



Year 3 Mathematics Core Knowledge Organiser

Times Tables (4x)		Times Tables (8x)		Complements to 100	
$1 \times 4 = 4$	$7 \times 4 = 28$	$1 \times 8 = 8$	$7 \times 8 = 56$	$1 + 9 = 10$	$10 + 90 = 100$
$2 \times 4 = 8$	$8 \times 4 = 32$	$2 \times 8 = 16$	$8 \times 8 = 64$	$2 + 8 = 10$	$20 + 80 = 100$
$3 \times 4 = 12$	$9 \times 4 = 36$	$3 \times 8 = 24$	$9 \times 8 = 72$	$3 + 7 = 10$	$30 + 70 = 100$
$4 \times 4 = 16$	$10 \times 4 = 40$	$4 \times 8 = 32$	$10 \times 8 = 80$	$4 + 6 = 10$	$40 + 60 = 100$
$5 \times 4 = 20$	$11 \times 4 = 44$	$5 \times 8 = 40$	$11 \times 8 = 88$	$5 + 5 = 10$	$50 + 50 = 100$
$6 \times 4 = 24$	$12 \times 4 = 48$	$6 \times 8 = 48$	$12 \times 8 = 96$		
Times Tables (3x)		Related Facts			
$1 \times 3 = 3$	$7 \times 3 = 21$	3	6	9	12
$2 \times 3 = 6$	$8 \times 3 = 24$			15	18
$3 \times 3 = 9$	$9 \times 3 = 27$				21
$4 \times 3 = 12$	$10 \times 3 = 30$		4×30		30×7
$5 \times 3 = 15$	$11 \times 3 = 33$	30	60	90	120
$6 \times 3 = 18$	$12 \times 3 = 36$			150	180
				210	
				$41 + 59 = 100$	
				$52 + 48 = 100$	
				$63 + 37 = 100$	
				$74 + 26 = 100$	

Number Line



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

Addition

Hundreds	Tens	Ones

H	T	O
3	7	1
+ 2	6	3
6	3	4
1		

Subtraction

Hundreds	Tens	Ones

H	T	O
3	7	1
- 2	6	3
3	2	5

Multiplication

$2 \text{ tens} \times 3 = \underline{6} \text{ tens}$

$6 \text{ ones} \times 3 = \underline{18} \text{ ones}$

$26 \times 3 = \underline{60} + \underline{18} = \underline{78}$

$26 \times 3 = \underline{78}$

Tens	Ones

Division

$25 \div 3 = 8 \text{ r } 1$

Place Value

hundred 100 ten 10 one 1

Hundreds	Tens	Ones

2 is equal to 2

$2 = 2$

< > =

less than more than equal to

$294 < 300$

$294 > 200$

$294 = 200 + 90 + 4$

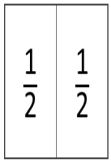
4 is greater than 2

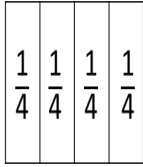
$4 > 2$

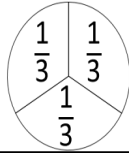
2 is less than 4

$2 < 4$

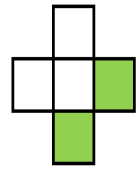
Fractions


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

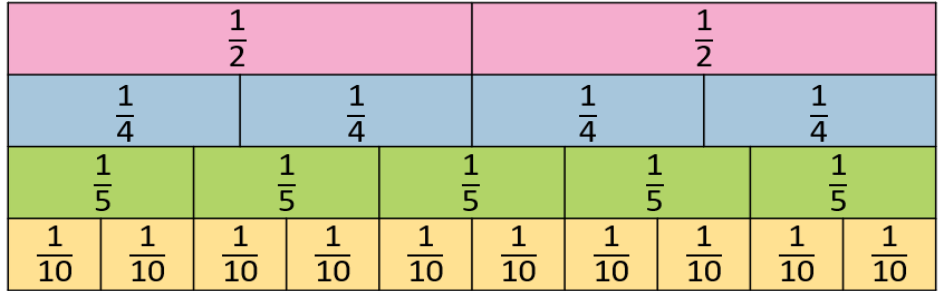

 $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4} = 1 \text{ whole}$


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

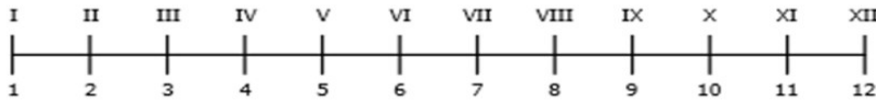
Numerator and denominator are same, fraction is one whole.


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

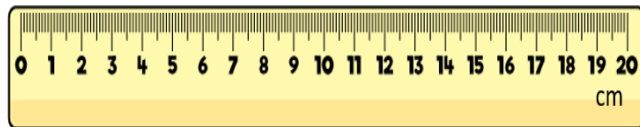
29 minutes to 2 $31 + 29 = 60$

Measure (Length)

10 millimetres = 1 centimetre 100 centimetres in one metre

70 mm 5 mm

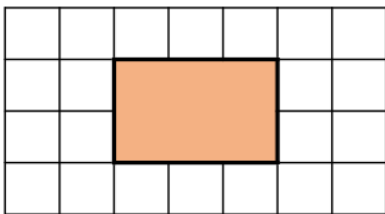
The line is 75 mm long.



Bookcase = 1 metre tall.



perimeter rectangle



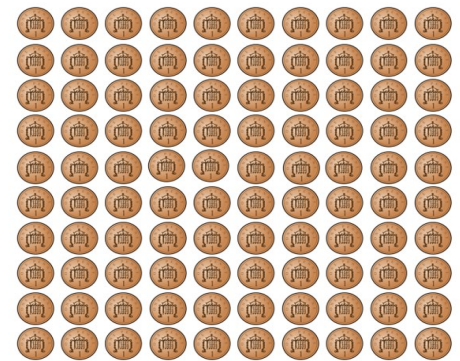
10 squares

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