Winton's Mathematical Methods and Calculation Policy

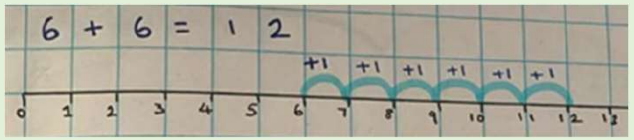
Year 2

Addition +

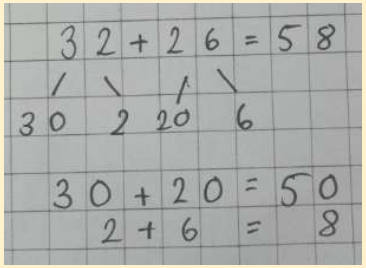
Vocabulary

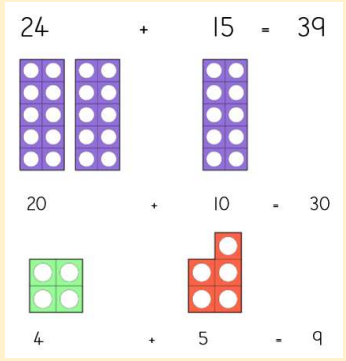
add
total
increase
more
plus
make
sum
altogether
number bonds

1. Number line (bridging 10s)

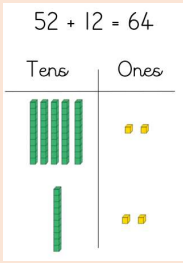


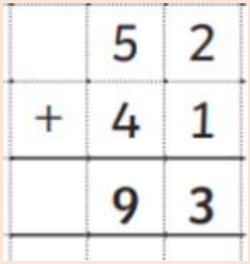
1. Partitioning



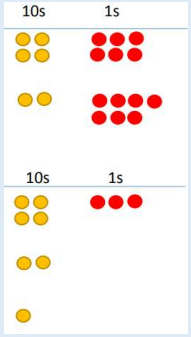


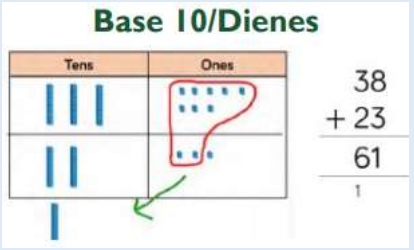
2. Partitioning in columns

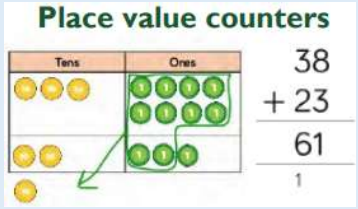




3. Partitioning in columns – with exchanging





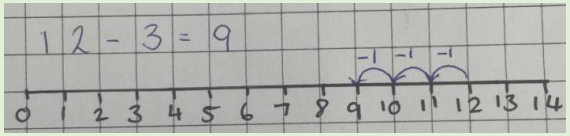


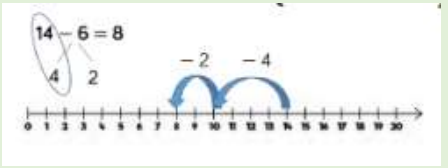
Subtraction

Vocabulary

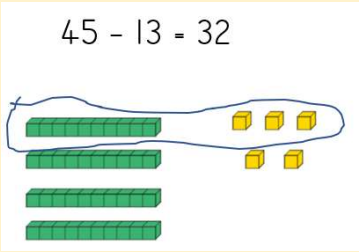
subtract
subtraction
total
decrease
less
minus
difference
number bonds

1. Number line (bridging 10)

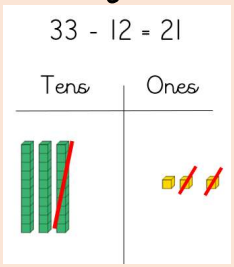


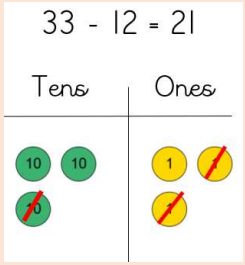


2. Partitioning

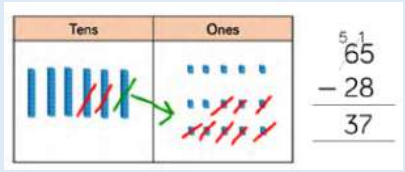


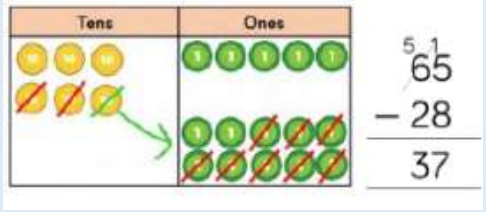
3. Partitioning Column with dienes/ counters





4. Partitioning Column with dienes/ counters (including exchanging)





Multiplication ✖

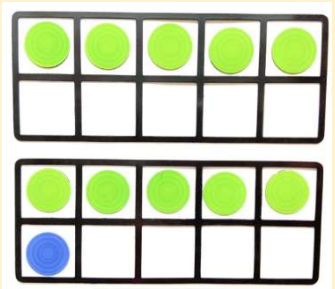
Vocabulary

multiply
lots of
inverse

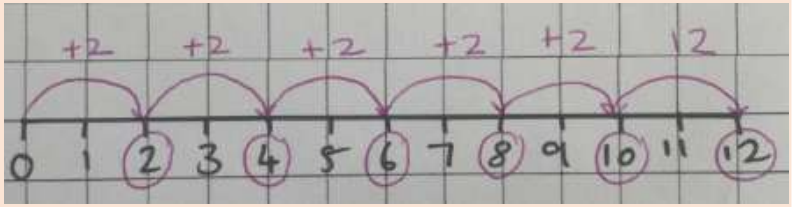
1. Doubles and Near doubles

Doubles	Doubles plus 1
1 + 1 = 2	1 + 2 = 3
2 + 2 = 4	2 + 3 = 5
3 + 3 = 6	3 + 4 = 7
4 + 4 = 8	4 + 5 = 9
5 + 5 = 10	5 + 6 = 11
6 + 6 = 12	6 + 7 = 13
7 + 7 = 14	7 + 8 = 15
8 + 8 = 16	8 + 9 = 17
9 + 9 = 18	9 + 10 = 19
10 + 10 = 20	10 + 11 = 21

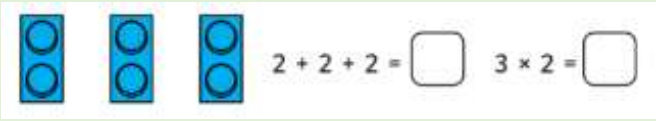
Example:
3 + 3 = 6
3 + 4 = 3 + 3 + 1 = 7



2. Skip counting on a number line



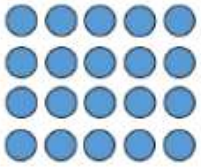
3. Repeated addition



6× 2 =

2+ 2+ 2+ 2+ 2+ 2

4. Arrays



5 + 5 + 5 + 5 = 20

4 × 5 = 20

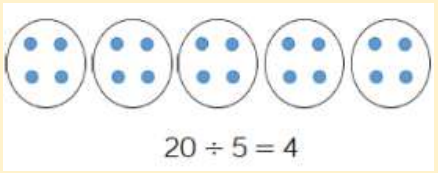
5 × 4 = 20

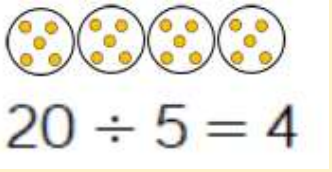
Division

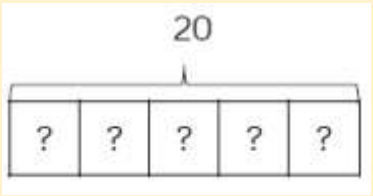
Vocabulary

share
equal
groups of
multiples

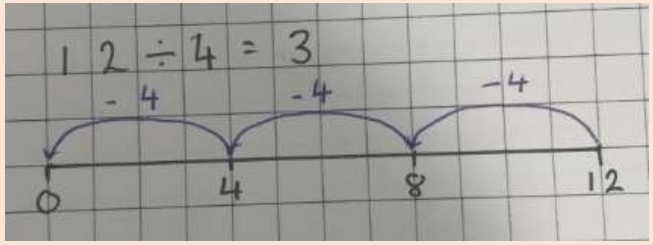
1. Sharing and grouping - pictorial and abstract



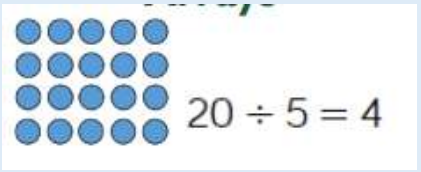


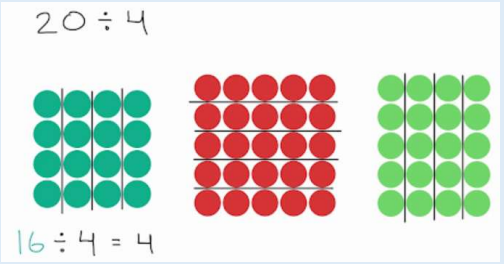


2. Repeated subtraction



2. Arrays



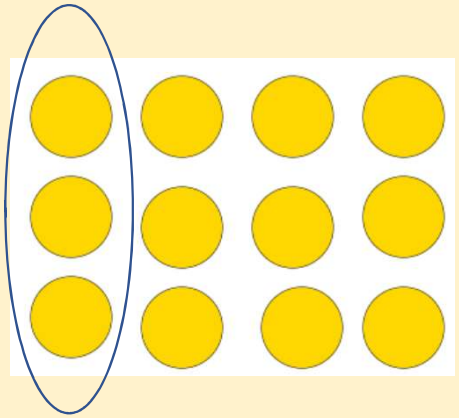


Fractions

Vocabulary

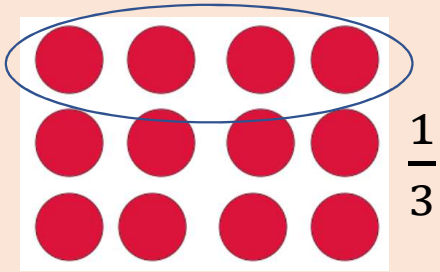
numerator
denominator
equivalent

1. Find ¼ of a quantity



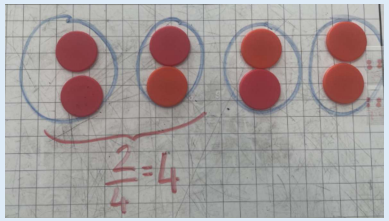
¼ of 12 = 3

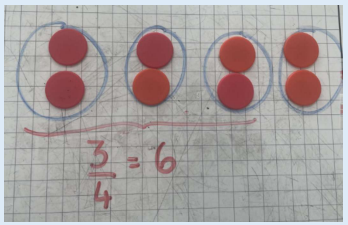
2. Find 1/3 of a quantity



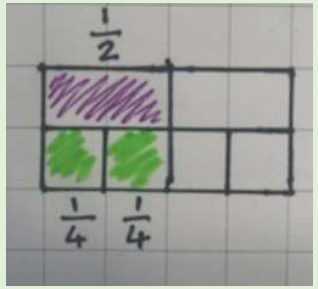
$\frac{1}{3}$ of 12 = 4

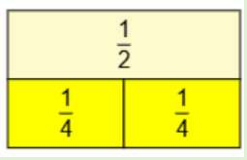
3. Find 2/4 and 3/4 of a quantity





4. Recognise the equivalence of 2/4 and ½





Number Facts

MULTIPLICATION (x2)	MULTIPLICATION (x3)	MULTIPLICATION (5x)	MULTIPLICATION (x10)
1 × 2 = 2	1 × 3 = 3	5 × 1 = 5	1 × 10 = 10
2 × 2 = 4	2 × 3 = 6	5 × 2 = 10	2 × 10 = 20
3 × 2 = 6	3 × 3 = 9	5 × 3 = 15	3 × 10 = 30
4 × 2 = 8	4 × 3 = 12	5 × 4 = 20	4 × 10 = 40
5 × 2 = 10	5 × 3 = 15	5 × 5 = 25	5 × 10 = 50
6 × 2 = 12	6 × 3 = 18	5 × 6 = 30	6 × 10 = 60
7 × 2 = 14	7 × 3 = 21	5 × 7 = 35	7 × 10 = 70
8 × 2 = 16	8 × 3 = 24	5 × 8 = 40	8 × 10 = 80
9 × 2 = 18	9 × 3 = 27	5 × 9 = 45	9 × 10 = 90
10 × 2 = 20	10 × 3 = 30	5 × 10 = 50	10 × 10 = 100
11 × 2 = 22	11 × 3 = 33	5 × 11 = 55	11 × 10 = 110
12 × 2 = 24	12 × 3 = 36	5 × 12 = 60	12 × 10 = 120

DIVISION	DIVISION	DIVISION	DIVISION
2 ÷ 2 = 1	3 ÷ 3 = 1	5 ÷ 5 = 1	10 ÷ 10 = 1
4 ÷ 2 = 2	6 ÷ 3 = 2	10 ÷ 5 = 2	20 ÷ 10 = 2
6 ÷ 2 = 3	9 ÷ 3 = 3	15 ÷ 5 = 3	30 ÷ 10 = 3
8 ÷ 2 = 4	12 ÷ 3 = 4	20 ÷ 5 = 4	40 ÷ 10 = 4
10 ÷ 2 = 5	15 ÷ 3 = 5	25 ÷ 5 = 5	50 ÷ 10 = 5
12 ÷ 2 = 6	18 ÷ 3 = 6	30 ÷ 5 = 6	60 ÷ 10 = 6
14 ÷ 2 = 7	21 ÷ 3 = 7	35 ÷ 5 = 7	70 ÷ 10 = 7
16 ÷ 2 = 8	24 ÷ 3 = 8	40 ÷ 5 = 8	80 ÷ 10 = 8
18 ÷ 2 = 9	27 ÷ 3 = 9	45 ÷ 5 = 9	90 ÷ 10 = 9
20 ÷ 2 = 10	30 ÷ 3 = 10	50 ÷ 5 = 10	100 ÷ 10 = 10
22 ÷ 2 = 11	33 ÷ 3 = 11	55 ÷ 5 = 11	110 ÷ 10 = 11
24 ÷ 2 = 12	36 ÷ 3 = 12	60 ÷ 5 = 12	120 ÷ 10 = 12

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
31 = Thirty-one
32 = Thirty-two
33 = Thirty-three
34 = Thirty-four
35 = Thirty-five
36 = Thirty-six
37 = Thirty-seven
38 = Thirty-eight
39 = Thirty-nine
40 = Forty
41 = Forty-one
42 = Forty-two
43 = Forty-three
44 = Forty-four
45 = Forty-five
46 = Forty-six
47 = Forty-seven
48 = Forty-eight
49 = Forty-nine
50 = Fifty
51 = Fifty-one
52 = Fifty-two
53 = Fifty-three
54 = Fifty-four
55 = Fifty-five
56 = Fifty-six
57 = Fifty-seven
58 = Fifty-eight
59 = Fifty-nine
60 = Sixty
61 = Sixty-one
62 = Sixty-two
63 = Sixty-three
64 = Sixty-four
65 = Sixty-five
66 = Sixty-six
67 = Sixty-seven
68 = Sixty-eight
69 = Sixty-nine
70 = Seventy
71 = Seventy-one
72 = Seventy-two
73 = Seventy-three
74 = Seventy-four
75 = Seventy-five
76 = Seventy-six
77 = Seventy-seven
78 = Seventy-eight
79 = Seventy-nine
80 = Eighty
81 = Eighty-one
82 = Eighty-two
83 = Eighty-three
84 = Eighty-four
85 = Eighty-five
86 = Eighty-six
87 = Eighty-seven
88 = Eighty-eight
89 = Eighty-nine
90 = Ninety
91 = Ninety-one
92 = Ninety-two
93 = Ninety-three
94 = Ninety-four
95 = Ninety-five
96 = Ninety-six
97 = Ninety-seven
98 = Ninety-eight
99 = Ninety-nine
100 = One hundred

Number Facts

Greater Than
8 > 5

Less Than
5 < 8

Equal To
7 = 7

Even and Odd Numbers

Even Numbers end in

0 2 4 6 8

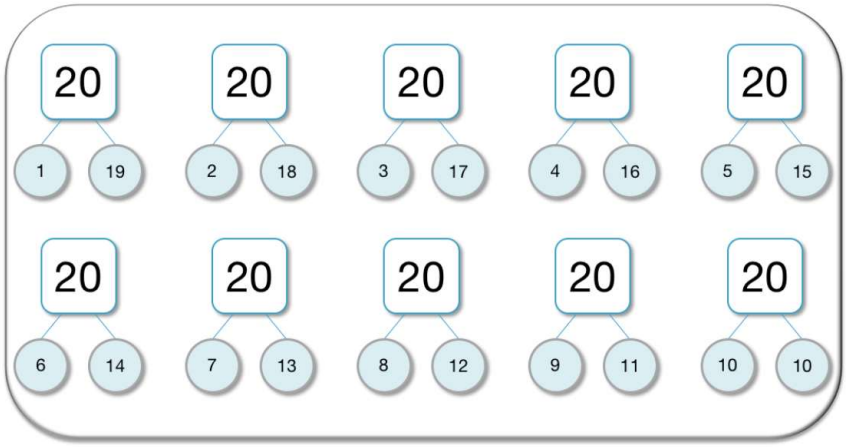
Examples: 4, 56, 730

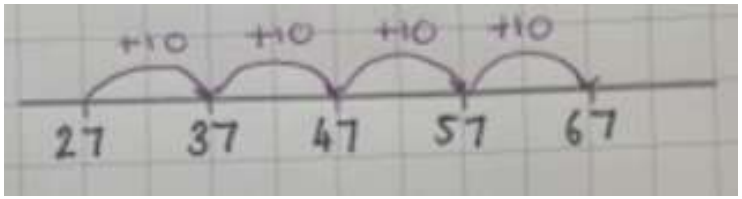
Odd Numbers end in

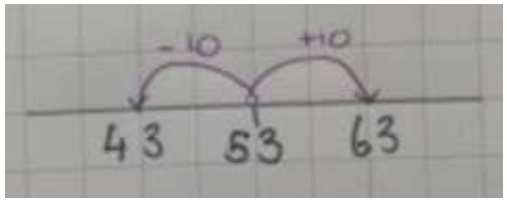
1 3 5 7 9

Examples: 9, 83, 641

60 + 40 = 100	70 - 20 = 50	30 + 40 = 70
90 - 70 = 20	100 - 30 = 70	80 + 10 = 90
50 + 30 = 80	50 - 20 = 30	10 + 40 = 50
30 + 60 = 90	80 - 40 = 40	90 - 40 = 50

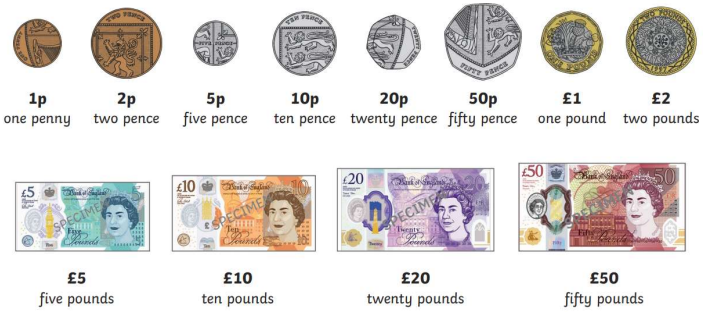


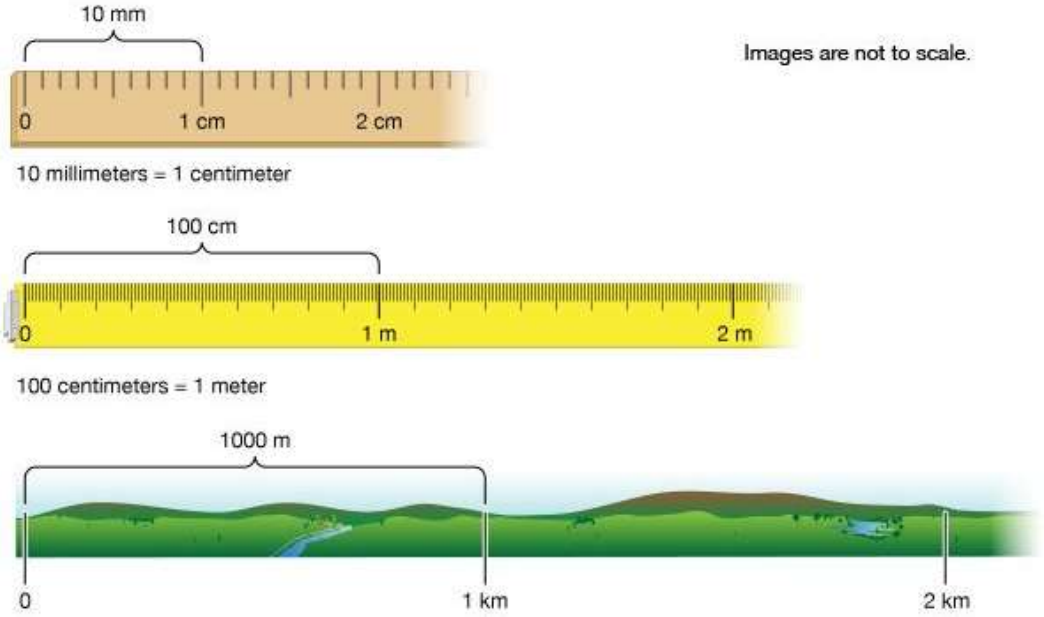




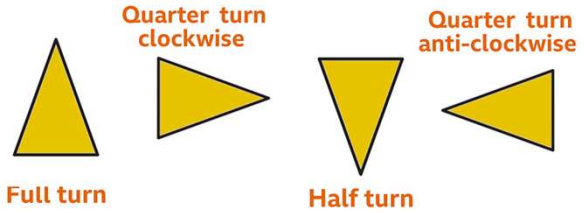
Number Facts

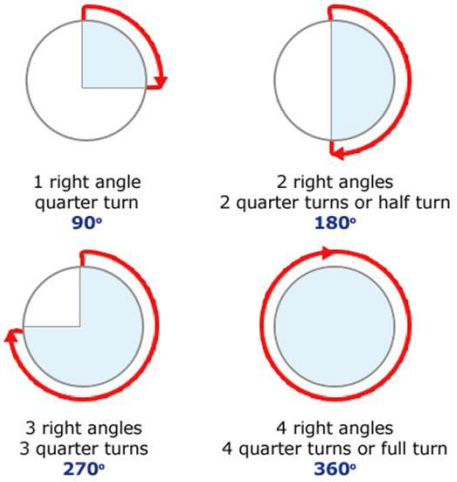
British Coins and Notes





Images are not to scale.





1 day = 24 hours
1 hour = 60 minutes

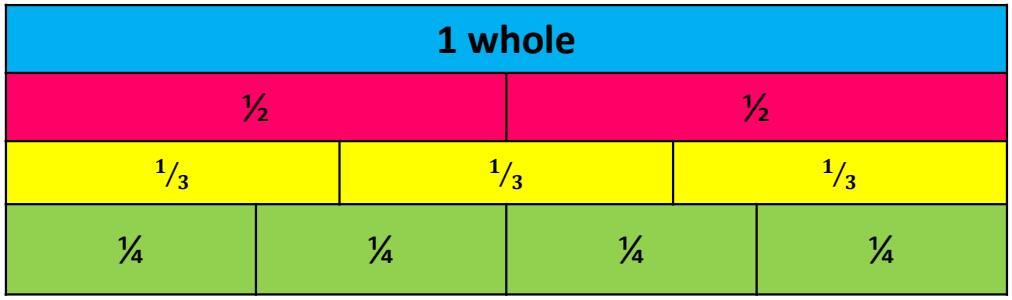
Step 1: Read the number at the end of the long hand

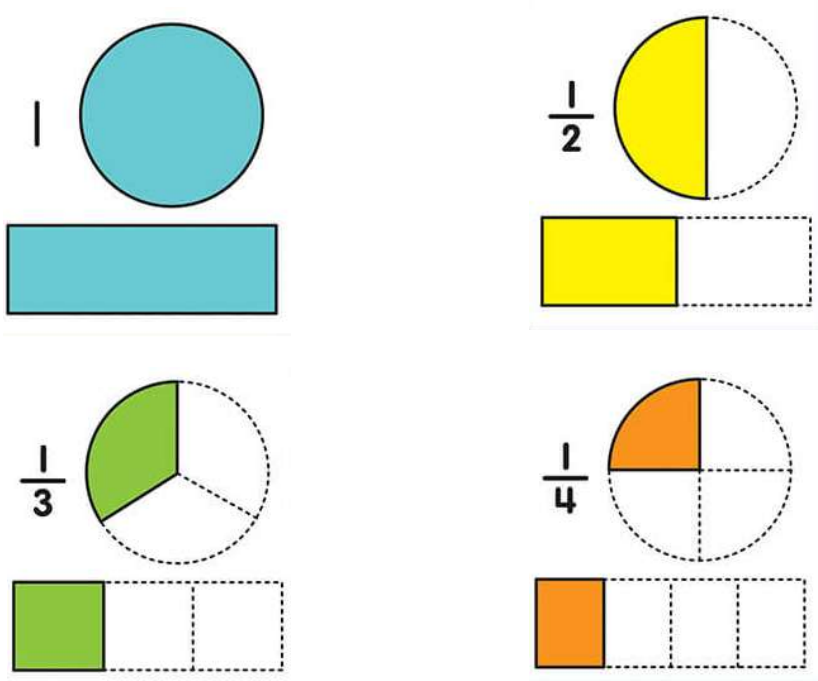
Step 2: Say which side it's pointing to 'minutes past' green side, 'minutes to' pink side

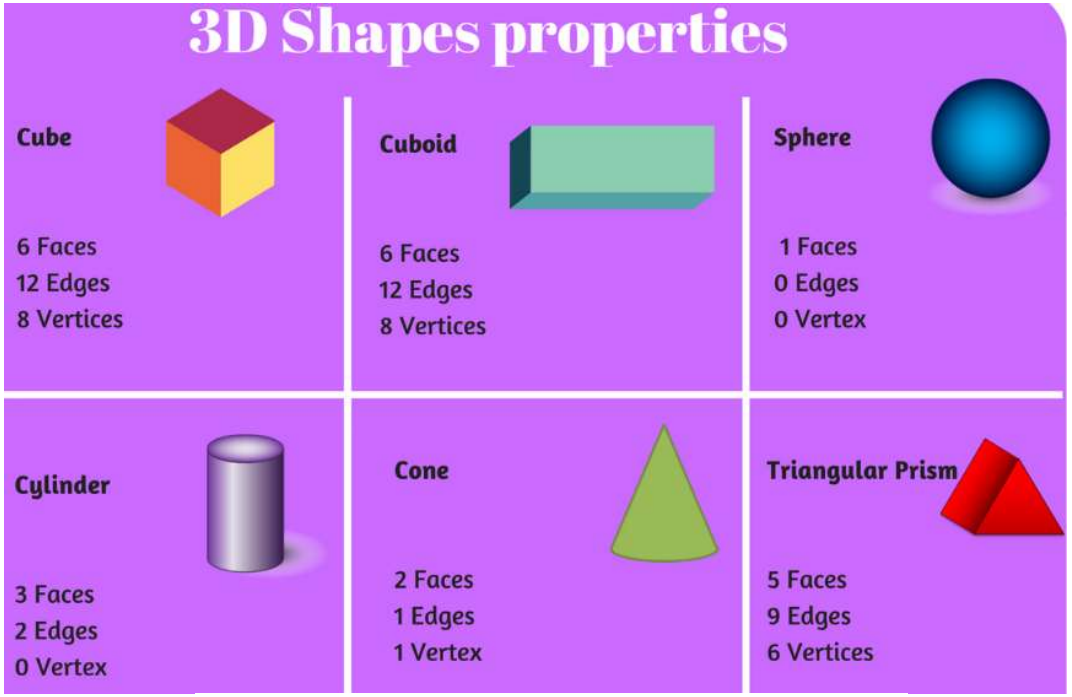
Step 3: Read the number at the end of the short hand

E.g. 8 minutes to 2

Number Facts







	3 sides	triangle
	4 sides	quadrilateral
	5 sides	pentagon
	6 sides	hexagon
	7 sides	heptagon
	8 sides	octagon
	9 sides	nonagon
	10 sides	decagon