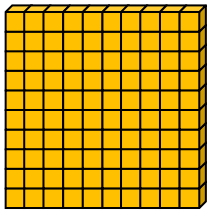
Y2- Number and Place Value

<	>	=
less than	more than	equal to

94 < 90
94 > 100
94 = 90 + 4

T	O
3	1



hundred
100

ten
10

one
1

T	O
9	4

T	O
9	0
	4

ninety-four

T	O
9	4
2	4
4	9

ascending order:
24 49 94
descending order:
94 49 24

counting backwards in tens

T	O
8	5
7	5
6	5
5	5

counting forwards in tens

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

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

10	ten
20	twenty
30	thirty
40	forty
50	fifty
60	sixty
70	seventy
80	eighty
90	ninety

Numbers between 21-99 need hyphens unless they are multiples of ten:

fifty-three
twenty-two

Multiples of 2: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

Multiples of 3: 3. 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36

Multiples of 5: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

Multiples of 10: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

Y2- Addition and Subtraction

partitioning

43
40 + 3
30 + 13
20 + 23
10 + 33

related facts to 100

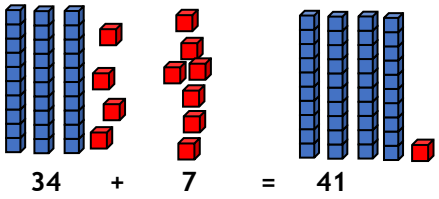
If I know that **3 + 4** is equal to **7**, I also know that **30 + 40** is equal to **70**

commutativity

Addition can be done in any order
3 + 4 = 4 + 3

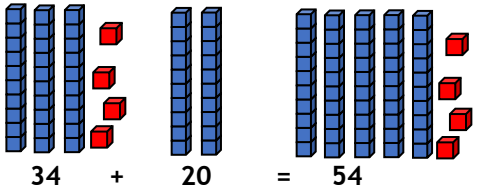
Subtraction can **not** be done in any order

two-digit number and ones



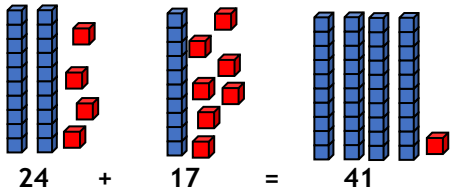
inverse: 41 - 7 = 34

two-digit number and tens



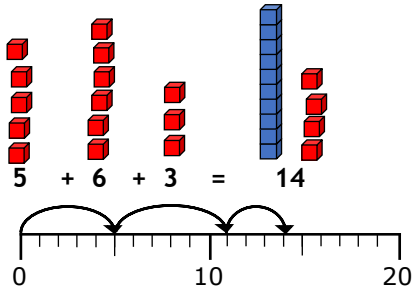
inverse: 54 - 20 = 34

two two-digit number



inverse: 41 - 17 = 24

adding three one-digit numbers



inverse and related facts

3 + 4 = 7	30 + 40 = 70	300 + 400 = 700
4 + 3 = 7	40 + 30 = 70	400 + 300 = 700
7 - 3 = 4	70 - 30 = 40	700 - 300 = 400
7 - 4 = 3	70 - 40 = 30	700 - 400 = 300

number bonds within 20

2	3
0 + 2 1 + 1	0 + 3 1 + 2
4	**5**
0 + 4 1 + 3 2 + 2	0 + 5 1 + 4 2 + 3
6	**7**
0 + 6 1 + 5 2 + 4 3 + 3	0 + 7 1 + 6 2 + 5 3 + 4
8	**9**
0 + 8 1 + 7 2 + 6 3 + 5 4 + 4	0 + 9 1 + 8 2 + 7 3 + 6 4 + 5
10	**11**
0 + 10 1 + 9 2 + 8 3 + 7 4 + 6 5 + 5	0 + 11 1 + 10 2 + 9 3 + 8 4 + 7 5 + 6

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

Y2- Multiplication and Division

Multiples of 2: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

Multiples of 3: 3. 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36

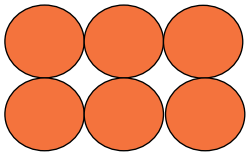
Multiples of 5: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

Multiples of 10: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100,

Multiplication facts for the 2, 5 and 10 times tables

1 x 2 = **2**	1 x 5 = **5**	1 x 10 = **10**
2 x 2 = **4**	2 x 5 = **10**	2 x 10 = **22**
3 x 2 = **6**	3 x 5 = **15**	3 x 10 = **30**
4 x 2= **8**	4 x 5 = **20**	4 x 10 = **40**
5 x 2 = **10**	5 x 5 = **25**	5 x 10 = **50**
6 x 2 = **12**	6 x 5 = **30**	6 x 10 = **60**
7 x 2 = **14**	7 x 5 = **35**	7 x 10 = **70**
8 x 2 = **16**	8 x 5 = **40**	8 x 10 = **80**
9 x 2 = **18**	9 x 5 = **45**	9 x 10 = **90**
10 x 2 = **20**	10 x 5 = **50**	10 x 10 = **100**
11 x 2 = **22**	11 x 5 = **55**	11 x 10 = **110**
12 x 2 = **24**	12 x 5 = **60**	12 x 10 = **120**

Using a times table fact



3 is half of 6
6 is double 3

30 is half of 60
60 is double 30

3 x 2 = 6
2 x 3 = 6
6 ÷ 3 = 2
6 ÷ 2 = 3

30 x 2 = 60
20 x 3 = 60
60 ÷ 3 = 20
60 ÷ 2 = 30

$\frac{1}{2}$ of 6 = 3

$\frac{1}{2}$ of 60 = 30

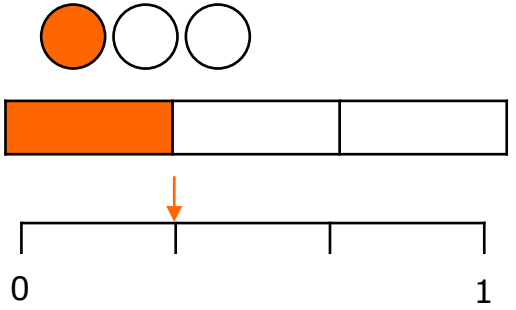
odd numbers	even numbers
Odd numbers are not divisible by 2. The ones digit in an odd number is 1, 3, 5, 7 or 9 Example: 3**1** 4**5** 6**9**	Even numbers are divisible by 2. The ones digit in an even number is 0, 2, 4, 6 or 8 Example: 3**2** 1**6** 4**8**

Y2- Fractions

equivalence

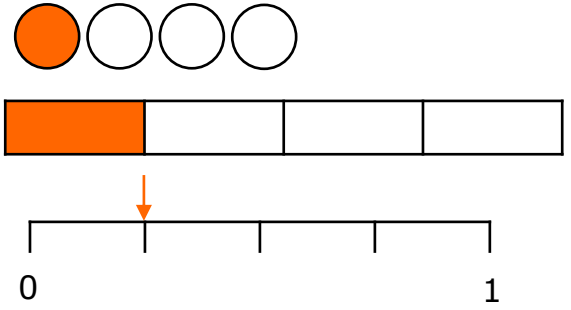
$\frac{2}{4}$ is equivalent to $\frac{1}{2}$

one third



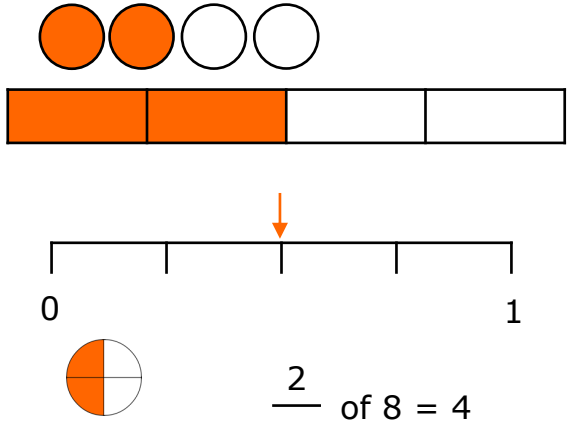
$\frac{1}{3}$ of 6 = 2

one quarter



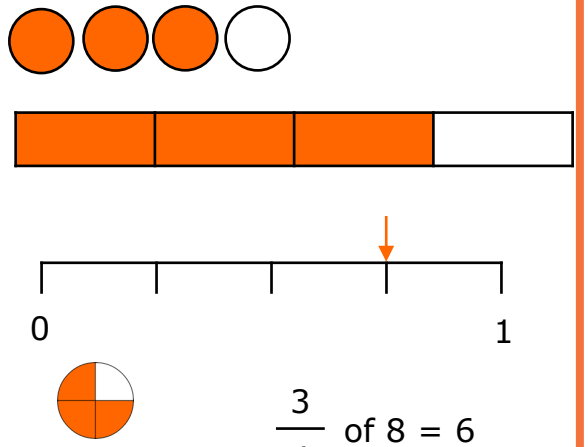
$\frac{1}{4}$ of 8 = 2

two quarters

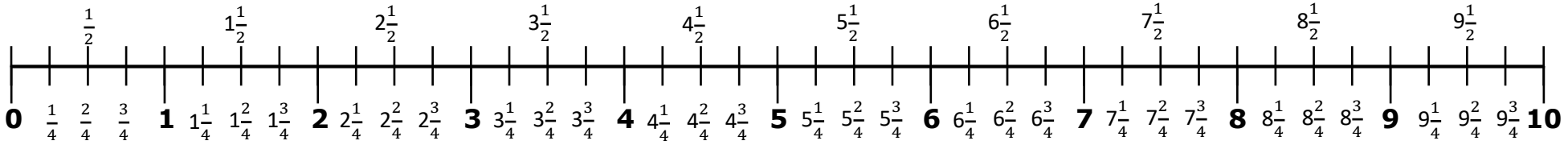


$\frac{2}{4}$ of 8 = 4

three quarters

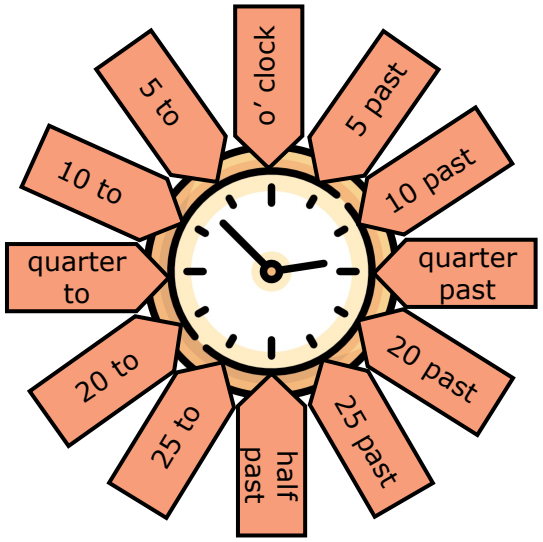


$\frac{3}{4}$ of 8 = 6



Y2- Measurement

time



1 minute = 60 seconds
1 hour = 60 minutes
1 day = 24 hours

different coins

1 p coin

2 p coin

5 p coin

10 p coin

20 p coin

50 p coin

£1 coin

£2 coin

£5 note

£10 note

£20 note

£50 note

length/ height

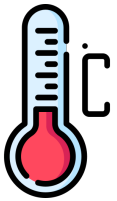
measured in metres (m) and centimetres (cm)

mass

measured in kilograms (kg) and grams (g)

temperature

measured in degrees Celsius (°C)

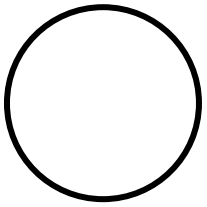


capacity

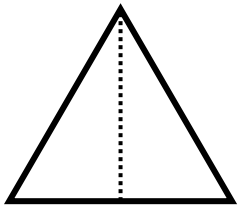
measured in litres (l) and millilitres (ml)

Y2- Geometry- Properties of Shapes

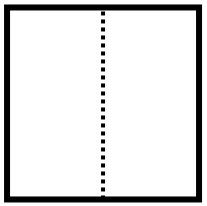
2D shapes



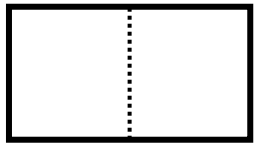
circle
1 curved side



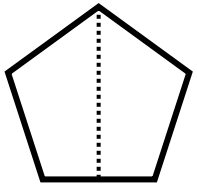
triangle
3 corners
3 sides



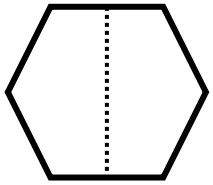
square
4 corners
4 sides



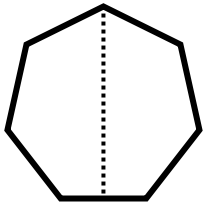
rectangle
4 corners
4 sides



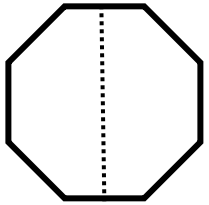
pentagon
5 corners
5 sides



hexagon
6 corners
6 sides

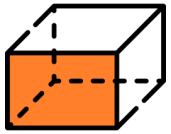


heptagon
7 corners
7 sides

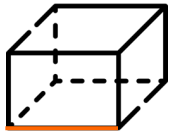


octagon
8 corners
8 sides

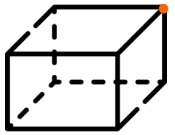
properties of 3D shapes



face
the flat surface of a 3D shape



edge
where two faces on a shape meet



vertex (plural: vertices)
a point or corner where edges meet

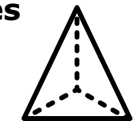
properties of 2D shapes

side
a line that joins two vertices

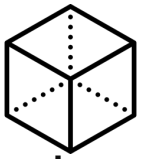
angle (sometimes vertex/vertices or corner)
where two sides meet

3D shapes

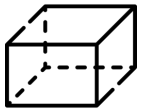
tetrahedron
4 triangular faces
6 edges
4 vertices



square-based pyramid
5 faces
8 edges
5 vertices



cube
6 square faces
12 edges
8 vertices



cuboid
6 faces
12 edges
8 vertices

cone
1 circular face
1 curved surface
1 curved edge
1 apex

cylinder
2 circular faces
1 curved surface
2 curved edges
0 vertices

triangular prism
5 faces
9 edges
6 vertices

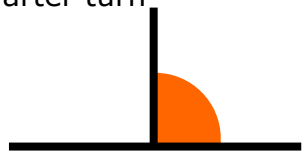
sphere
1 curved surface
0 edges
0 vertices

Y2- Geometry- Position and Direction

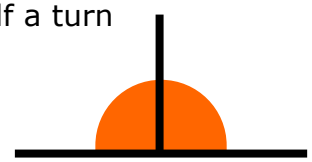
angles

Angles are a description of turn.

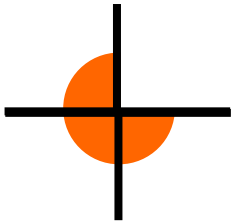
A right angle makes a quarter turn



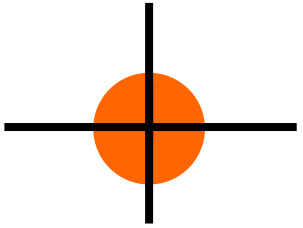
Two right angles make half a turn



Three right angles make three quarters of a turn

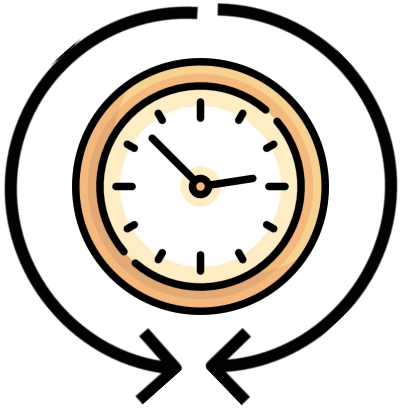


Four right angles make a complete turn



direction of turn

anticlockwise



clockwise

patterns and sequences

Find where the pattern starts to repeat. Continue the pattern from there.

Y2- Statistics

tally chart

team	points	
Green	𝍸 𝍸 𝍸 𝍸 𝍸	25
Blue	𝍸 𝍸 𝍸 𝍸 𝍸 ||	27
Red	𝍸 𝍸 |||	13

table

hockey	tennis	football	rugby	total
21	41	16	22	100

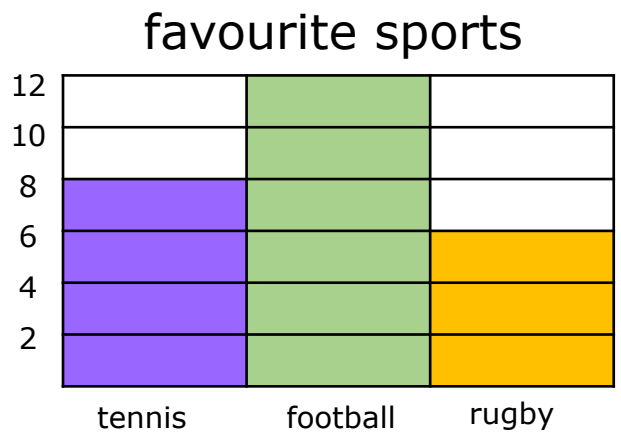
If one part is missing, add the other parts together and subtract them from the total.

hockey	tennis	football	rugby	total
21	41		22	100

If the total is missing, add the parts together.

hockey	tennis	football	rugby	total
21	41	16	22	

block diagram



favourite sports	
tennis	8
football	12
rugby	6

pictogram

team	points	
Green	● ● ● ◗	35
Blue	● ● ●	30
Red	● ● ● ● ◗	45

Key

● = 10 points