Maths Fluency Year 4

Aut 1	Aut 2	Spring 1	Spring 2	Summer 1	Summer 2
Introduce Q 1-12	Consolidate 1-12 Introduce Q 13-15	Consolidate 1-15 Arithmetic Consolidate 1-12/ Introduce Q 16, 17, 22, 23	Arithmetic Consolidate Questions covered so far	Arithmetic Consolidate Questions covered so far	Arithmetic Consolidate Questions covered so far/ Introduce Q 20,21,24,25,26

1	Addend plus addend equals the sum + increase Use your place value knowledge. The hundreds column will increase	2	Minuend minus subtrahend is equal to the difference - decrease Use your place value knowledge. The hundreds column will decrease

Th	H	T	O

Th	H	T	O

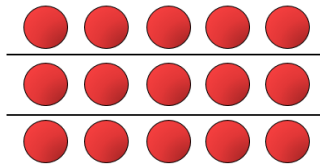| 3	Addend plus addend equals the sum 504 + 90 = 594 The 10s column will increase by 9	4	Minuend minus subtrahend is equal to the difference 564 - 50 = 514 The 10s column will decrease by 5

Th	H	T	O

Th	H	T	O

| 5 | __ lots of ___ make | 6 | How many lots of the divisor go into the dividend? |

5

__ lots of ___ make

There are ___ rows of ___ that makes_____

There are __3__ rows of __5__

__5__ + __5__ + __5__ = __15__

__3__ × __5__ = __15__

6

How many lots of the divisor go into the dividend?

$57 \div 3 = 19$

How many times does 3 go into 5?
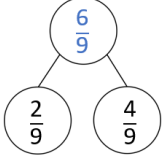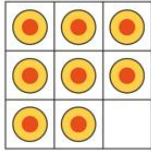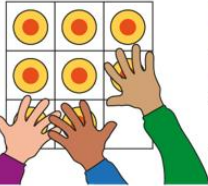
It goes into 5 once and has a remainder of 2.
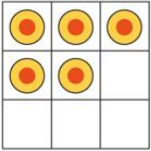
How many times does 3 go into 27?

It goes into 27 nine times and has no remainder.

$$1\,9$$
$$3\,)\,5\,^2 7$$

7	Denominator is the same it stays the same Add the numerators $\frac{2}{9} + \frac{4}{9} = \frac{6}{9}$ 	8	Denominator is the same it stays the same Subtract the numerators First … Then … Now … $\frac{8}{9} - \frac{3}{9} = \frac{5}{9}$
9	**Addend plus addend equals the sum** 1504 + 1000 = 2504 The 1000s column will increase by 1	10	**Minuend minus subtrahend is equal to the difference** 3564 - 1000 = 2564 The 1000s column will decrease by 1

Th	H	T	O

Th	H	T	O

11	Addend plus addend equals the sum When adding, if the (ones/ tens/ hundreds) is equal to (10/ 100/ 1,000 etc), we must regroup to the column on the left. Larger number first Start with the Ones Larger than 9 carry under the line	12	Minuend minus subtrahend is equal to the difference If we cannot subtract, we must exchange from the column to the left. Larger number first Start with the Ones Top number smaller than bottom number Knock next door to exchange a ten

Maths Fluency Year 4

Th	H	T	O
1000 1000 1000 1000 1000	100 100 100 100 100 100 100 100 100 100 100 100	10 10 10	1 1 1 1 1 1 1 1 1 1 1
6	2	6	1

```
   4 8 0 3
 + 1 4 5 8
   6 2 6 1
   1   1
```

$3,402 - 1,319 = 2,083$

Th	H	T	O
1000 1000	100 100 100 100	10 10 10 10 10 10 10 10	1 1 1 1 1 1 1 1 1
2	0	8	3

```
   3 ³4̶ ¹0̶⁹1̶2
 - 1  3  1  9
   2  0  8  3
```

13
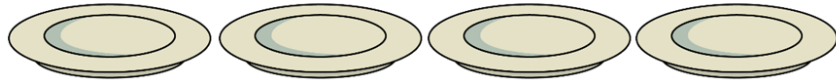
There are 4 plates.
Each plate has 0 doughnuts on it.
There are 0 doughnuts altogether.

$0 \times 4 = 0$

$4 \times 0 = 0$

Multiplying anything by 0 gives an answer of 0 as this is the same as no lots of anything.
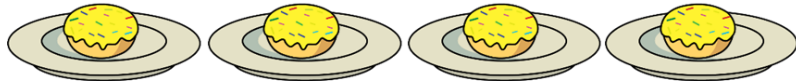
There are 4 plates.
Each plate has 1 doughnut on it.
There are 4 doughnuts altogether.

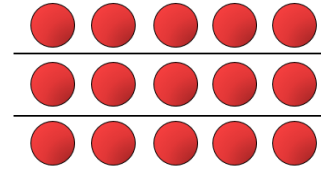$4 \times 1 = 4$

$1 \times 4 = 4$

Multiplying anything by 1 gives the same number as this is the same as one lot of anything

Dividing anything by 1 gives the same number, as this is just one group of anything.
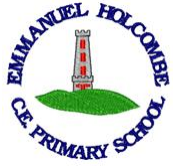
14

__ lots of ___ make

There are ___ rows of ___ that makes_____

There are __3__ rows of __5__

__5__ + __5__ + __5__ = __15__

__3__ × __5__ = __15__

15

$2 \times 5 \times 3$ $3 \times 2 \times 5$ $5 \times 3 \times 2$

10×3 6×5 15×2

30   30   30

Multiply left to right

16

Larger number first
Place value is correct
Multiply from the ones first
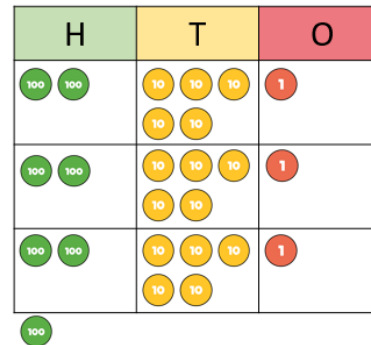
$$251 \times 3 = 753$$

H	T	O
100 100	10 10 10 / 10 10	1
100 100	10 10 10 / 10 10	1
100 100	10 10 10 / 10 10	1
100		

	H	T	O
	2	5	1
×			3
	7	5	3
		1	

17

Larger number first
Place value is correct
Multiply from the ones first

$$251 \times 3 = 753$$

H	T	O
100 100	10 10 10 1	
	10 10	
100 100	10 10 10 1	
	10 10	
100 100	10 10 10 1	
	10 10	
100		
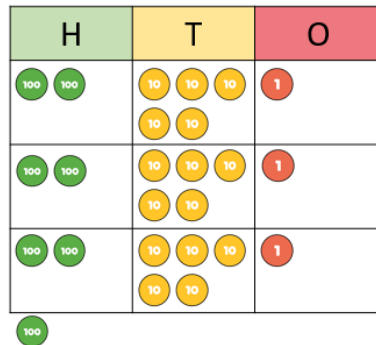
	H	T	O	
	2	5	1	
×			3	
	7	5	3	
	1			

18

Denominator is the same it stays the same

Add the numerators

$$\frac{2}{9} + \frac{4}{9} = \frac{6}{9}$$

$\frac{6}{9}$

$\frac{2}{9}$ $\frac{4}{9}$

19	Denominator is the same it stays the same

Subtract the numerators

First …   Then …   Now …

$$\frac{8}{9} - \frac{3}{9} = \frac{5}{9}$$

20	Addend plus addend equals the sum

Largest number first
Think about decimals like money £__.__p
Place value is correct
Start with the Ones

$$7.75 + 2.46 = 10.21$$

	7	.	7	5
+	2	.	4	6
1	0	.	2	1
	1		1	1

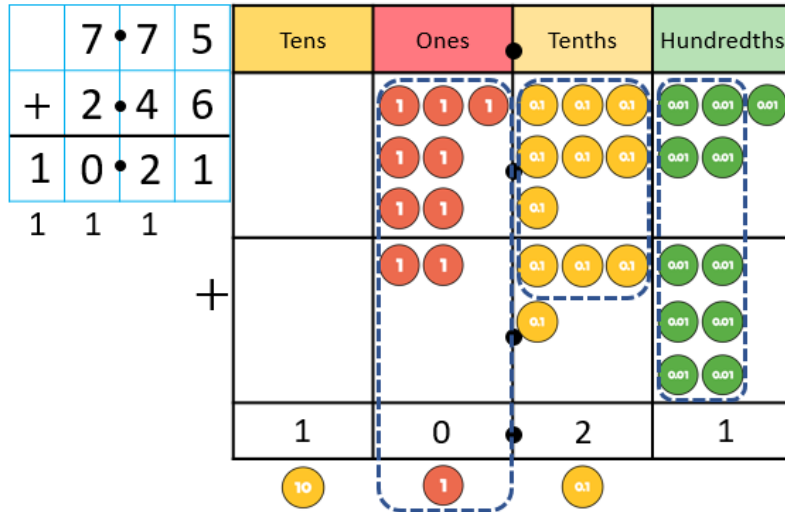|	Tens	Ones	Tenths	Hundredths
	1	0	2	1

21	**Addend plus addend equals the sum**

Largest number first

Think about decimals like money £__.__p

Place value is correct

Start with the Ones

$$7.75 + 2.46 = 10.21$$

	7	•	7	5
+	2	•	4	6
1	0	•	2	1
1	1		1	

Tens	Ones	Tenths	Hundredths
	1 1 1	0.1 0.1 0.1	0.01 0.01 0.01
	1 1	0.1 0.1 0.1	0.01 0.01
	1 1	0.1	
	1 1	0.1 0.1 0.1	0.01 0.01
		0.1	0.01 0.01
			0.01 0.01
1	0	2	1
10	1	0.1	

22	When dividing by 10 the number is being split into 10 equal parts

The number is 10 times smaller

When dividing by 10, we move the digits one place to the right

$$32 \div 10 = 3.2$$

Tens	Ones	Tenths
10 10	1 1	
10		

$\div 10$

Tens	Ones	Tenths
	1 1	0.1 0.1
	1	

| 23 | When dividing by 100 the number is being split into 100 equal parts. The number is 100 times smaller. When dividing by 100, we move the digits two place to the right. $$3 \div 100 = 0.03$$ | 24 | Fraction of an amount- ÷ by the denominator x by the numerator $$\frac{1}{7} \text{ of } 42 = 6$$ $$42 \div 7$$ |

Tens	Ones	Tenths	Hundredths
	●●● ●		
	0 .	0	3

| 25 | **Addend plus addend equals the sum** | 26 | **Addend plus addend equals the sum** |

25

Addend plus addend equals the sum

Larger number first

Think about decimals like money £__.__p

Place value is correct
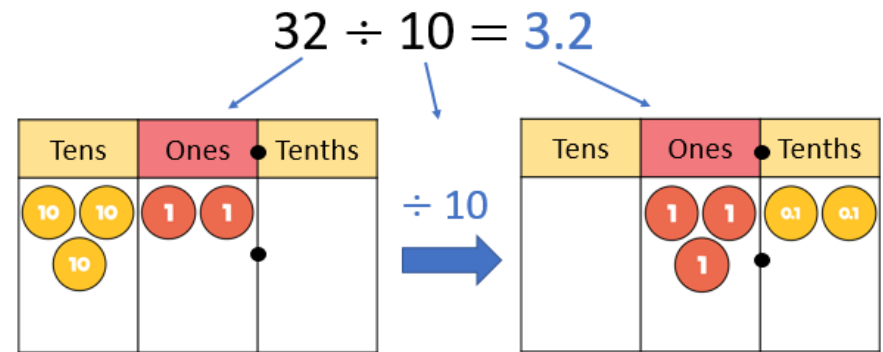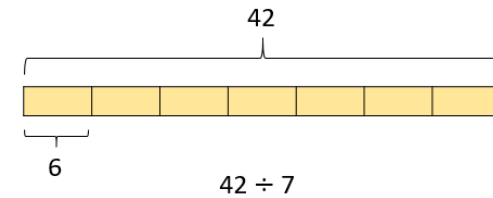
Start with the Ones

$$2.5 + 3.16 = 5.66$$

Ones	Tenths	Hundredths
● ● ●	●	● ● ● / ● ● ●
● ●	● ● ● / ● ●	
5	6	6

26

Addend plus addend equals the sum

Larger number first

Think about decimals like money £__.__p

Place value is correct

Start with the Ones

$$2.5 + 3.16 = 5.66$$

Ones	Tenths	Hundredths
● ● ●	●	● ● ● / ● ● ●
● ●	● ● ● / ● ●	
5	6	6

- https://mathsbot.com/primary/year4Mini
- https://vimeo.com/911532990