



## Year 3 Mathematics Core Knowledge Organiser

### Times Tables (4x)

$1 \times 4 = 4$	$7 \times 4 = 28$
$2 \times 4 = 8$	$8 \times 4 = 32$
$3 \times 4 = 12$	$9 \times 4 = 36$
$4 \times 4 = 16$	$10 \times 4 = 40$
$5 \times 4 = 20$	$11 \times 4 = 44$
$6 \times 4 = 24$	$12 \times 4 = 48$

### Times Tables (8x)

$1 \times 8 = 8$	$7 \times 8 = 56$
$2 \times 8 = 16$	$8 \times 8 = 64$
$3 \times 8 = 24$	$9 \times 8 = 72$
$4 \times 8 = 32$	$10 \times 8 = 80$
$5 \times 8 = 40$	$11 \times 8 = 88$
$6 \times 8 = 48$	$12 \times 8 = 96$

### Complements to 100

$1 + 9 = 10$	$10 + 90 = 100$
$2 + 8 = 10$	$20 + 80 = 100$
$3 + 7 = 10$	$30 + 70 = 100$
$4 + 6 = 10$	$40 + 60 = 100$
$5 + 5 = 10$	$50 + 50 = 100$

### Times Tables (3x)

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

### Related Facts

$41 + 59 = 100$
$52 + 48 = 100$
$63 + 37 = 100$
$74 + 26 = 100$

### Number Line



Counting forwards (up) and backwards (down) in 100s, 50s, 10s...

### Addition

### Subtraction

### Multiplication

### Division

### Place Value

Hundreds	Tens	Ones
100, 100	10, 10	1, 1, 1

2 is equal to 2

4 is greater than 2

2 is less than 4

294	<	300
294	>	200
294	=	200 + 90 + 4

# Fractions

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

$\frac{2}{2} = 1 \text{ whole}$

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

$\frac{4}{4} = 1 \text{ whole}$

$$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{3}{3}$$

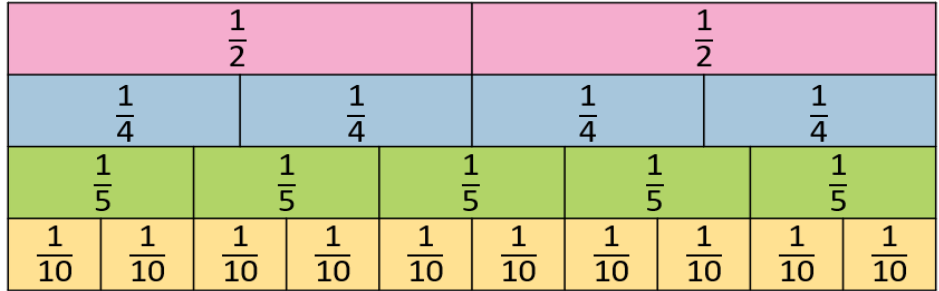
$\frac{3}{3} = 1 \text{ whole}$

Numerator and denominator are same, fraction is one whole.

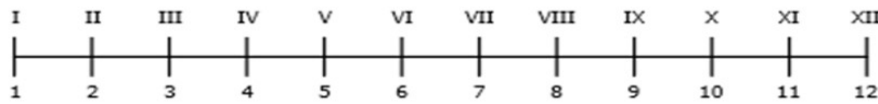
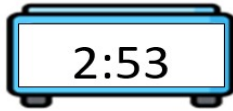
$\frac{2}{5}$  is shaded

$\frac{2}{5}$  numerator  
 $\frac{2}{5}$  denominator

5 equal parts... denominator is 5  
2 parts are shaded... numerator is 2



# Time: Analogue



convert units of time

- 60 seconds = 1 minute
- 60 minutes = 1 hour
- 24 hours = 1 day
- 7 days = 1 week
- 12 months = 1 year
- 365 days = 1 year **366 leap yr.**

30 days have **September, April, June and November.**  
All the rest have **31**,  
except for February (the one which only has 28 days clear,  
and 29 in each leap year)

# Tell Time to the Minute

29 minutes to 2  $31 + 29 = 60$

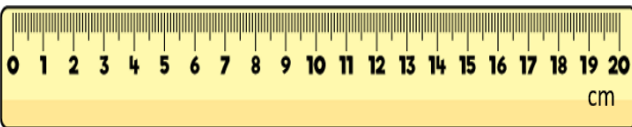
o'clock

5 to, 5 past, 10 to, 10 past, quarter to, quarter past, 20 to, 20 past, 25 to, 25 past, half past

# Measure (Length)

10 millimetres = 1 centimetre      100 centimetres in one metre

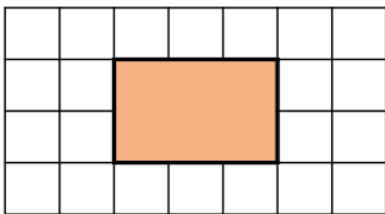
The line is 75 mm long.



Bookcase = 1 metre tall.



perimeter rectangle



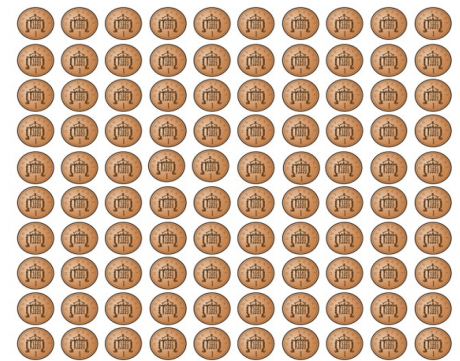
10 squares

Perimeter =

Length all the way around outside edge

# Money (£ and p)

There are 100 1 p coins in £1



£1 and 50p

150p

£5 and 50p

550p

£1 and 5p

105p