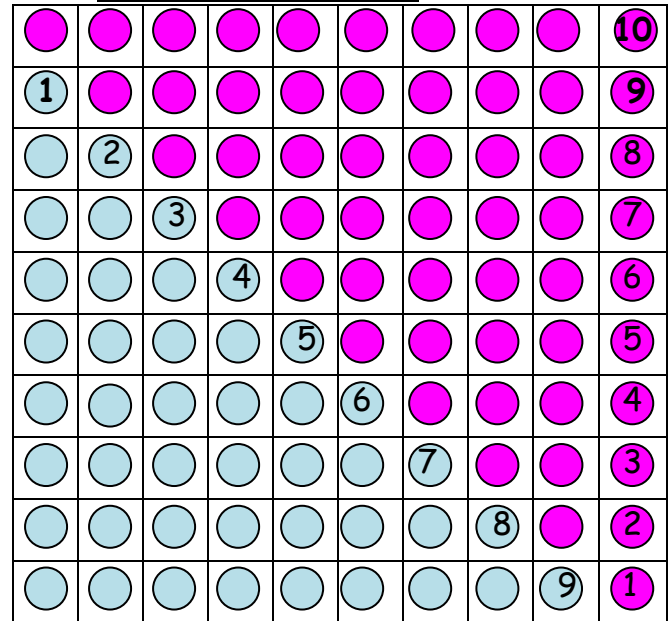
0 + 10	1 + 9	2 + 8	3 + 7	4 + 6
10 + 0	9 + 1	8 + 2	7 + 3	6 + 4
		5 + 5		

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		
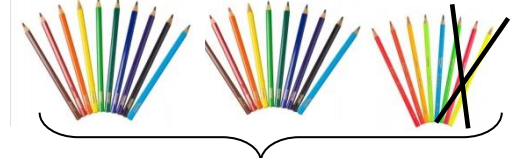
Subtraction is the inverse of addition
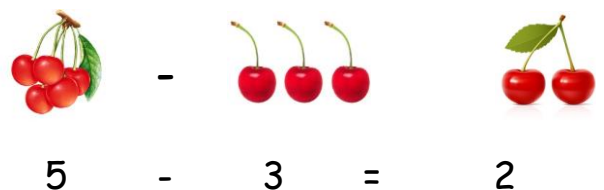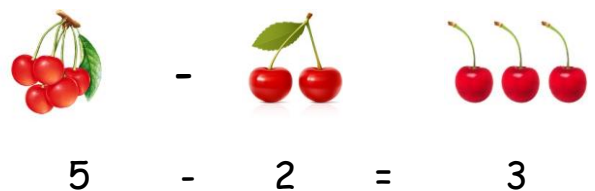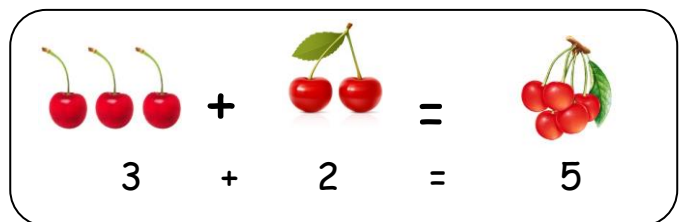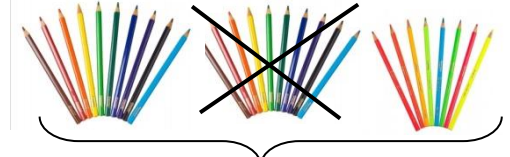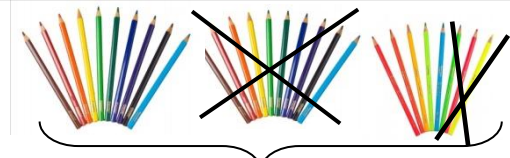
3 + 2 = 5

5 - 2 = 3

5 - 3 = 2

2/8 Add & subtract

20 + 8 = 28

```
  20
+  8
  28
```


28 − 3 = 25

```
  28
+  3
  25
```


28 − 10 = 18

```
  28
- 10
  18
```


28 − 13 = 15

```
  28
- 13
  15
```

2/9 Add & subtact

7 + 3 = 10 is the same as 3 + 7 👍

10 – 7 = 3 is NOT the same as 7-10 👎

2/10 Add & subtact

Fact family for add and subtract

13 + 7 = 20

20 - 13 = 7   20 - 7 = 13

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

7 x 5 = 35

35 ÷ 5 = 7   35 ÷ 7 = 5

2/13 Multiply & divide

7 x 5 = 35 is the same as 5 x 7

35 ÷ 7 = 5 is NOT the same as 7÷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
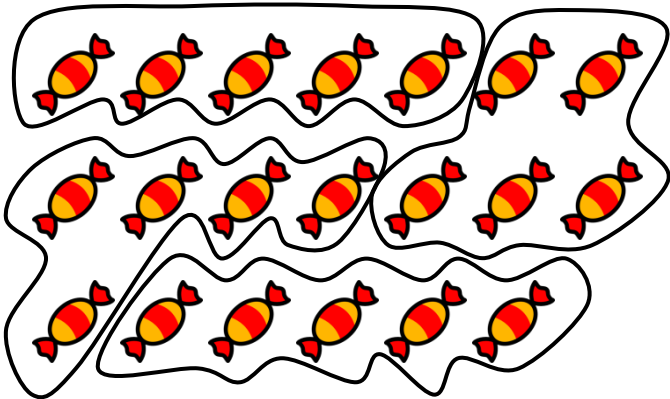
There must be 4 children

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	Multiplication sentence
2 + 2 + 2 = 6	3 x 2 = 6

Repeated addition is the same as multiplication

Addition sentence	Multiplication sentence
5 + 5 + 5 + 5 = 20	**4 x 5 = 20**
10 + 10 + 10 = 30	**3 x 10 = 30**

Repeated subtraction (Division)
Repeated subtraction is the same as division

```
 15
 -5  (1)
 10
 -5  (2)
  5
 -5  (3)
  0
```

This is the same as
15 ÷ 5 = 3

Because 5 has been subtracted 3 times to get to 0

2/15 & 16 Fractions

To work out a half

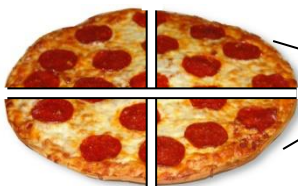Split into two equal parts
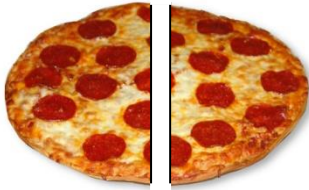
YES   NO!!!!
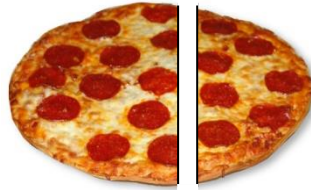
10sweets ÷ 2 = 5sweets
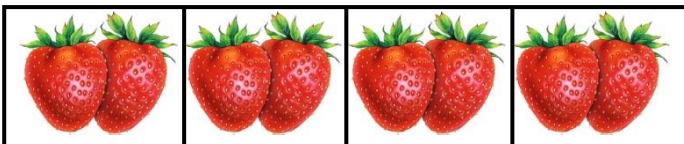
OR $\frac{1}{2}$ of 10 = 10 ÷ 2 = 5

To work out a quarter

Split into four equal parts

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

8 strawberries ÷ 4 = 2 strawberries

OR $\frac{1}{4}$ of 8 = 8 ÷ 4 = 2

2/17 Units of measure

METRIC units of length are:

Millimetre (mm)

↓

Centimetre (cm)

↓

Metre (m)

↓

Kilometre (km)

2cm = 20mm   4.5cm = 45mm

1cm = 10mm

1cm   2cm   3cm   4cm   5cm
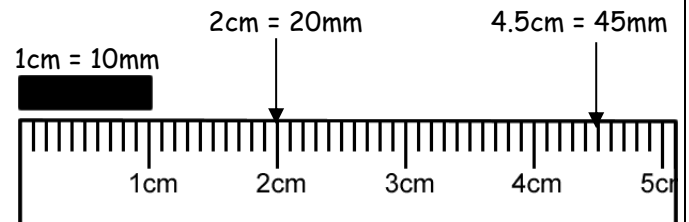
- A big stride is about a metre

- Distance to Dublin is measured in kilometres

METRIC units of mass are:

Gram (g)

↓

Kilogram (kg)

1 kilogram(kg) = 1000grams(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
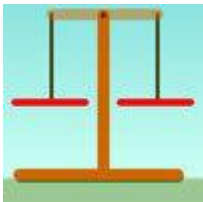
- ♦ A 5-litre bucket

- ♦ 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 ½ 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

24p + 32p
=20p + 4p + 30p + 2p
=20p + 30p + 4p + 2p
=50p + 6p
=56p

To find change from £1

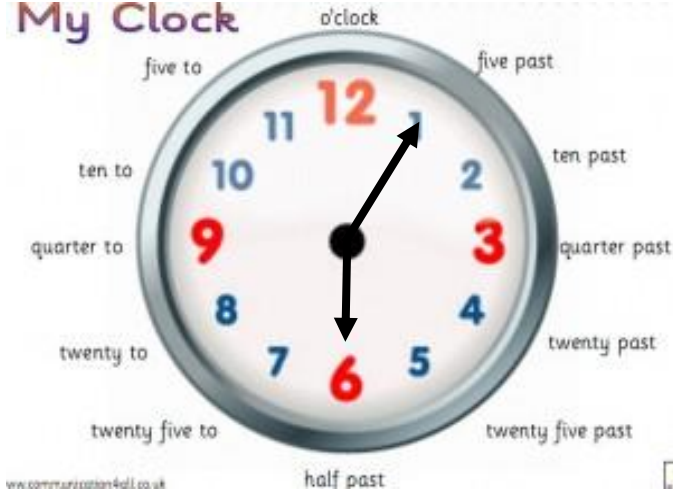| Subtraction method	Add-on method
£1 – 56p	56p + 4p = 60p
= £1 – 50p – 6p	60p + 40p = £1
= 50p – 6p	= 4p + 40p
= 44p	= 44p

2/21 Sequence of time

Smallest

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

Largest

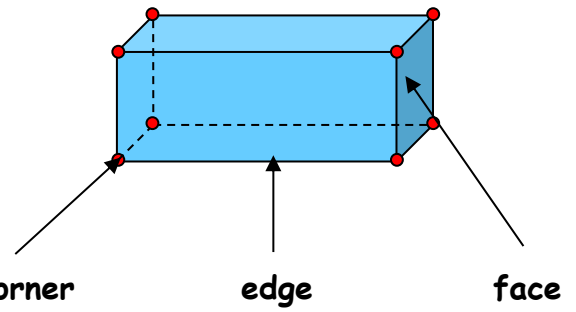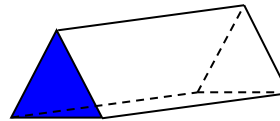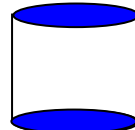## 2/22 Write time

My Clock

The time shown is:
5 past 6   OR   6:05

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

corner   edge   face

2/25 2D shapes on 3D shapes

6 faces – all rectangles

5 faces – 2 triangles
        - 3 rectangles

3 faces – 2 circles
        - 1 curved surface
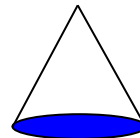
2 faces – 1 circle
        - 1 curved surface
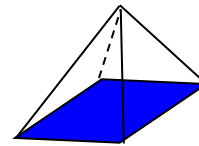
5 faces – 1 rectangle
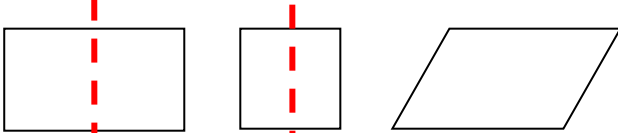   - 4 triangles

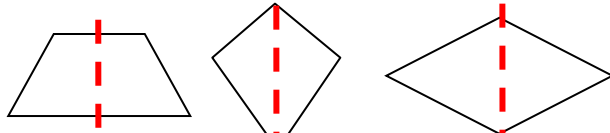## 2/26 To sort 2D shapes and 3D shapes

rectangles   not rectangles

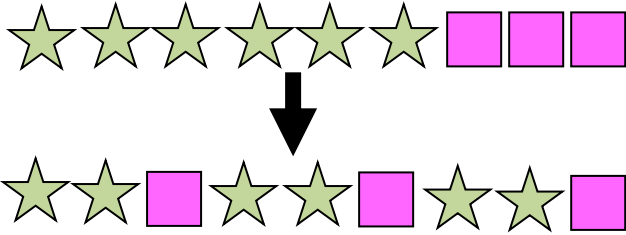red
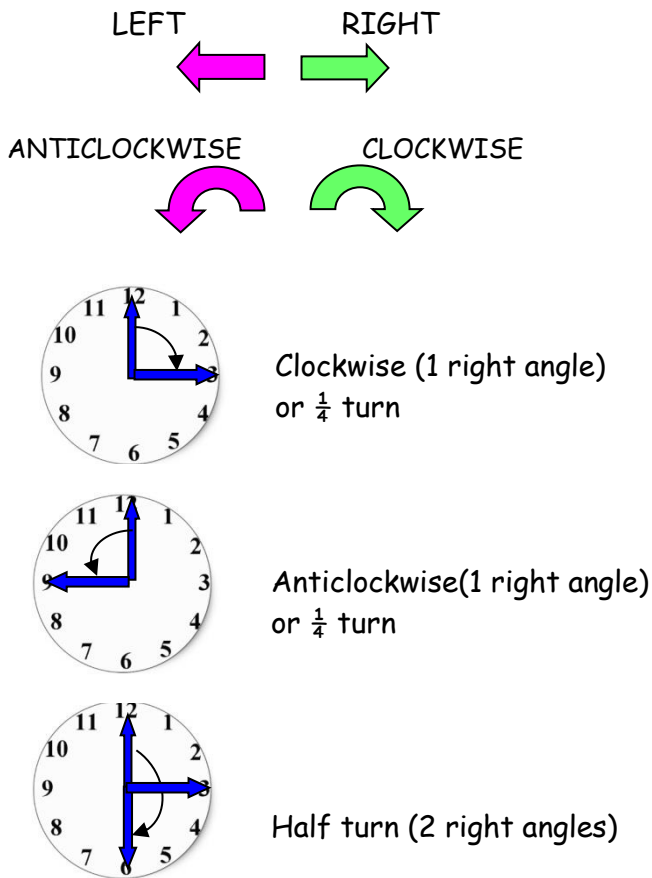
not red

Carroll diagram

Has one or more flat faces   Can Roll
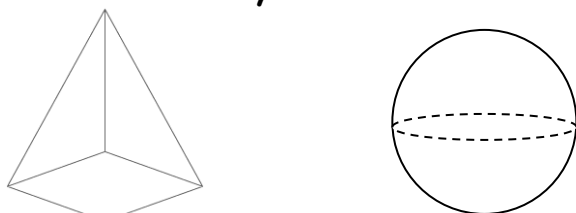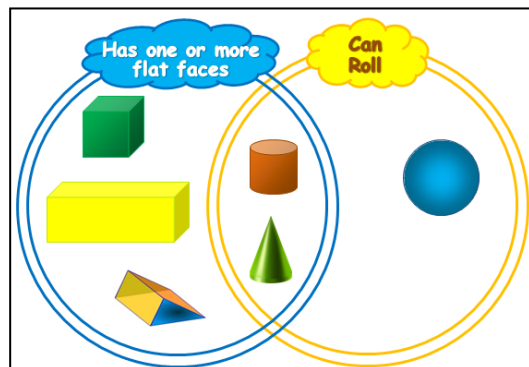
Venn diagram

2/27 Sequence of shapes

Make these shapes into a pattern

2/28 Describe position, direction & movement

LEFT   RIGHT

ANTICLOCKWISE   CLOCKWISE

Clockwise (1 right angle) or $\frac{1}{4}$ turn

Anticlockwise (1 right angle) or $\frac{1}{4}$ turn

Half turn (2 right angles)

2/29 Tables and graphs

Pictogram of
Year 2 favourite fruits

Apple	
Banana	
Grape	
Orange	
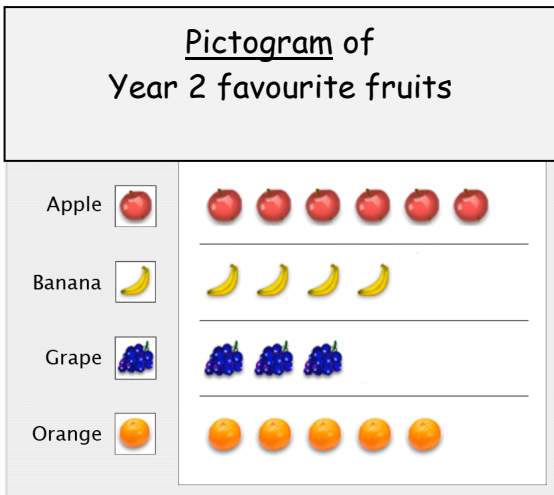
Tally chart showing animals in the zoo
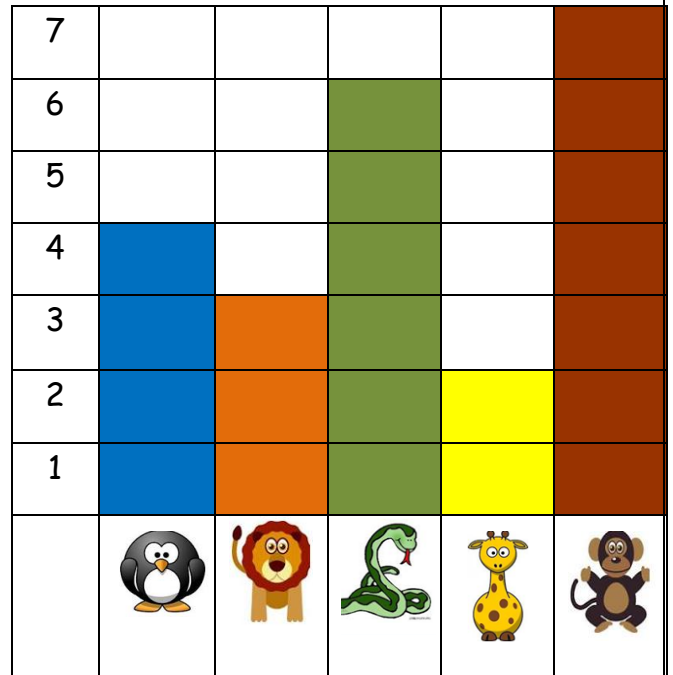
Animal	Tally	Number of animals
Penguin	IIII	4
Lion	III	3
Snake	HHT I	6
Giraffe	II	2
Monkey	HHT II	7

Block graph to show animals in the zoo

7					
6					
5					
4					
3					
2					
1					

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