Year 3
Maths Examples

ST. MARY'S RC. PRIMARY SCHOOL

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

0	x	2	=	0
1	x	2	=	2
2	x	2	=	4
3	x	2	=	6
4	x	2	=	8
5	x	2	=	10
6	x	2	=	12
7	x	2	=	14
8	x	2	=	16
9	x	2	=	18
10	x	2	=	20
11	x	2	=	22
12	x	2	=	24

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

0	x	10	=	0
1	x	10	=	10
2	x	10	=	20
3	x	10	=	30
4	x	10	=	40
5	x	10	=	50
6	x	10	=	60
7	x	10	=	70
8	x	10	=	80
9	x	10	=	90
10	x	10	=	100
11	x	10	=	110
12	x	10	=	120

0	x	3	=	0
1	x	3	=	3
2	x	3	=	6
3	x	3	=	9
4	x	3	=	12
5	x	3	=	15
6	x	3	=	18
7	x	3	=	21
8	x	3	=	24
9	x	3	=	27
10	x	3	=	30
11	x	3	=	33
12	x	3	=	36

Count in 10s

tens	ones
3	7

Counting up in tens this digit changes:
37 47 57 67 77 87

2 Place value

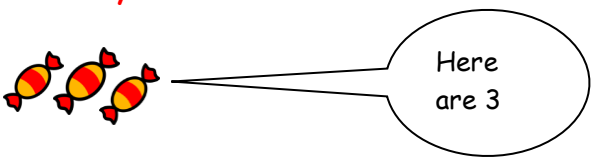
tens	ones
2	8

28 means 2 tens and 8 ones

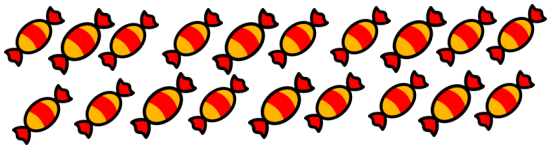
20 and 8

3 Estimate numbers

- Eyeball estimate

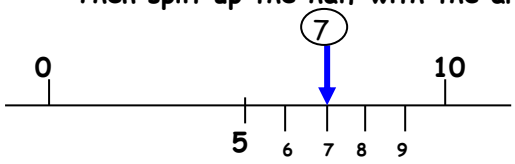


Use this to estimate larger amounts



- Estimate on a number line

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





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

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

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

6 Addition & subtraction problems

Words for ADD

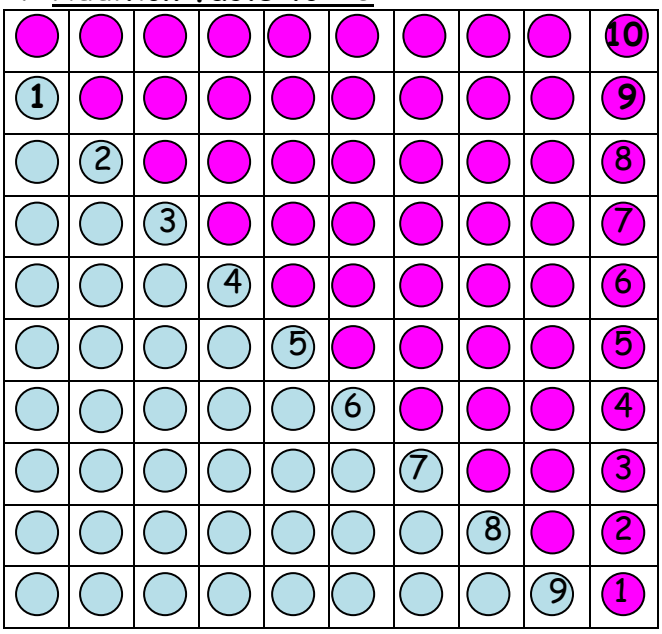
altogether | sum of | total | plus

Words for SUBTRACT

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

how many more?

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		

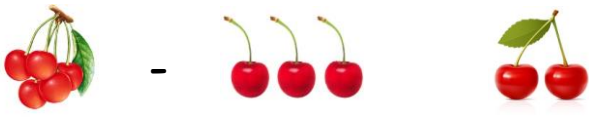
Addition facts to 20

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

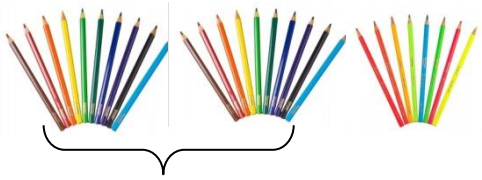
Subtraction is the inverse of addition







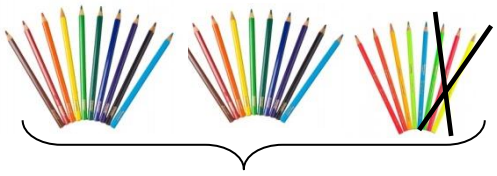
8 Add & subtract



= 28

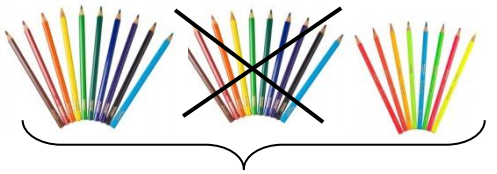
20 + 8 = 28

20
8 +
28



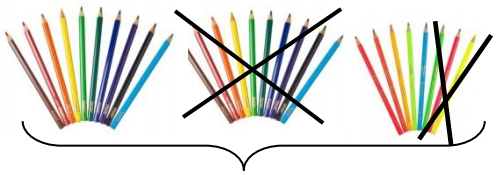
28 - 3 = 25

28
3 -
25



28 - 10 = 18

28
10 -
18



28 - 13 = 15

28
13 -
15

9 Add & subtract

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



10 – 7 = 3 is NOT the same as 7-10



10 Add & subtact

Fact family for add and subtract

13 + 7 = 20

20 - 13 = 7 20 - 7 = 13

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

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

13 Multiply & divide

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



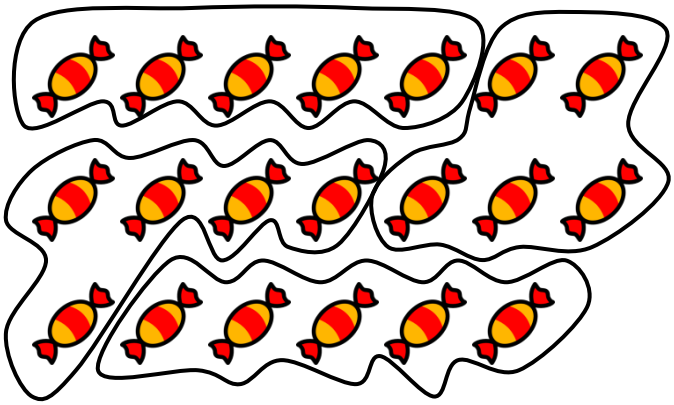
35 ÷ 7 = 5 is NOT the same as 7÷35



14 Multiply & divide

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

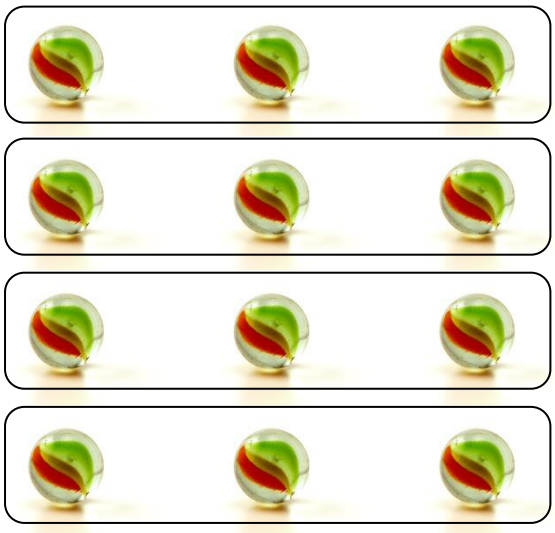
Divide them up into groups of 5 sweets-like this



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

15 & 16 Fractions

To work out a half

Split into two equal parts

YES NO!!!!



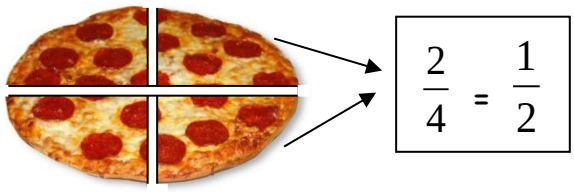


10sweets ÷ 2 = 5sweets

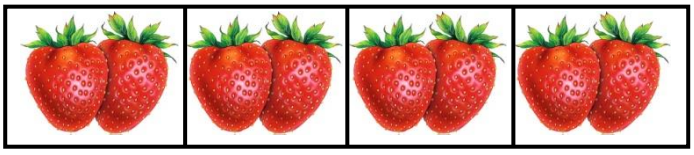
OR $\frac{1}{2}$ of 10 = 10 ÷ 2 = 5

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

17 Units of measure

METRIC units of length are:

Millimetre (mm)

↓

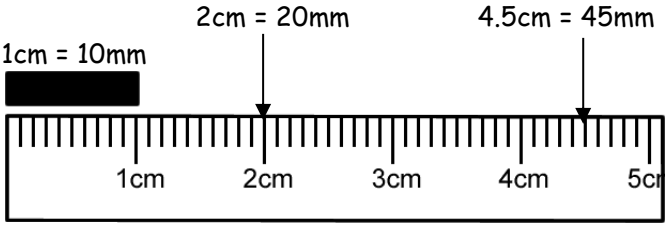
Centimetre (cm)

↓

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 kilogram(kg) = 1000grams(g)

- An apple weighs 150grams



- Baby chimp weighs 3kg



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



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

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

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
£1 – 56p
= £1 – 50p – 6p
= 50p – 6p
= 44p

Add-on method
56p + 4p = 60p
60p + 40p = £1
= 4p + 40p
= 44p

21 Sequence of time

Smallest ↓

Second(s) → 60
Minute(min) → 60
Hour(h) → 24
Day → 7
Week → 4

Largest

Month
Year

22 Write time

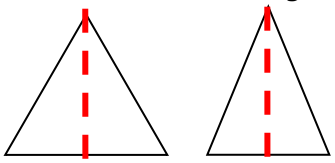


The time shown is:

5 past 6 OR 6:05

23 2D shapes

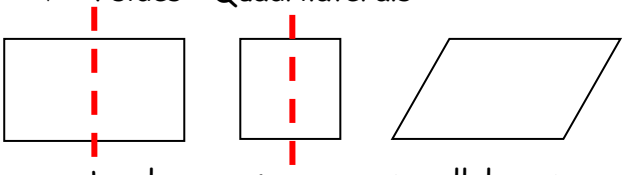
- 3 sides – Triangles



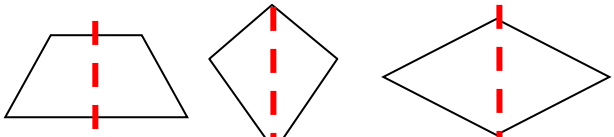
equilateral isosceles

A vertical line of symmetry

- 4 sides - Quadrilaterals

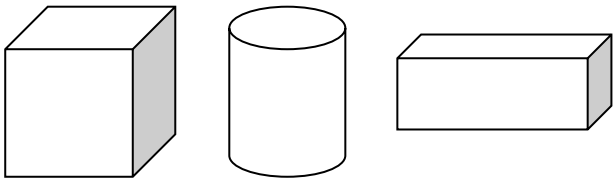


rectangle square parallelogram

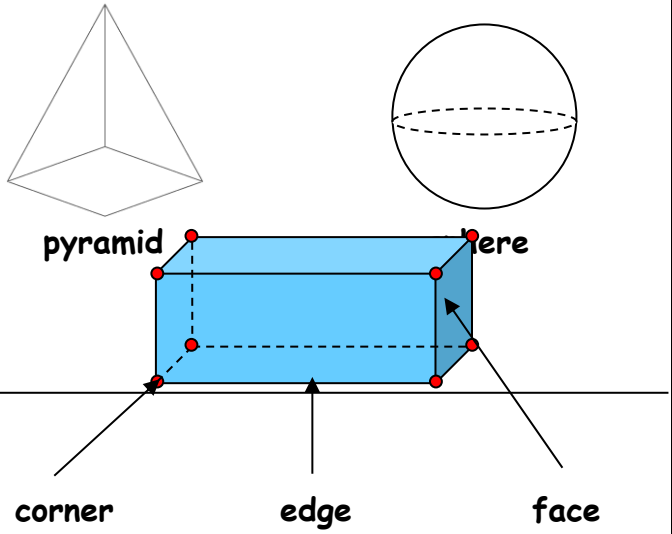


trapezium kite rhombus

24 3D shapes



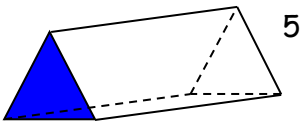
cube **cylinder** **cuboid**



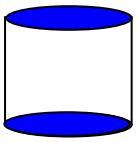
25 2D shapes on 3D shapes



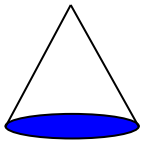
6 faces – all rectangles



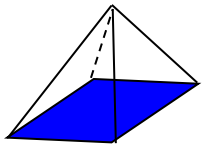
5 faces – 2 triangles
- 3 rectangles



3 faces – 2 circles
- 1 curved surface

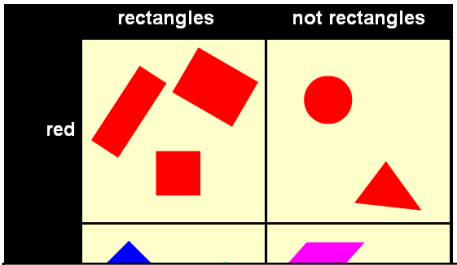


2 faces – 1 circle
- 1 curved surface

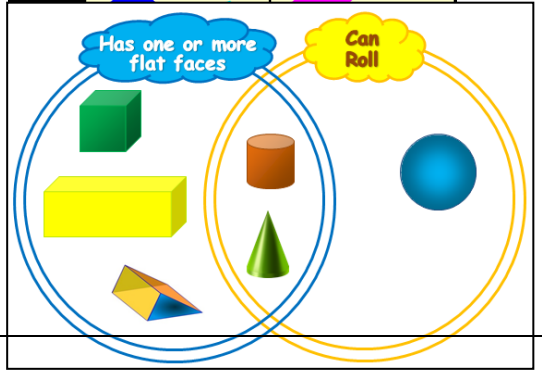


5 faces – 1 rectangle
- 4 triangles

26 To sort 2D shapes and 3D shapes



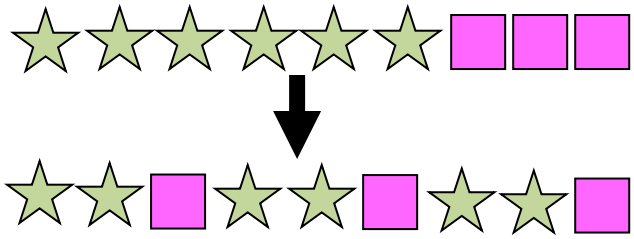
Carroll diagram



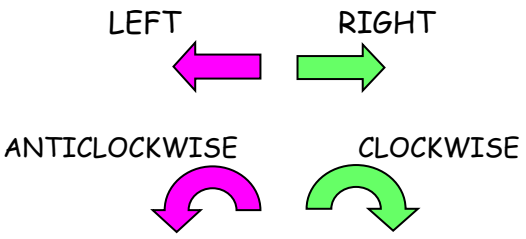
Venn diagram

27 Sequence of shapes

Make these shapes into a pattern



28 Describe position, direction & movement

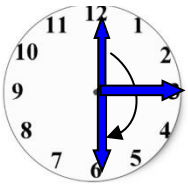




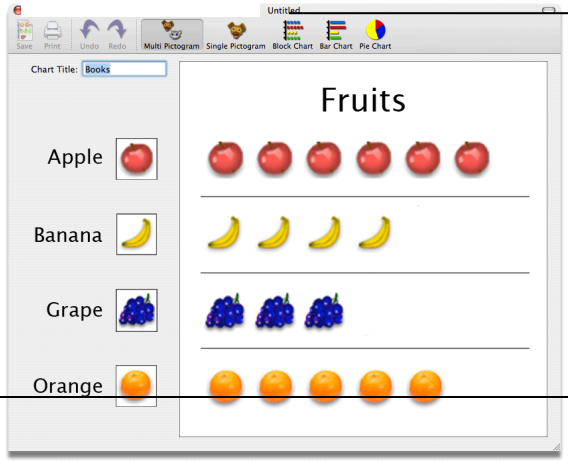
Clockwise (1 right angle) or $\frac{1}{4}$ turn



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

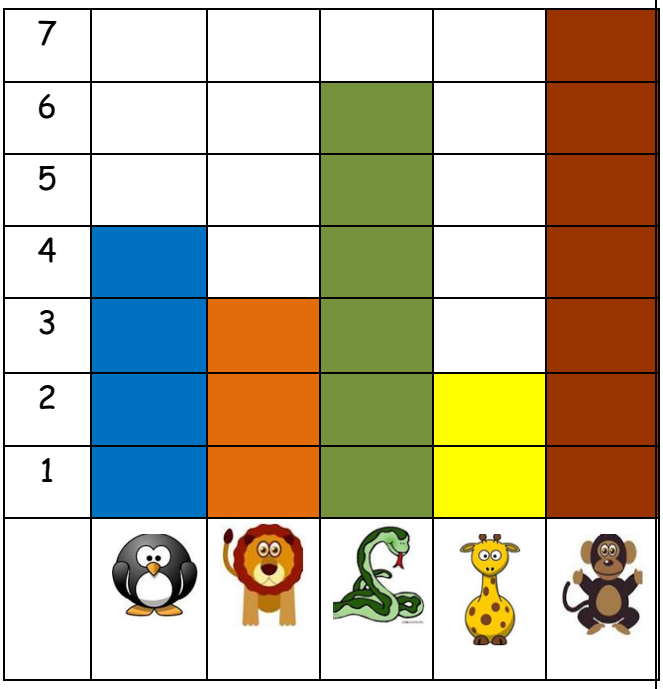


Half turn (2 right angles)



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

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