







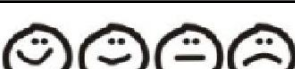












Name: _____

Form: _____

Teacher: _____

Year 7 & 8
 Numeracy
 Workbook



Week	Topic	AFL
1	Addition	
2	Subtraction	
3	Mental Maths	
4	Multiplication	
5	Division	
6	Mental Maths	
7	BIDMAS	
8	Percentages	
9	Mental Maths	
10	Simplifying Fractions	
11	Adding Fractions	
12	Mental Maths	
13	Fractions-Decimals-Percentages	
14	Ratio	
15	Mental Maths	
16	Collecting Like terms	
17	Substitution	
18	Vocabulary and Directed Numbers	
19	Word Based Puzzle	

Week 1 Maths – Addition

1) $7 + 3 =$

2) $12 + 8 =$

3) $5 + 17 =$

4) $13 + 14 =$

5) $23 + 19 =$

6) $26 + 27 =$

7) $37 + 15 =$

8) $26 + 19 =$

9) $13 + 37 =$

3

Timester Challenge

1) $3 \times 0 =$

2) $3 \times 1 =$

3) $3 \times 2 =$

4) $3 \times 3 =$

5) $3 \times 4 =$

6) $3 \times 5 =$

7) $3 \times 6 =$

8) $3 \times 7 =$

9) $3 \times 8 =$

10) $3 \times 9 =$

11) $3 \times 10 =$

12) $3 \times 11 =$

13) $3 \times 12 =$

14) $3 \times 20 =$

$\begin{array}{r} 376 \\ 123 \\ \hline \end{array} +$

$\begin{array}{r} 572 \\ 369 \\ \hline \end{array} +$

$\begin{array}{r} 592 \\ 272 \\ \hline \end{array} +$

$\begin{array}{r} 736 \\ 543 \\ \hline \end{array} +$

$1385 + 3476 =$

$4863 + 264 =$

$253 + 8597 =$

$7309 + 4983 =$

$10046 + 943 =$

4

$\begin{array}{r} 3.43 \\ 2.45 \\ \hline \end{array} +$

$\begin{array}{r} 5.63 \\ 3.59 \\ \hline \end{array} +$

$\begin{array}{r} 35.9 \\ 17.2 \\ \hline \end{array} +$

$\begin{array}{r} 4.72 \\ 56.3 \\ \hline \end{array} +$

$\begin{array}{r} 1.347 \\ 5.62 \\ \hline \end{array} +$

$48.93 + 34.76 =$

$4.893 + 85.96 =$

$8.54 + 85.96 =$

$7.359 + 85.96 =$

$10.546 + 2.65 =$

5

CHALLENGE ACCEPTED



A Book costs £3.49 and a DVD costs £4.99. Miss Kerfoot wants to buy three books and two DVD's for the library.

a) How much will this cost?

b) Mrs Evans only has £20 does she have enough and why?



To improve I am going to _____

Week 2 Maths – subtraction

- 1) $19 - 5 =$ 2) $34 - 3 =$ 3) $39 - 12 =$
- 4) $48 - 15 =$ 5) $74 - 9 =$ 6) $72 - 16 =$
- 7) $74 - 12 =$ 8) $87 - 18 =$ 9) $56 - 27 =$

3

Timester Challenge

- 1) $2 \times 0 =$
- 2) $2 \times 1 =$
- 3) $2 \times 2 =$
- 4) $2 \times 3 =$
- 5) $2 \times 4 =$
- 6) $2 \times 5 =$
- 7) $2 \times 6 =$
- 8) $2 \times 7 =$
- 9) $2 \times 8 =$
- 10) $2 \times 9 =$
- 11) $2 \times 10 =$
- 12) $2 \times 11 =$
- 13) $2 \times 12 =$
- 14) $2 \times 20 =$

$$\begin{array}{r} 356 \\ -127 \\ \hline \end{array}$$

$$\begin{array}{r} 472 \\ -399 \\ \hline \end{array}$$

$$\begin{array}{r} 562 \\ -372 \\ \hline \end{array}$$

$$\begin{array}{r} 726 \\ -463 \\ \hline \end{array}$$

$$\begin{array}{r} 1343 \\ -433 \\ \hline \end{array}$$

$3426 - 1345 =$ $4693 - 265 =$ $8536 - 4537 =$ $7359 - 2563 =$ $10546 - 969 =$

4

$$\begin{array}{r} 3.73 \\ -2.45 \\ \hline \end{array}$$

$$\begin{array}{r} 5.36 \\ -3.99 \\ \hline \end{array}$$

$$\begin{array}{r} 25.9 \\ -18.2 \\ \hline \end{array}$$

$$\begin{array}{r} 472 \\ -54.3 \\ \hline \end{array}$$

$$\begin{array}{r} 8.397 \\ -5.62 \\ \hline \end{array}$$

$48.63 - 32.76 =$ $82.96 - 4.69 =$ $85.96 - 6.84 =$ $86.8 - 75.27 =$ $10.846 - 2.64 =$

5

CHALLENGE ACCEPTED



Mrs Finch is going on a time team mission and needs to buy some vital equipment. She needs a trowel £7.49, bucket £11.56 and a tooth brush £1.57. She only has £20 is this enough?



To improve I am going to _____

Week 3 Mental Maths

Timester Challenge

1) $3 \times 5 =$

2) $2 \times 6 =$

3) $4 \times 3 =$

4) $7 \times 2 =$

5) $3 \times 9 =$

6) $2 \times 8 =$

7) $3 \times 11 =$

8) $0 \times 3 =$

9) $2 \times 5 =$

10) $9 \times 3 =$

11) $3 \times 7 =$

12) $4 \times 2 =$

13) $2 \times 0 =$

14) $3 \times 12 =$

15) $11 \times 2 =$

16) $20 \times 3 =$

17) $8 \times 3 =$

18) $2 \times 9 =$

19) $12 \times 2 =$

20) $20 \times 2 =$

	Definition
Sum	
Take Away	

CHALLENGE ACCEPTED



Write down more words that mean the same as 'sum' and 'takeway'



To improve I am going to _____

Week 4 Maths – Multiplication

1) $8 \times 10 =$

2) $16 \times 10 =$

3) $8 \times 10 =$

4) $103 \times 100 =$

5) $72 \times 100 =$

6) $23 \times 10 =$

7) $38 \times 10 =$

8) $24 \times 1000 =$

9) $2.7 \times 10 =$

4

Timester Challenge

1) $4 \times 0 =$

2) $4 \times 1 =$

3) $4 \times 2 =$

4) $4 \times 3 =$

5) $4 \times 4 =$

6) $4 \times 5 =$

7) $4 \times 6 =$

8) $4 \times 7 =$

9) $4 \times 8 =$

10) $4 \times 9 =$

11) $4 \times 10 =$

12) $4 \times 11 =$

13) $4 \times 12 =$

14) $4 \times 20 =$

1) $27 \times 16 =$

2) $53 \times 48 =$

3) $64 \times 28 =$

4) $57 \times 36 =$

5) $29 \times 14 =$

6) $536 \times 63 =$

7) $429 \times 17 =$

8) $562 \times 34 =$

9) $243 \times 47 =$

10) $140 \times 306 =$

5

1) $3 \times 0.5 =$

2) $6 \times 0.5 =$

3) $3.4 \times 0.25 =$

4) $0.25 \times 0.25 =$

5) $0.6 \times 0.75 =$

6) $2.6 \times 0.1 =$

7) $3.4 \times 0.6 =$

8) $0.12 \times 0.5 =$

9) $0.14 \times 0.3 =$

10) $0.26 \times 0.3 =$

5/6

CHALLENGE ACCEPTED



Miss Wilson wants to buy 6 pencils, 10 pens and 5 rulers for spare equipment. Pens cost 35p, pencils cost 12p and rulers cost 24p. Miss Bartram has £7, does she have enough. (Show all working out)



To improve I am going to _____

Week 5 Maths – Division

1) $42 \div 6 =$

2) $16 \div 4 =$

3) $56 \div 7 =$

4) $63 \div 9 =$

5) $72 \div 8 =$

6) $42 \div 7 =$

7) $35 \div 5 =$

8) $28 \div 4 =$

9) $66 \div 6 =$

4

Timester Challenge

1) $5 \times 0 =$

2) $5 \times 1 =$

3) $5 \times 2 =$

4) $5 \times 3 =$

5) $5 \times 4 =$

6) $5 \times 5 =$

7) $5 \times 6 =$

8) $5 \times 7 =$

9) $5 \times 8 =$

10) $5 \times 9 =$

11) $5 \times 10 =$

12) $5 \times 11 =$

13) $5 \times 12 =$

14) $5 \times 20 =$

1) $121 \div 11 =$

2) $356 \div 2 =$

3) $98 \div 2 =$

4) $156 \div 13 =$

5) $196 \div 14 =$

6) $510 \div 17 =$

7) $483 \div 23 =$

8) $525 \div 21 =$

9) $540 \div 36 =$

10) $450 \div 25 =$

5

1) $10 \div 0.5 =$

2) $16 \div 0.5 =$

3) $16 \div 0.25 =$

4) $32 \div 0.25 =$

5) $16 \div 0.75 =$

6) $260 \div 0.1 =$

7) $34 \div 0.1 =$

8) $283 \div 0.1 =$

9) $2.4 \div 0.1 =$

10) $26 \div 0.01 =$

5/6

CHALLENGE ACCEPTED



Mr Doyle is arranging a school trip and has a budget of £350. Each child that comes costs £16. What is the maximum amount of pupils that could go on the trip? (Show all working out)



To improve I am going to _____

Week 6 Mental Maths

Timester Challenge

1) $3 \times 9 =$

2) $4 \times 6 =$

3) $4 \times 3 =$

4) $7 \times 2 =$

5) $3 \times 9 =$

6) $5 \times 8 =$

7) $3 \times 12 =$

8) $0 \times 5 =$

9) $4 \times 5 =$

10) $9 \times 3 =$

11) $4 \times 7 =$

12) $4 \times 2 =$

13) $5 \times 0 =$

14) $5 \times 12 =$

15) $11 \times 5 =$

16) $20 \times 5 =$

17) $8 \times 4 =$

18) $4 \times 9 =$

19) $12 \times 4 =$

20) $20 \times 4 =$

Tier words	Definition
Product	
Quotient	

CHALLENGE ACCEPTED



Write down more words that mean the same as 'product' and 'quotient'



To improve I am going to _____

Week 7 Maths – BIDMAS

Timester Challenge

- 1) $3 + 4 \times 2 =$ 2) $5 \times 4 \div 2 =$ 3) $70 - 3 \times 5 =$
- 4) $45 \div 9 + 4 =$ 5) $15 + 7 \times 6 =$ 6) $24 - 49 \div 7 =$
- 7) $2 \times 16 \div 4 =$ 8) $9 + 35 \div 5 =$ 9) $36 - 10 + 4 =$

- 1) $6 \times 0 =$
2) $6 \times 1 =$
3) $6 \times 2 =$
4) $6 \times 3 =$
5) $6 \times 4 =$
6) $6 \times 5 =$
7) $6 \times 6 =$
8) $6 \times 7 =$
9) $6 \times 8 =$
10) $6 \times 9 =$
11) $6 \times 10 =$
12) $6 \times 11 =$
13) $6 \times 12 =$
14) $6 \times 20 =$

4

- 1) $(14 \div 2)^2$ 2) $20 \div 2^2$ 3) $(8 \div 4) \times 3 - 2^2$
- 4) $4 + 6 \div 3 - 3$ 5) $6 + 4 \div 3 - 3$ 6) $5 \times (2 + 3) - 4$

5

Correct these questions by putting one or two sets of brackets in.

- 1) $7 - 3 \times 3 - 2 = 10$ 2) $9 - 4 \div 9 - 5 = 8$ 3) $7 + 4 - 9 \div 3 = 8$
- 4) $2 \times 4 - 1^2 - 10 = 8$ 5) $21 \div 10 \div 5 + 1 = 7$ 6) $40 \div 3 + 2 \times 4 = 2$

5/6

Mr Dumican wants to find the largest number possible. Use all of the following to write a single calculation whose answer is as large as possible:

CHALLENGE ACCEPTED



- Each of the numbers 7, 8 and 9 (once only)
- Each of the operations + and \times (only once)
- One pair of brackets



To improve I am going to _____

Week 8 Maths – Percentages

- 1) 50% of 140 2) 10% of 120 3) 50% of 200
4) 10% of £70 5) 25% of £40 6) 1% of 1800cm
7) 25% of £120 8) 50% of 90m 9) 1% of £2400

4

Timester Challenge

- 1) $7 \times 0 =$
- 2) $7 \times 1 =$
- 3) $7 \times 2 =$
- 4) $7 \times 3 =$
- 5) $7 \times 4 =$
- 6) $7 \times 5 =$
- 7) $7 \times 6 =$
- 8) $7 \times 7 =$
- 9) $7 \times 8 =$
- 10) $7 \times 9 =$
- 11) $7 \times 10 =$
- 12) $7 \times 11 =$
- 13) $7 \times 12 =$
- 14) $7 \times 20 =$

- 1) 35% of £80 2) 45% of £120 3) 3% of 120m 4) 12% of 3600cm
5) 5% of £320 6) 75% 48cm 7) 23% of 150m 8) 17.5% of £500

5

- 1) Increase £40 by 20% 2) Increase £24 by 75% 3) Decrease £88 by 10% 4) Decrease £320 by 20% 5) Increase £458 by 35%

6

CHALLENGE ACCEPTED



Miss Kerfoot went to Disney Land Paris and wanted to buy a Buzz Lightyear lazer gun.

Each gun cost €45, however there was a 20% sale. How much do the ears cost in the sale?



To improve I am going to _____

Week 9 Mental Maths

Timester Challenge

1) $4 \times 9 =$

2) $7 \times 6 =$

3) $4 \times 7 =$

4) $7 \times 2 =$

5) $6 \times 9 =$

6) $5 \times 8 =$

7) $7 \times 7 =$

8) $6 \times 5 =$

9) $4 \times 6 =$

10) $9 \times 7 =$

11) $8 \times 7 =$

12) $4 \times 8 =$

13) $5 \times 0 =$

14) $5 \times 12 =$

15) $11 \times 7 =$

16) $20 \times 7 =$

17) $3 \times 4 =$

18) $4 \times 9 =$

19) $2 \times 6 =$

20) $20 \times 6 =$

Tier words	Definition
Increase	
Decrease	

CHALLENGE ACCEPTED



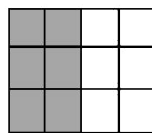
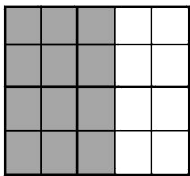
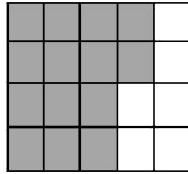
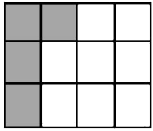
Write down more words that mean the same as 'increase' and 'decrease'



To improve I am going to _____

Week 10 Maths – Simplifying Fractions

What is the fraction shaded in on each grid?



4

Timester Challenge

- 1) $8 \times 0 =$
- 2) $8 \times 1 =$
- 3) $8 \times 2 =$
- 4) $8 \times 3 =$
- 5) $8 \times 4 =$
- 6) $8 \times 5 =$
- 7) $8 \times 6 =$
- 8) $8 \times 7 =$
- 9) $8 \times 8 =$
- 10) $8 \times 9 =$
- 11) $8 \times 10 =$
- 12) $8 \times 11 =$
- 13) $8 \times 12 =$
- 14) $8 \times 20 =$

Simplify the following fractions

1) $\frac{5}{10}$

2) $\frac{2}{4}$

3) $\frac{2}{8}$

4) $\frac{3}{9}$

5) $\frac{15}{20}$

6) $\frac{21}{28}$

7) $\frac{36}{63}$

8) $\frac{30}{42}$

9) $\frac{32}{48}$

10) $\frac{33}{121}$

5

Convert these improper fractions to mixed numbers

1) $\frac{15}{10}$

2) $\frac{17}{9}$

3) $\frac{26}{5}$

4) $\frac{18}{3}$

5) $\frac{31}{8}$

6) $\frac{78}{5}$

7) $\frac{98}{11}$

8) $\frac{29}{6}$

9) $\frac{13}{7}$

10) $\frac{17}{4}$

5

Mr Burgess has a bag. In his bag there are pink and blue balls.

a) What is the probability of choosing a pink?

CHALLENGE ACCEPT!



b) Design a bag with $P(\text{green}) = \frac{2}{5}$.

c) Design a bag with $P(\text{green}) = \frac{2}{5}$ but there are 15 objects in the bag.

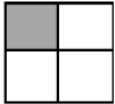



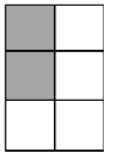
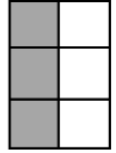
To improve I am going to _____

Week 11 Maths – Adding fractions

Timester Challenge

- 1) $9 \times 0 =$
- 2) $9 \times 1 =$
- 3) $9 \times 2 =$
- 4) $9 \times 3 =$
- 5) $9 \times 4 =$
- 6) $9 \times 5 =$
- 7) $9 \times 6 =$
- 8) $9 \times 7 =$
- 9) $9 \times 8 =$
- 10) $9 \times 9 =$
- 11) $9 \times 10 =$
- 12) $9 \times 11 =$
- 13) $9 \times 12 =$
- 14) $9 \times 20 =$


 $+$

 $=$
 $4) \frac{2}{5} + \frac{1}{5} =$


 $+$

 $=$
 $5) \frac{3}{8} + \frac{2}{8} =$

$3) \frac{4}{10} + \frac{3}{10} =$

$6) \frac{4}{13} + \frac{5}{13} =$

5

$1) \frac{1}{5} + \frac{2}{10} =$

$2) \frac{3}{8} + \frac{1}{4} =$

$3) \frac{1}{3} + \frac{2}{9} =$

$4) \frac{2}{7} + \frac{5}{14} =$

$5) \frac{2}{5} + \frac{1}{6} =$

$6) \frac{4}{7} + \frac{1}{3} =$

$7) \frac{1}{2} + \frac{5}{8} =$

$8) \frac{3}{8} + \frac{1}{4} =$

$9) \frac{3}{5} + \frac{4}{7} =$

$10) \frac{3}{8} + \frac{2}{7} =$

5

$1) 1\frac{1}{5} + 2\frac{2}{5} =$

$2) 3\frac{1}{4} + 1\frac{3}{4} =$

$3) 1\frac{1}{7} + 4\frac{3}{7} =$

$4) 2\frac{1}{5} + 3\frac{4}{10} =$

$5) 4\frac{3}{8} + 1\frac{1}{4} =$

$6) 2\frac{1}{3} + 1\frac{1}{6} =$

6

CHALLENGE ACCEPTED



Mrs Morgan is putting together a piece of music. Each bar needs $\frac{6}{8}$ notes

How many notes are needed for 9 bars?



To improve I am going to _____

Week 12 Mental Maths

Timester Challenge

- | | |
|--------------------|---------------------|
| 1) $4 \times 9 =$ | 11) $8 \times 3 =$ |
| 2) $7 \times 9 =$ | 12) $4 \times 7 =$ |
| 3) $8 \times 7 =$ | 13) $8 \times 0 =$ |
| 4) $7 \times 2 =$ | 14) $9 \times 12 =$ |
| 5) $6 \times 8 =$ | 15) $11 \times 7 =$ |
| 6) $5 \times 8 =$ | 16) $20 \times 7 =$ |
| 7) $7 \times 7 =$ | 17) $7 \times 6 =$ |
| 8) $9 \times 5 =$ | 18) $4 \times 3 =$ |
| 9) $4 \times 7 =$ | 19) $9 \times 6 =$ |
| 10) $9 \times 8 =$ | 20) $20 \times 9 =$ |

Tier words	Definition
Simplify	
Denominator	

CHALLENGE ACCEPTED



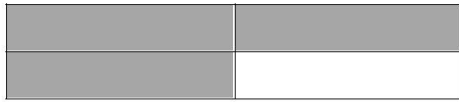
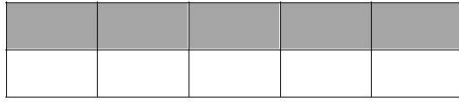
Write down 5 different fractions that are bigger than one half but less than 1



To improve I am going to _____

Week 13 Maths – Fractions-Decimals-Percentages

What percentage and fraction is shaded in each of the following.



Percentage	Fraction

4

Timester Challenge

- 1) $10 \times 0 =$
- 2) $10 \times 1 =$
- 3) $10 \times 2 =$
- 4) $10 \times 3 =$
- 5) $10 \times 4 =$
- 6) $10 \times 5 =$
- 7) $10 \times 6 =$
- 8) $10 \times 7 =$
- 9) $10 \times 8 =$
- 10) $10 \times 9 =$
- 11) $10 \times 10 =$
- 12) $10 \times 11 =$
- 13) $10 \times 12 =$
- 14) $10 \times 20 =$

Complete the following table (converting between fraction, decimal and percentages)

$\frac{1}{2}$	50%	0.5
		0.25
	20%	

$\frac{1}{10}$		0.7
	2%	

5

Complete the following table (converting between fraction, decimal and percentages)

$\frac{1}{10}$	10%	0.1
		0.35
	11.5%	

$\frac{1}{3}$		
		0.125
	80.5%	

5

CHALLENGE ACCEPTED



Mr Tsang looks at three different pupils test results. Pupil a scores 9/10, pupil b scores 16/20 and pupil c scores 13/15

a) Which pupil scores the highest?

b) Which pupil scores the lowest?



To improve I am going to _____

Week 14 Maths – Ratio

Write these ratios in their simplest form

- | | | |
|----------|----------|----------|
| 1) 2:4 | 2) 6:9 | 3) 6:8 |
| 4) 10:15 | 5) 25:50 | 6) 20:50 |
| 7) 33:77 | 8) 18:27 | 9) 8:16 |

Timester Challenge

- 1) $11 \times 0 =$
- 2) $11 \times 1 =$
- 3) $11 \times 2 =$
- 4) $11 \times 3 =$
- 5) $11 \times 4 =$
- 6) $11 \times 5 =$
- 7) $11 \times 6 =$
- 8) $11 \times 7 =$
- 9) $11 \times 8 =$
- 10) $11 \times 9 =$
- 11) $11 \times 10 =$
- 12) $11 \times 11 =$
- 13) $11 \times 12 =$
- 14) $11 \times 20 =$

5

- | | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 1) Share £50 into the ratio 2:3. | 2) Share £24 into the ratio 3:1. | 3) Share £48 into the ratio 1:2. | 4) Share £18 into the ratio 1:5. | 5) Share £35 into the ratio 2:5. |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|

5

- | | | |
|---|---|---|
| 1) There are 32 sweets in total. Mr Travis has 3 times as many sweets to Mrs Hill. How many sweets do they both have? | 2) Both Robyn and Ben play football. Ben scores 3 times as many goals as Robyn. Ben scores 21 goals, how many does Robyn score? | 3) Homer wants to share £65 between Bart, Lisa and Maggie. Lisa gets 3 times as much as Maggie. Bart gets twice as much as Lisa. How much do they each get? |
|---|---|---|

6

CHALLENGE ACCEPTED



Mrs Thomas wants to make a sugary treat. To make sugar syrup, 150grams of sugar is mixed with 250ml of water.

- a) How many grams of sugar are mixed with 1000ml of water?
- b) How much water is mixed with 150 grams of sugar?

To improve I am going to



Week 15 Mental Maths

Timester Challenge

1) $4 \times 9 =$

2) $11 \times 9 =$

3) $8 \times 7 =$

4) $7 \times 2 =$

5) $9 \times 8 =$

6) $5 \times 10 =$

7) $7 \times 10 =$

8) $9 \times 5 =$

9) $4 \times 11 =$

10) $9 \times 11 =$

11) $8 \times 11 =$

12) $11 \times 7 =$

13) $8 \times 10 =$

14) $9 \times 12 =$

15) $11 \times 7 =$

16) $20 \times 7 =$

17) $7 \times 12 =$

18) $4 \times 12 =$

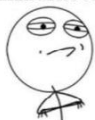
19) $12 \times 6 =$

20) $20 \times 9 =$

Tier words	Definition
Numerator	
Evaluate	

Write down five different improper fractions that are greater than 1 but less than 2

CHALLENGE ACCEPTED



To improve I am going to _____

Week 16 Maths – Collecting like terms



How many of each object is there?

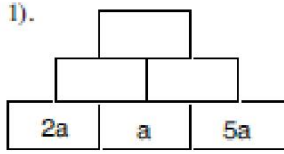
4

Timester Challenge

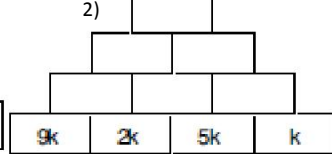
- 1) $12 \times 0 =$
- 2) $12 \times 1 =$
- 3) $12 \times 2 =$
- 4) $12 \times 3 =$
- 5) $12 \times 4 =$
- 6) $12 \times 5 =$
- 7) $12 \times 6 =$
- 8) $12 \times 7 =$
- 9) $12 \times 8 =$
- 10) $12 \times 9 =$
- 11) $12 \times 10 =$
- 12) $12 \times 11 =$
- 13) $12 \times 12 =$
- 14) $12 \times 20 =$

To find the next term add the two bricks below

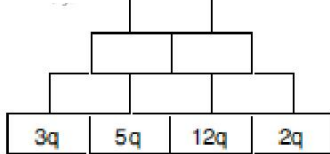
1).



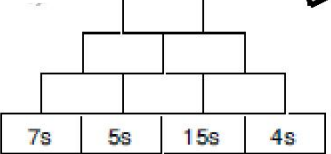
2).



3).



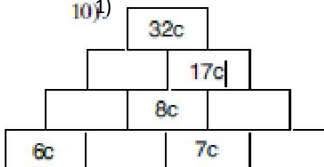
4).



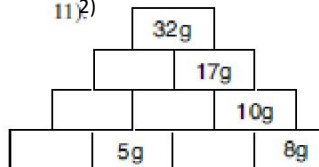
5

To find the next term add the two bricks below

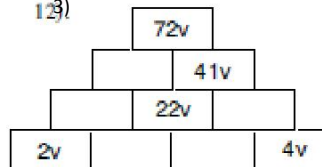
10) 1).



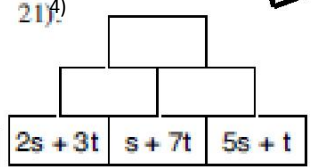
11) 2).



13) 3).



21) 4).



5

CHALLENGE ACCEPTED



Miss Westwell asked the students to simplify $7x - 2z + y + 3z - x$

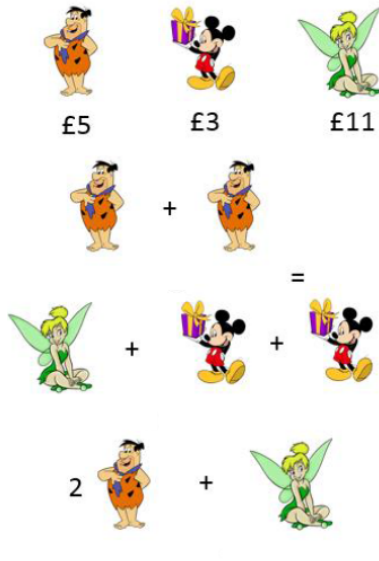
Pupil a said $6x + y - z$ Pupil b said $5x + 8y - 5z$ Pupil c said $6x + y + z$

Which student has the correct answer and can you tell what the mistakes were?



To improve I am going to _____

Week 17 Maths – Substitution



4

Timester Challenge

- 1) $15 \times 2 =$
- 2) $15 \times 3 =$
- 3) $15 \times 4 =$
- 4) $15 \times 5 =$
- 5) $25 \times 2 =$
- 6) $25 \times 3 =$
- 7) $25 \times 4 =$
- 8) $25 \times 5 =$
- 9) $50 \times 2 =$
- 10) $50 \times 3 =$
- 11) $50 \times 4 =$
- 12) $50 \times 5 =$

If $a=4$ find the value of

- | | | | | |
|----------|-----------|-------------|---------------|----------------|
| 1) $3a$ | 2) $4a+2$ | 3) $5 + 2a$ | 4) $14 - 3a$ | 5) $12a - 9$ |
| 6) a^2 | 7) a^3 | 8) $3a^2$ | 9) $2a^2 + 4$ | 10) $9a + a^2$ |

6

If $m=5$ and $n=2$ find the value of

- | | | | | |
|---------------|---------------|---------------|------------------|------------------|
| 1) $2m+3n$ | 2) $3m-5n$ | 3) $3mn$ | 4) $2m-5n$ | 5) $mn+4$ |
| 6) $2mn - 15$ | 7) $m^2 - 3n$ | 8) $2mn + 3n$ | 9) $3m^2 - 2n^3$ | 10) $4n^3 - m^2$ |

6

CHALLENGE ACCEPTED



Mr Denton says $2x - y$ can never be equal to $y - 2x$, however Mrs Morris says they are equal if $x = 3$ and $y = 6$. Can you find another pair of values for which these two expressions are equal?
What is the rule for finding them?



To improve I am going to _____

Week 18 Maths – Vocabulary and Directed Numbers

Tier words	Definition
Substitute	
Power	

T V X H F F L V J U U N
 Y H N R H A L A R V E J
 L T I I D M S P T V I S
 U Q N R N B I Q E F I P
 L S O E T E X S N X C F
 P Q X X W E T Y Q Z I E
 S E V E N T E E N F Y V
 J S W V B T E N T M E L
 Z O P M F K N E V E L E
 F I V E S L E U S W X W
 T A V U H N D J Q L R T
 B Y S R A H C Q F Z L O

$3 - -4 =$

$5 - -4 =$

$8 - -5 =$

$-2 + 12 =$

$-5 + 22 =$

$-2 + 17 =$

$-5 + 10 =$

$-4 + 15 =$

$-5 + 25 =$

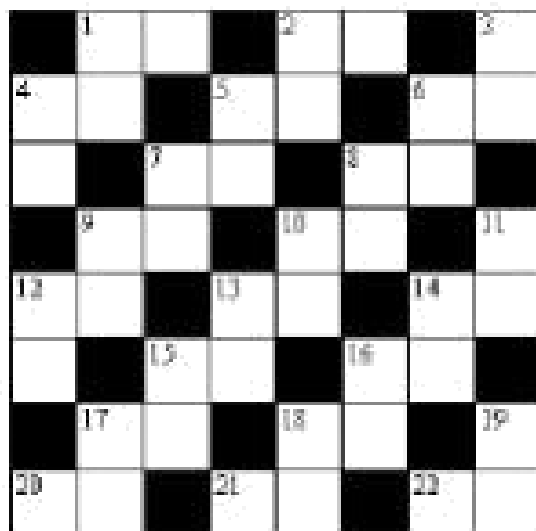
$-3 - -9 =$

$-1 - -17 =$

$-3 - -15 =$

Week 19 Maths – Word Based Puzzle

Word Based Mixed Operations Puzzle



Complete all the operations described to solve all the squares in the puzzle.

Across

1. Subtract 21 from 79
2. Subtract 23 from 51
4. Multiply 8 by 3
5. Subtract 16 from 53
6. Subtract 54 from 150
7. Divide 344 by 8
8. Subtract 15 from 70
9. Multiply 5 by 3
10. Subtract 13 from 49
12. Divide 644 by 14
13. Multiply 11 by 2
14. Add 39 and 28
15. Divide 300 by 4
16. Subtract 10 from 45
17. Multiply 43 by 2
18. Add 1 and 47
20. Divide 440 by 10
21. Add 25 and 4
22. Add 22 and 17

Down

1. Divide 702 by 13
2. Add 21 and 6
3. Subtract 19 from 45
4. Multiply 7 by 3
5. Divide 132 by 4
6. Divide 380 by 4
7. Subtract 40 from 85
8. Multiply 14 by 4
9. Subtract 14 from 30
10. Multiply 8 by 4
11. Add 19 and 38
12. Add 46 and 1
13. Subtract 17 from 42
14. Divide 195 by 3
15. Add 57 and 19
16. Subtract 19 from 57
17. Multiply 12 by 7
18. Divide 245 by 5
19. Add 5 and 14

Working out

Week _____

Week _____

Working out

Week _____

Week _____

Working out

Week _____

Week _____

Working out

Week _____

Week _____

Working out

Week _____

Week _____

Working out

Week _____

Week _____

Working out

Week _____

Week _____

Working out

Week _____

Week _____