



Level 6 Homework booklet 1

NAME _____

TEACHER _____

Task	Topic	Date Set	Date Completed		
1	Multiplying by Powers of 10				
2	Negative Numbers 1				
3	Negative Numbers 2				
4	Number Review				
5	Multiplying and Dividing Decimals Mentally				
6	Long Multiplication with Decimals				
7	Long Division				
8	Significant Figures				
9	Using a calculator and rounding				
10	Sequences				
11	Mixed Questions				

After you have completed each homework self-assess your understanding and the date you completed it

My Maths

Please see back cover for **MyMaths** tasks

Parents

Please read note on back cover

	Numbers	Calculating	Algebra	Shape	Data
7		Significant Figures Dividing Fractions Estimating Calculations Multiplying Fractions Percentage Change 1 Mixed numbers Incomes 1 Incomes 2 Ways of Buying Budgeting Change as a Percentage	Brackets Negative Inequations Inequations Quadratic Sequences Rearranging 1 Sim equations 3 Sim equations 2 Sim equations 1 Simplifying 2 Substitution 2 Simultaneous Negatives Equation of a Line 2	Upper and Lower Bounds 1 Pythagoras Theorem Speed Area of a Trapezium Volume of Cylinders Volume of Prisms Drawing Loci Density Square and Cubic Units	Mean of Grouped Data 1 Median Mode from Freq Table Relative Frequency Sampling Types of Data Questionnaires Line of Best Fit Misleading Graphs Mean from Frequency Tables Mean of Grouped Data 2 Probability Revision Step Graphs Dot Plots
6	Frac Dec Perc 2 Recurring Decimals 1	Adding Subtracting Fractions Proportion Unitary Method Ratio Dividing 2 Multiply Divide Fractions Intro	Trial and Improvement Conversion graphs $y=mx+c$ Factorising Linear nth Term Drawing Graphs Solving Equations Real Life Graphs	Area of a Circle Circumference of a Circle Constructing Shapes Plans Elevations Enlarging Shapes Interior Exterior Angles Nets Surface Area Area of a Parallelogram Angles in Parallel Lines Reflecting Shapes Rotating Shapes All Transformations Translating Shapes Area of a Triangle Volume of Cuboids Angle Proofs Sum of Angles in a Polygon	Grouping Data Listing Outcomes Drawing Pie Charts Scatter Graphs Two Way Tables

Task 1 Multiplying by Powers of 10

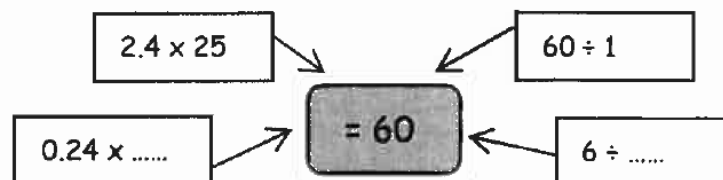
Section C	Level 6
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>1) a) 7×0.1 b) 6×0.01 c) 70×0.01 d) 56×0.1 e) 7.89×0.01 f) 0.056×0.001 g) 6.089×0.01 h) 8200×0.0001</p> </div> <div style="width: 45%;"> <p>2) a) $6 \div 0.1$ b) $700 \div 0.01$ c) $9.9 \div 0.1$ d) $0.67 \div 0.01$ e) $0.005 \div 0.01$ f) $4.04 \div 0.001$ g) $89000 \div 0.0001$ h) $40 \div 0.01$</p> </div> </div> <p>3) Use the numbers in the box to complete these multiplications. You can use each number in the box once only.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <div style="display: flex; justify-content: space-around;"> 0.0062 62 </div> <div style="display: flex; justify-content: space-around;"> 6.2 620 </div> <div style="display: flex; justify-content: space-around;"> 0.62 0.062 </div> </div> <p>a) $62 \times 0.1 = \underline{\hspace{2cm}}$ b) $6.2 \times 0.1 = \underline{\hspace{2cm}}$ c) $6.2 \times 0.01 = \underline{\hspace{2cm}}$ d) $6200 \times 0.1 = \underline{\hspace{2cm}}$ e) $0.62 \times 0.01 = \underline{\hspace{2cm}}$ f) $6200 \times 0.01 = \underline{\hspace{2cm}}$</p>	

Level 6 question - Fill in the missing decimal number.

- (a) $15 \div \dots\dots\dots = 15 \times 0.1$ 1 mark
- (b) $15 \div 1000 = 15 \times \dots\dots\dots$ 1 mark
- (b) $15 \times 0.01 = 15 \div \dots\dots\dots$ 1 mark

Level 7 question

Each of these calculations has the same answer, 60. Fill in each gap with a number.



2 marks

Task 2 Negative Numbers 1

A

1 $-1 + 10 = \underline{\quad}$
 2 $0 - -6 = \underline{\quad}$
 3 $-5 + 2 = \underline{\quad}$
 4 $1 - 3 = \underline{\quad}$
 5 $-6 - -8 = \underline{\quad}$
 6 $5 - -5 = \underline{\quad}$
 7 $6 + -4 = \underline{\quad}$
 8 $10 + -7 = \underline{\quad}$
 9 $-3 + 9 = \underline{\quad}$

B

1 $9 + \underline{\quad} = 6$
 2 $1 - \underline{\quad} = 9$
 3 $3 - \underline{\quad} = 6$
 4 $0 - \underline{\quad} = -6$
 5 $1 - \underline{\quad} = 8$
 6 $3 - \underline{\quad} = 6$
 7 $8 + \underline{\quad} = 3$
 8 $6 - \underline{\quad} = 4$
 9 $-3 + \underline{\quad} = 6$

C

1 $0 - 6 = \underline{\quad}$
 2 $5 + -5 = \underline{\quad}$
 3 $\underline{\quad} - 10 = -3$
 4 $1 - 6 = \underline{\quad}$
 5 $\underline{\quad} + -5 = 4$
 6 $9 + \underline{\quad} = 4$
 7 $0 - \underline{\quad} = -4$
 8 $\underline{\quad} - -8 = 10$
 9 $-2 - 4 = \underline{\quad}$

C

1 $72 \div -9 = \underline{\quad}$
 2 $-7 \times 6 = \underline{\quad}$
 3 $-9 \times 6 = \underline{\quad}$
 4 $6 \times 4 = \underline{\quad}$
 5 $24 \div 3 = \underline{\quad}$
 6 $-7 \times 4 = \underline{\quad}$
 7 $48 \div 6 = \underline{\quad}$
 8 $-11 \times -7 = \underline{\quad}$
 9 $5 \times 11 = \underline{\quad}$
 10 $81 \div 9 = \underline{\quad}$

11 $9 \times \underline{\quad} = -99$
 12 $-8 \times \underline{\quad} = 96$
 13 $-44 \div 4 = \underline{\quad}$
 14 $64 \div \underline{\quad} = -8$
 15 $20 \div -5 = \underline{\quad}$
 16 $7 \times \underline{\quad} = 49$
 17 $120 \div -10 = \underline{\quad}$
 18 $-45 \div \underline{\quad} = -9$
 19 $\underline{\quad} \div 8 = 11$
 20 $\underline{\quad} \times -6 = -18$

21 $144 \div 12 = \underline{\quad}$
 22 $\underline{\quad} \times -9 = 27$
 23 $16 \div \underline{\quad} = -4$
 24 $\underline{\quad} \div -10 = 5$
 25 $-11 \times -10 = \underline{\quad}$
 26 $-48 \div \underline{\quad} = -4$
 27 $-11 \times -6 = \underline{\quad}$
 28 $100 \div -10 = \underline{\quad}$
 29 $12 \div \underline{\quad} = -3$
 30 $8 \times \underline{\quad} = -56$

D Complete these magic squares

-5		
2		
-3		1

-6		
1	-3	-7

E

X	4	-6			
-8			24		
-7				-35	
		-54			
	-24				120
			-36		

F

	1	-3	
		7	-9

Level 6 question Fill in the missing numbers in the boxes using only negative numbers.

- = 5

- = -5

1 mark

Task 3 Negative Numbers 2

A) Work out the difference in temperature between

- 1) -6 and 3 = _____
- 2) -10 and -4 = _____
- 3) -5 and 0 = _____
- 4) -8 and 4 = _____
- 5) -18 and 25 = _____

B) Work out the number halfway between

- 1) -5 and -9 _____
- 2) -3 and 1 _____
- 3) 7 and -5 = _____
- 4) -7 and 3 = _____

C) Work out

- 1) $-7 + 3$ = _____
- 2) $-3 - 7$ = _____
- 3) $4 - 9$ = _____
- 4) $0 - 12$ = _____
- 5) $-5 + 11$ = _____
- 6) $-6 + 6$ = _____
- 7) $-8 - 9$ = _____
- 8) $-3 + 6$ = _____
- 9) $-8 + 4$ = _____
- 10) $-3 - 7$ = _____

D) Work out

- 1) $2 + (-8)$ = _____
- 2) $5 + (-3)$ = _____
- 3) $2 + (-6)$ = _____
- 4) $6 + (-1)$ = _____
- 5) $-3 + (-6)$ = _____
- 6) $-8 + (-3)$ = _____
- 7) $0 + (-6)$ = _____
- 8) $4 + (-8)$ = _____
- 9) $-1 + (-3)$ = _____
- 10) $-2 + (-5)$ = _____

E) Work out

- 1) $2 - (-7)$ = _____
- 2) $5 - (-1)$ = _____
- 3) $2 - (-9)$ = _____
- 4) $6 - (-2)$ = _____
- 5) $-3 - (-2)$ = _____
- 6) $-8 - (-2)$ = _____
- 7) $0 - (-3)$ = _____
- 8) $4 - (-7)$ = _____
- 9) $-6 - (-2)$ = _____
- 10) $-3 - (-9)$ = _____

F) Work out

- 1) $2 - 4$ = _____
- 2) $5 - 7$ = _____
- 3) $1 + 7$ = _____
- 4) $-6 - 2$ = _____
- 5) $-3 + 3$ = _____
- 6) $-3 - 2$ = _____
- 7) $0 + 3$ = _____
- 8) $3 - 6$ = _____
- 9) $-4 + 9$ = _____
- 10) $-5 + 1$ = _____

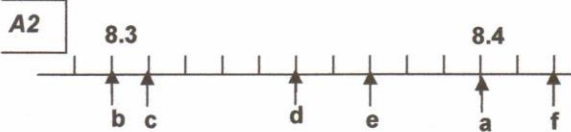
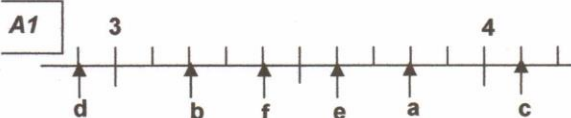
G

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

H) Complete these

1	-4	+	$+6$	=	_____	11	$+9$	+	_____	=	$+7$
2	-5	+	-7	=	_____	12	$+7$	-	_____	=	$+4$
3	$+7$	-	$+1$	=	_____	13	-1	+	_____	=	-8
4	-6	+	$+7$	=	_____	14	$+7$	-	_____	=	$+9$
5	$+7$	-	$+4$	=	_____	15	_____	+	-2	=	$+3$
6	$+9$	-	-3	=	_____	16	_____	-	$+8$	=	-6
7	-1	-	-7	=	_____	17	_____	-	-5	=	$+7$
8	-3	+	$+5$	=	_____	18	$+7$	+	_____	=	-2
9	-2	-	$+7$	=	_____	19	-2	-	_____	=	$+4$
	$+4$	-	-9	=	_____		_____	-	-3	=	$+7$

Task 4 Number Review



	a	b	c	d	e	f
1						
2						

B) Put these in order SMALLEST FIRST

- 1) 3.4 3.37 3.3
- 2) 2.82 2.9 2.813 2.8
- 3) 8.23 8.18 8.2 8.172
- 4) 4 0 -6 -3 -5

C) Work out these

- 1) $5 - 8 =$
- 2) $-3 + 9 =$
- 3) $-4 - 7 =$
- 4) $-7 + 2 =$
- 5) $6 + -3 =$
- 6) $4 + -7 =$
- 7) $-4 + -5 =$
- 8) $8 - -3 =$
- 9) $9 - -4 =$
- 10) $-3 - -7 =$

D) Find the missing numbers

- 1) $7.4 \times 100 =$
- 2) $\times 1000 = 8400$
- 3) $65.4 \times$ $= 654$
- 4) $\times 100 = 35.6$
- 5) $0.74 \times$ $= 740$
- 6) $16 \div 10 =$
- 7) $830 \div$ $= 8.3$
- 8) $\div 1000 = 9.4$
- 9) $28.7 \div$ $= 2.87$
- 10) $\div 100 = 0.347$

E)

- 1) Round 487 to the nearest 10
- 2) Round 3842 to the nearest 100
- 3) Round 26529 to the nearest 1000
- 4) Round 4.82 to the nearest whole number
- 5) Round 4.876 to 1 decimal place
- 6) Round 3.829 to 1 decimal place
- 7) Round 1.656 to 1 decimal place
- 8) Round 2.8372 to 2 decimal places
- 9) Round 3.7653 to 2 decimal places
- 10) Round 1.6221 to 2 decimal places

F) In the decimal 3,829,104.756

The 9 means 9 thousands

- a) The 4 means 4
- b) The 3 means 3
- c) The 7 means 7
- d) The 2 means 2
- e) The 6 means 6

G

SHOW ALL YOUR WORKING OUT. DON'T USE A CALCULATOR

$$\begin{array}{r} 528 \\ + 794 \\ \hline \end{array}$$

$$\begin{array}{r} 513 \\ - 187 \\ \hline \end{array}$$

$$\begin{array}{r} 489 \\ \times 6 \\ \hline \end{array}$$

$$3 \overline{)768}$$

H

SHOW ALL YOUR WORKING OUT. DON'T USE A CALCULATOR

1) Alex had £537.
He spent £169.
How much did he have left?

2) 8 people earned £267 each.
How much did they earn altogether?

3) A train engine is 11.3m long and a carriage is 23.2m long.
How long is a train engine and **two** carriages altogether.

4) Dave has a piece of wood 2.76m long. He cuts off three equal pieces which are each 0.83 cm long. How much has he got left?

5) A CD-Rom disc has a capacity of 657.3 mb. How many mb do 6 CD-Rom discs have?

6) A long piece of rock is 2.61m long. nine people share it equally. How much do each get?

7) Three computer files are 7.1 Mb, 3.4 Mb and 13.1 Mb long. The total directory length is 50Mb. What how long are the remaining files altogether?

Task 5 Multiplying and Dividing Decimals Mentally

A				
1	8000	x		8
2	200	x		3
3	50	x		5
4	2.5	x		5
5	0.024	x		3
6	0.03	x		5
7	90	x		9
8	0.6	x		6
9	0.07	x		8
10	0.3	x		5

B				
1	63000	÷		9
2	350	÷		5
3	120	÷		2
4	0.25	÷		5
5	8.1	÷		9
6	0.006	÷		3
7	1500	÷		3
8	3.6	÷		6
9	0.14	÷		7
10	0.02	÷		5

C				
1	9	x		40
2	8	x		0.3
3	0.7	x		70
4	8	x		0.004
5	60	x		0.04
6	0.04	x		0.02
7	30	x		200
8	3	x		40
9	90	x		0.4
10	8	x		0.9
11	0.8	x		0.4
12	40	x		0.07
13	0.02	x		0.6
14	0.8	x		0.06
15	40	x		0.006

D				
1	0.00018	÷		0.003
2	280000	÷		700
3	0.001	÷		0.2
4	180000	÷		90
5	7.2	÷		90
6	3	÷		500
7	4.8	÷		0.06
8	0.045	÷		0.005
9	0.00027	÷		0.09
10	0.42	÷		0.7
11	3500	÷		0.5
12	0.08	÷		0.002
13	0.024	÷		0.004
14	0.0036	÷		0.4
15	0.000049	÷		0.007

E				
1	0.07	x		0.002
2	100	÷		5000
3	63	÷		0.09
4	0.4	x		90
5	1.8	÷		60
6	270000	÷		3000
7	0.14	÷		2
8	4000	÷		5
9	80	x		0.009
10	1800	÷		9
11	40	x		0.07
12	6300	÷		700
13	0.05	x		60
14	8	x		0.3
15	540000	÷		6000

F				
16	90	x		0.9
17	0.0008	÷		0.02
18	630	÷		0.09
19	1	÷		0.02
20	0.05	x		0.07
21	0.35	÷		0.7
22	7	x		0.02
23	0.6	x		0.06
24	0.0045	÷		0.5
25	0.00001	÷		0.005
26	0.00063	÷		0.07
27	24	÷		0.006
28	0.05	x		0.006
29	5	x		0.6
30	15	÷		0.3

Task 6 Long multiplication with decimals

1. Runner beans cost £1.70 per kilogram
Ayden bought 2.4kg of runner beans.
He paid with a £5 note.

Work out how much change he should get
YOU MUST SHOW YOUR WORKING

2. The cash price of a washing machine is £470
Bojana buys the washing machine

She pays
A deposit of 30% of the cash price
And £30.25 each month for 12 months

Bojana pays, in total, more than £470
How much more?

3. Lorna buys a new phone after Xmas.
It costs her £17 per month. It is free for the first 4 hours per month and then 24p per minute over this.
She uses 287 minutes in January and 362 minutes in February.
How much does it cost her altogether?

4.

Bill is ordering sand and cement for another job.
Here is his order.

2.5 tonnes of sand at £32.30 per tonne

10 bags of cement at £3.40 per bag

Calculate the total cost of his order.

5.

The cash price of a washing machine is £470

Mrs Danvers buys the washing machine.

She pays
a deposit of 30% of the cash price
and £30.25 each month for 12 months.

Mrs Danvers pays, in total, more than £470
How much more?

Task 7 Long Division

1)

Peter buys 12 bay trees.
The total cost is £444.

How much is one bay tree?

2)

Paul rented a garage for 26 weeks.
He paid a total of £832.

Work out how much he paid each week.

3)

The club buys 18 chairs.
These cost £288 altogether.

How much does one chair cost?
Show all your working.

4)

Mr. Dunkley wins £975 on a lottery.
The £975 is shared equally between his 15 grandchildren.

How much does each grandchild receive?
You must show your working.

5)

Kate bought some new doors for her house.
They cost £64 each.
She paid £448.

How many doors did she buy?

Task 8 Significant Figures

a

1	90090	to 1sf	= _____
2	963521	to 1sf	= _____
3	6872	to 1sf	= _____
4	42283	to 1sf	= _____
5	35149	to 1sf	= _____
6	7738520	to 2sf	= _____
7	91027	to 2sf	= _____
8	674	to 2sf	= _____
9	318.851	to 2sf	= _____
10	74.440	to 3sf	= _____
11	20.7076	to 4sf	= _____
12	9.6849	to 2sf	= _____
13	1.239	to 1sf	= _____
14	0.0000025	to 1sf	= _____
15	0.000006	to 1sf	= _____
16	0.0005512	to 1sf	= _____
17	0.0001168	to 2sf	= _____
18	0.165278896	to 2sf	= _____
19	0.052532	to 3sf	= _____
20	0.000098979	to 4sf	= _____

B) Copy and complete these

- 1) $543 \times 62 \approx \underline{\quad} \times \underline{\quad} = \underline{\hspace{2cm}}$
- 2) $77 \times 243 \approx \underline{\quad} \times \underline{\quad} = \underline{\hspace{2cm}}$
- 3) $91 \times 89 \approx \underline{\quad} \times \underline{\quad} = \underline{\hspace{2cm}}$
- 4) $48 \times 378 \approx \underline{\quad} \times \underline{\quad} = \underline{\hspace{2cm}}$
- 5) $326 \times 654 \approx \underline{\quad} \times \underline{\quad} = \underline{\hspace{2cm}}$
- 6) $86 \times 4675 \approx \underline{\quad} \times \underline{\quad} = \underline{\hspace{2cm}}$

C) Do the same as b for these

- 1) $487 \times 12 = \underline{\hspace{2cm}}$
- 2) $568 \times 72 = \underline{\hspace{2cm}}$
- 3) $812 \times 489 = \underline{\hspace{2cm}}$
- 4) $485 \times 398 = \underline{\hspace{2cm}}$
- 5) $924 \times 63 = \underline{\hspace{2cm}}$
- 6) $4.9 \times 816 = \underline{\hspace{2cm}}$

Task 9 Using Calculator and Rounding

B) Calculate these

1)

$$\frac{7.5}{15 - 3.4}$$

Give your answer correct to 2 decimal places.

2)

$$\frac{24.5 + 8.74}{3.14 - 2.3}$$

Give your answer correct to 1 decimal place.

3)

$$\frac{6.5 \times 4.7}{6.7 - 1.9}$$

Give your answer correct to 1 decimal place.

4)

Calculate, correct to 1 decimal place.

$$\frac{18.6 - 2.75}{3.5 + 1.043}$$

5)

$$\frac{4.9^2}{7.8 - 5.67}$$

Give your answer correct to 1 decimal place.

6)

$$\frac{13.2 - 2.1}{3.9}$$

Give your answer correct to 2 decimal places.

7)

Calculate.

$$\frac{3.42 \times 4.2}{3.8^4}$$

Give your answer correct to 3 decimal places.

8)

Calculate.

$$2.26^4$$

Give your answer correct to 1 decimal place.

9)

$$\frac{6.9 - 4.15}{2.8 - 1.75}$$

Give your answer correct to one decimal place.

10)

Calculate.

$$\frac{1}{4.5 + 6.8}$$

Give your answer correct to 2 decimal places.

11)

$$\frac{7.5}{15 - 3.4}$$

Give your answer correct to 2 decimal places.

12)

Calculate.

$$1.27^3$$

Give your answer correct to 2 decimal places.

13)

Calculate, giving your answer correct to two decimal places.

$$\frac{50 + \sqrt{12}}{6.8}$$

14)

Calculate.

$$\frac{4.85 + 1.72}{2.1 - 0.55}$$

Give your answer correct to 2 decimal places.

15)

Calculate.

$$\frac{12.3^2}{11.7 - 1.4}$$

Give your answer correct to 1 decimal place.

16)

Calculate, correct to 2 decimal places.

$$\frac{1}{3.4 + 2.01}$$

17)

Calculate.

$$\frac{13.2 - 2.1}{3.9}$$

Give your answer correct to two decimal places.

Task 10

SEQUENCES

Name: _____

Assessment Criteria: Generate terms of a sequence using term-to-term and position-to-term definitions of the sequence, on paper and using ICT; write an expression to describe the n th term of an arithmetic sequence.

1. Look at the following sequence of numbers.

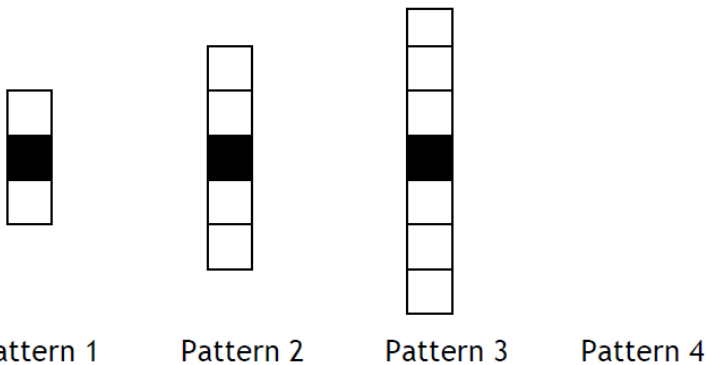
a) Complete the missing numbers

5, 12, 19, 26, ____, ____

b) What is the term-to-term rule? _____

c) What is the n^{th} term of the sequence? _____

2. Look at the following pattern.



a) Draw the next pattern in the sequence

b) How many white squares will the 10th Pattern have? _____

c) How many white squares will the n^{th} pattern have? _____

d) How many black squares will the n^{th} pattern have? _____

e) Write a formula for the n^{th} term of the pattern. _____

3. Write down the first 3 terms of the sequence with n^{th} term:

a. $T(n) = 4n - 2$

b. $T(n) = n^2 + 2$

Overall, I think my success level is:

Low High
○ ○ ○ ○

Q	SEQUENCES	😊	☹
	I can describe a sequence using the term-to-term rule		
	I can write an expression to describe the n^{th} term of a linear sequence		
	I can generate terms of a sequence using the position-to-term rule		
	<i>I can solve problems and carry through substantial tasks by breaking them into smaller, more manageable tasks, using a range of efficient techniques, methods and resources, including ICT; give solutions to an appropriate degree of accuracy</i>		
I need to practise ...			

2) Copy the following sequences and add the next two terms.

- a). 5 8 11 14 17 _ _
- b). 3 5 7 9 11 _ _
- c). 4 10 16 22 28 _ _
- d). 37 33 29 25 21 _ _
- e). 1 2 4 7 11 _ _
- f). 4 5 7 10 14 _ _
- g). 2 6 10 14 18 _ _
- h). 9 10 12 15 19 24 _ _
- i). 27 24 21 18 15 _ _

Level 6

2) Sequences

a) Match each n^{th} term rule to its number sequence.

n^{th} term

Number sequence

$$4n$$

4, 7, 12, 19, ...

$$(n+1)^2$$

4, 8, 12, 16, ...

$$n^2 + 3$$

4, 9, 16, 25, ...

$$n(n+3)$$

4, 10, 18, 28, ...

Write the first four terms of the number sequence using the n^{th} term rule below.

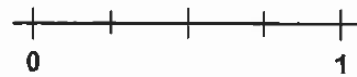
$$n^3 + 3$$

_____, _____, _____, _____

Level 6

Task 11 Mixed Questions

This decimal number line shows three dividers that are equidistant between 0 and 1.



(For the following questions, draw a decimal number line to help you.)

- 1) Find three numbers that are of equal distances between 3 and 4.
- 2) Find three numbers that are of equal distances between 0.1 and 0.2.
- 3) Find seven numbers that are of equal distances between 1 and 2.

Levels
6 - 7

Level 6 question - Here are six number cards.

Arrange these six cards to make the calculations below.

The first one is done for you.

$$939 = \begin{array}{|c|c|c|} \hline 4 & 2 & 3 \\ \hline \end{array} + \begin{array}{|c|c|c|} \hline 5 & 1 & 6 \\ \hline \end{array}$$

a) $1184 = \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} + \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array}$

b) $758 = \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} + \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array}$

c) Now arrange the six cards to make a difference of 115

$$115 = \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} - \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array}$$

3 marks

Level 6 Questions

1. a) Give an example to show the statement below is not correct.

When you multiply a number by 2, the answer is always greater than 2 1 mark

- b) Now give an example to show the statement below is not correct.

When you subtract a number from 2, the answer is always less than 2 1 mark

- c) Is the statement below correct for all numbers?

The square of a number is greater than the number itself.

Explain how you know.

1 mark

Level 6 question - Write the missing numbers in the table. The first row is done for you.

First number	Second number	Sum of first and second numbers	Product of first and second numbers	
3	6	9	18	
5	-3			1 mark
-8		-5		1 mark

Level 7 question - Write the missing numbers in these multiplication grids.

a)
$$\begin{array}{r|rr} \times & 8 & \\ \hline 9 & 72 & \\ -6 & & 30 \end{array}$$

b)
$$\begin{array}{r|rr} \times & 0.2 & \\ \hline 3 & & 1.2 \\ & & 6 \end{array}$$

3 marks

MyMaths : Here are the MyMaths tasks for level 6.

Your teacher will instruct which of these to do.

Alternatively can use MyMaths to help with topics you are unsure of and to revise topics.

Username : **thekingswood**

Password : **primes**

BOOSTER PACKS

Topic	<i>How to find</i> : Go to Boosters then	% Scored	Self Assessment		
Decimals Place Value	Six Boosters		😊	😐	😞
Calculators	Six Boosters		😊	😐	😞
Sequences	Six Boosters		😊	😐	😞

OTHER

Topic	<i>How to find</i> : Go to Library then	% Scored	Self Assessment		
Recurring Decimals 1	Number → Decimals		😊	😐	😞
Trial and Improvement	Number → Estimation and Accuracy		😊	😐	😞
Drawing Graphs	Algebra → Graphs		😊	😐	😞
Gradients	Algebra → Graphs		😊	😐	😞
$y=mx+c$	Algebra → Graphs		😊	😐	😞

Parent note about this booklet

This booklet contains several level tasks available for homework along with MyMaths tasks.

The teacher will instruct which level tasks students should complete each week.

Students can do extra MyMaths tasks not set by the teacher at any time It is not intended that the whole booklet should be completed as one homework.

The booklet must be kept safely and any lost booklets will require £1 for a new copy.