

Benjamin Britten Academy of Music and Mathematics

MATHEMATICS HOMEWORK BOOKLET

Year 7 Book C
SPRING TERM



NAME:



How does it work?

- One homework will be set a week
- The set and due date for each homework will be written on this page
- Some homework will need completing on this booklet, others on the internet
- If you need help logging onto a website, you need to see your class teacher
- If you need help with the homework task, you must speak to your teacher before the due date

CONTENTS

WEEK	HOMEWORK TITLE
1	Numeracy
2	Place Value
3	Research task
4	Numeracy
5	Averages
6	Mathswatch
7	Numeracy
8	Sequences
9	Real life maths
10	Numeracy
11	Substitution
12	Mathswatch

Log in details:

Below are the log in instructions you will need in order to access and complete some of the homework tasks in this booklet.

Mathswatch

Username—firstnamelastname@benjamin

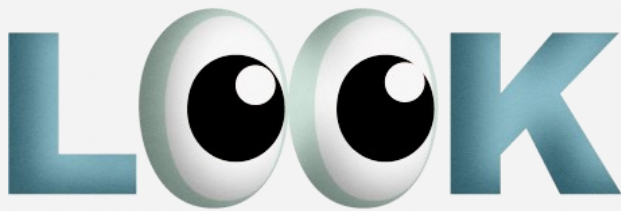
Password—your DOB (format: monthDYyyy)

Completing your homework

All homework tasks need to be completed in this booklet or on a specific website.

There are also **answers** for all booklet tasks at the back of the booklet. Part of your homework task each week is to **mark your work**. Make sure you mark all your answers in another colour pen, making any corrections if you need to.

Remember - if you need help, you must speak to your teacher **before** the due date.



If you see the logo above next to a task, you can type the clip number into Mathswatch for extra help!

Watch the video and make notes, then try the homework task again. If you still need help, then speak to your maths teacher at school.





HOMWORK 1: NUMERACY

Literacy challenge – Missing letters!

Below are 3 keywords in maths, but some of the letters are missing. Can you fill the blanks?

BR __ KET _

P _ OD __ T

CO _ RDI _ A _ ES

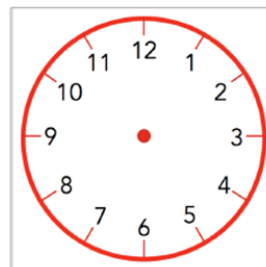
Recall and Recap

MENTAL STRATEGIES -
do these in your head

Q	Question	Answer
1	$3 + 17$	
2	What is double 55?	
3	$112 + 10$	
4	$29 - 10$	
5	$6 = 1 + \square$	
6	$58 - 11 = 58 - 8 - \square$	
7	$73 + 73 = \square \times 73$	
8	Draw hands on the clock face showing 10:10 am	
9	$7 + 3$	
10	$\square + 46 = 100$	
Total out of 10		

TIMESTABLES -
do these in your head

Q	Question	Answer
1	$6 \times 7 = \square$	
2	$24 \div 4 = \square$	
3	$4 \times \square = 28$	
4	$24 \div \square = 4$	
5	$7 \times 6 = \square$	
6	$18 \div 6 = \square$	
7	$\square \times 4 = 4$	
8	$\square \div 2 = 3$	
9	$5 \times 7 = \square$	
10	$54 \div 6 = \square$	
Total out of 10		



★		★★	
A1	5×7	B1	$8231 + 8329$
A2	$25 \div 5$	B2	$1216 \div 16$
A3	$8 - 6$	B3	$3682 + 1346$
A4	$12 \div 3$	B4	$2702 + 4229$
A5	$6 + 9$	B5	$6074 + 7459$
A6	$4 - 3$	B6	$1155 \div 15$
A7	$9 - 1$	B7	$7501 - 7083$
A8	$6 + 5$	B8	87×863
A9	3×8	B9	$2779 + 9245$
A10	$3 \div 1$	B10	75×467

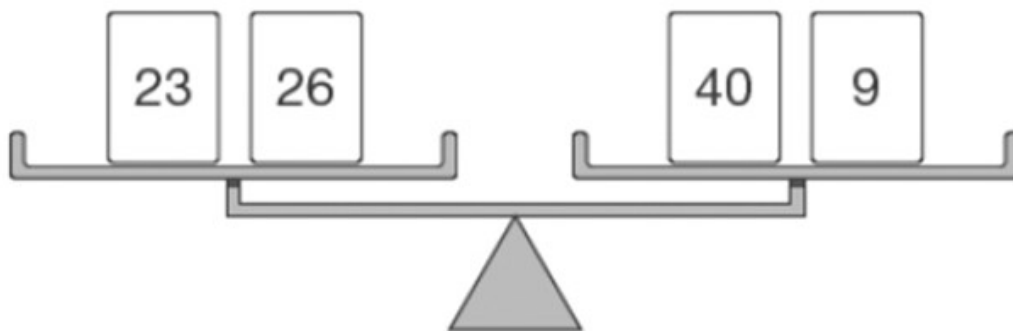
Problem solving!

Apply your core skills to the challenge question below...

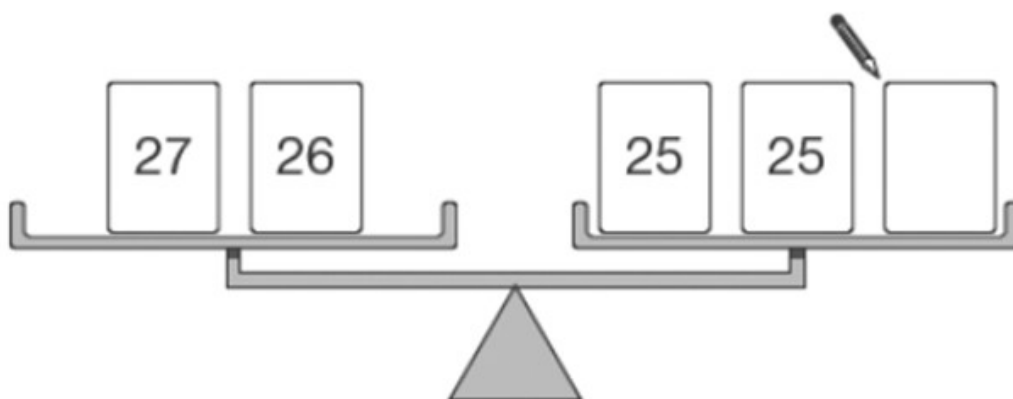


Scale balance

The numbers on these scales balance.



Write the missing number so that these scales balance.





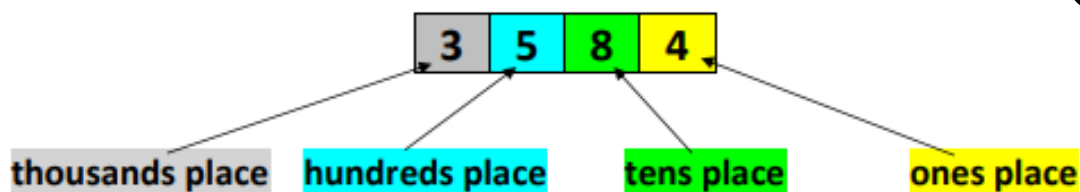
HOMWORK 2: PLACE VALUE

LOOK

A6, A7, A10,
A17

Core skills...

A digit's place value tells us how much each digit is worth.



1) Write down which digit is in the **ones** place:

1267 → 7	4235 →	3190 →	8302 →
----------	--------	--------	--------

2) Write down which digit is in the **tens** place:

2743 →	5194 →	8320 →	307 →
--------	--------	--------	-------

3) Write down which digit is in the **hundreds** place:

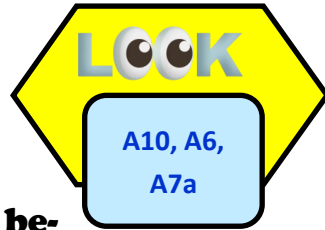
6035 →	3502 →	1238 →	839 →
--------	--------	--------	-------

4) Write down which digit is in the **thousands** place:

6235 →	8302 →	1428 →	389 →
--------	--------	--------	-------

Applying your skills

- 1) $1000 + 300 + 20 + 6 =$ _____
- 2) $2000 + 100 + 60 + 4 =$ _____
- 3) $4000 + 500 + 20 + 3 =$ _____
- 4) $7000 + 100 + 30 + 9 =$ _____
- 5) $5000 + 600 + 80 + 3 =$ _____



Problem solving!

Apply your core skills to the challenge questions below...

Select the correct answer from a choice of 8 possibilities.

- 1) I am a 3 digit number.
I am greater than 350.
My hundreds digit is even.
I am not a multiple of 5.

Who am I?

782	495	328	294
684	583	835	962

- 2) I am not a multiple of 10.
My tens digit is a multiple of 3.
If you round me to the nearest 100, I become 500.

Who am I?

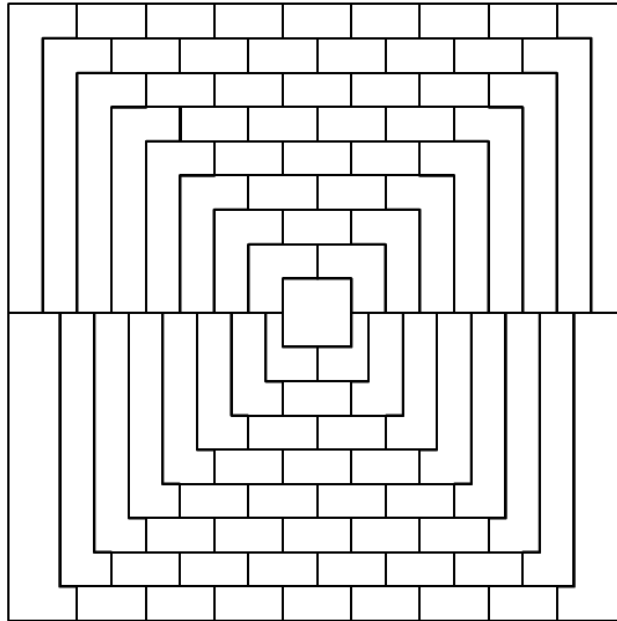
427	476	562	460
528	592	530	535



HOMWORK 3: FOUR COLOUR THEOREM

Part A

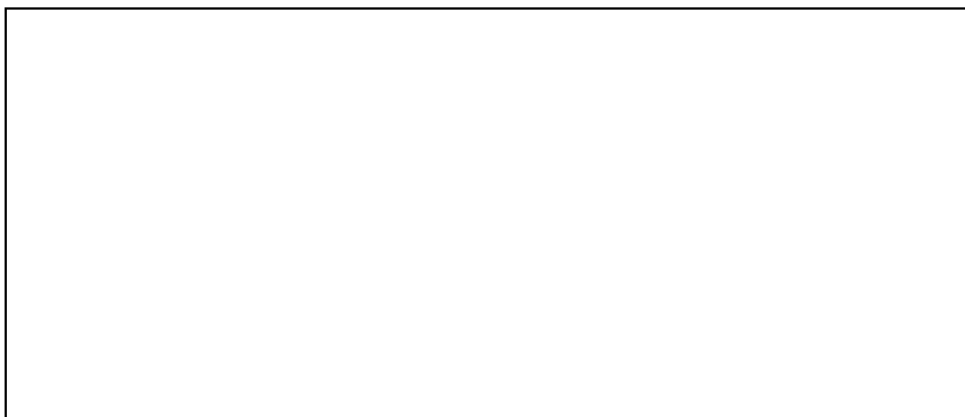
Colour in the pattern so that no areas which touch have the same colour. Try to use the least number of different colours possible.



What is the least number of different colours that are needed?

Part B

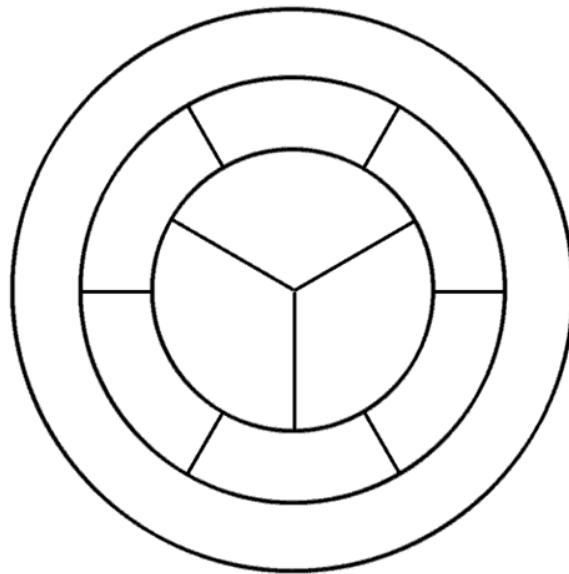
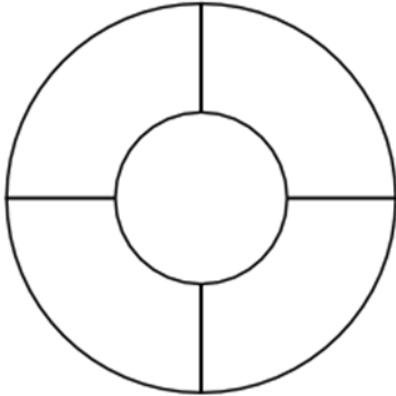
Now make your own pattern using the same rule (you can't have the same colours next to each other). Try to make a pattern which needs the greatest number of different colours.



What is the greatest number of different colours that are needed?



How many colours do you need to colour the two pictures below so that no two touching parts are the same colour? Use your own colours to test it out. Try to use the minimum number of colours possible.



Thanks to the Four Colour Theorem, we know that any picture of this kind only requires four different colours (to have no touching parts be the same colour).

RESEARCH: Use the internet or books to answer the following questions.

Q1 a) What is cartography?

b) How does the Four Colour Theorem link to cartography?

Q2 Why do some people believe that the Four Colour Theorem has not been proven properly?

Q3 Who famously thought he had proved the Four Colour Theorem but found out ten years later that he had made a mistake?



HOMWORK 4: NUMERACY

Literacy challenge – Missing letters!

Below are 3 keywords in maths, but some of the letters are missing. Can you fill the blanks?

E _ UA _ S

TR _ A _ GL _

EQ _ IV _ LE _ T

Quick maths! Just 5 mins..go!

	★	★★
A1	$8 \div 4$	B1 $3480 - 1864$
A2	$15 \div 5$	B2 $5105 - 1990$
A3	9×5	B3 $960 \div 15$
A4	$8 + 5$	B4 $1050 + 3770$
A5	$2 + 4$	B5 $8731 - 7375$
A6	1×1	B6 $1106 \div 14$
A7	$8 + 3$	B7 347×25
A8	7×8	B8 $3133 + 5739$
A9	$20 \div 4$	B9 $8574 - 4025$
A10	1×4	B10 $5282 - 3863$

Recall and Recap

MENTAL STRATEGIES -
do these in your head

Q	Question	Answer
1	$\square + 3 = 5$	
2	$68 + \square = 100$	
3	What is half of 4?	
4	$189 - 10$	
5	$161 + \square = 240$	
6	$74 = 24 + \square$	
7	$629 - 627$	
8	$9 \times 5 = 45$, so $45 \div 9 = \square$	
9	Write 8:23 am in 24 hour clock format	
10	2:15 pm is how many minutes after 2:05 pm?	
Total out of 10		

TIMESTABLES -
do these in your head

Q	Question	Answer
1	$5 \times 1 = \square$	
2	$24 \div 8 = \square$	
3	$5 \times \square = 30$	
4	$45 \div \square = 9$	
5	$6 \times 1 = \square$	
6	$40 \div 4 = \square$	
7	$\square \times 1 = 10$	
8	$\square \div 3 = 9$	
9	$6 \times 4 = \square$	
10	$2 \div 2 = \square$	
Total out of 10		



Problem solving!

Apply your core skills to the challenge questions below...

Temperature

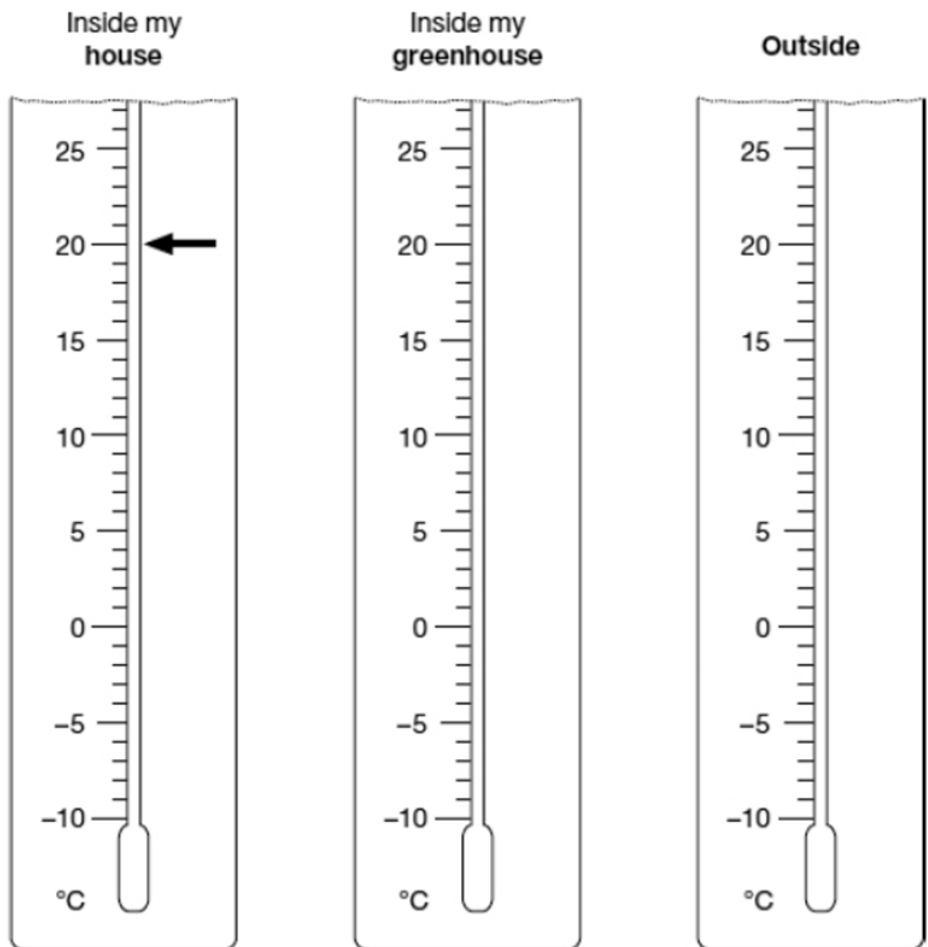
The table shows some temperatures for one day in winter.

Place	Temperature
Inside my house	20°C
Inside my greenhouse	8°C
Outside	-2°C



Draw arrows on the diagrams below to show these temperatures.

The first one is done for you.





HOMEWORK 5: AVERAGES

Recall and Recap: Frequency diagrams

I = 1 item
= 5 items

Red Blue Red Green Blue
 Blue Red Blue Red Yellow
 Red Red Yellow Green Red
 Green Blue Green Blue Red

Cross the items out as you tally them so you don't lose track

Complete the table from the data above.

Colour	Tally	Frequency
Red		
Blue		
Green		
Yellow		

Which fruit is the mode?

Remember a Key!

Pictograms

Key = 2 people = 1 person

Blue

Grey

Brown

Green ?

Other

How many people have grey eyes?

How many people have brown eyes?

5 people have green eyes, mark this on the diagram.



Applying your skills

Find the mean, mode, median and range:

Q1) 15, 7, 15, 10, 3

Q2) 18, 4, 11, 18, 14

Q3) 15, 21, 11, 15, 5

Q4) 20, 3, 6, 15, 20

Q5) 18, 15, 21, 4, 21

Here is a fun rhyme to help you remember the three M's and the R:

Hey diddle diddle, the **median's** the middle, You add then divide for the **mean**.

The **mode** is the one that you see the most, And the **range** is the difference between.



Problem solving!

Apply your core skills to the challenge questions below...



Football survey

Sam asked pupils in his class:






Do you like American football?

There were **30** pupils in his class.

The same number of pupils said 'Yes' as said 'No'.

12 pupils said 'Don't know'.

Complete the key and the rows for Yes and No in Sam's pictogram.

	Key:  represents _____ people
Yes	
No	
Don't know	   

2 marks



HOMWORK 6: MATHSWATCH



For this week's homework, your teacher will set you a task to complete on the website Mathswatch. The task will be based on the content you have learnt over the past half term in your maths lessons. You can use the space on the next page to do any working out if you need to.

Below are the log in instructions you will need in order to access and complete this homework task.

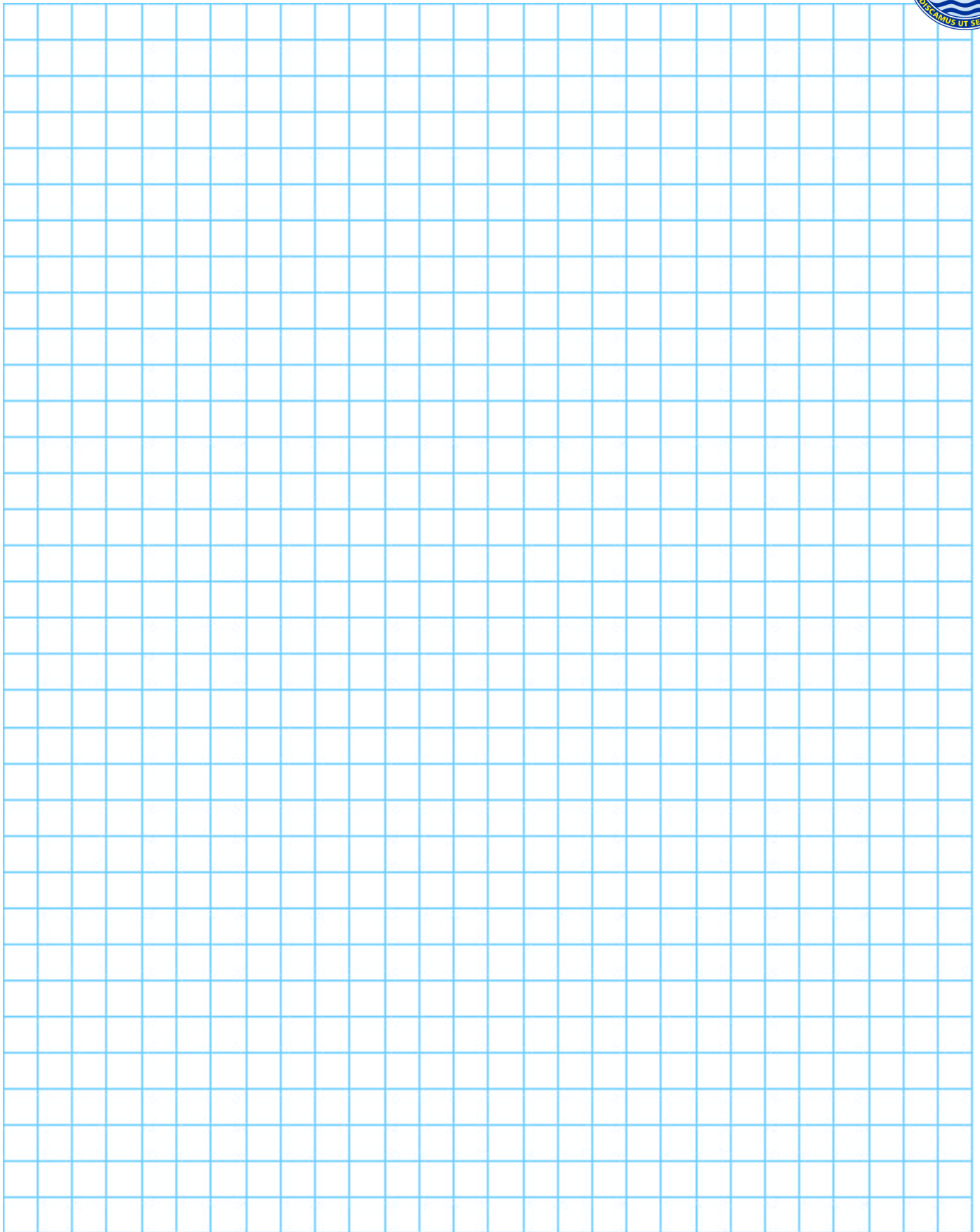
If you have any issues logging in, you must speak to your class teacher as soon as possible.

Username— firstnamelastname@benjamin

Password— your DOB (format: monthDYYYY)

If you need a printed copy of this homework task, make sure you speak to your class teacher before the due date and they will print a copy for you to complete.

Additional working out space:





HOMEWORK 7: NUMERACY

Literacy challenge – Missing vowels!

Below are 3 keywords in maths, but the vowels are missing. Can you fill the blanks?

ME _ I _ N

E _ TI _ ATE

SUB _ TI _ UT _ ON

★		★★	
A1	$3 + 1$	B1	$4232 - 1265$
A2	$4 \div 2$	B2	$5416 - 4292$
A3	$3 \div 1$	B3	$272 \div 16$
A4	$7 - 1$	B4	645×64
A5	5×6	B5	55×182
A6	6×2	B6	$1218 \div 14$
A7	$4 \div 4$	B7	$7229 + 4496$
A8	9×1	B8	$8454 - 4569$
A9	$5 + 6$	B9	$1088 \div 17$
A10	$9 + 9$	B10	$608 \div 16$

Recall and Recap

MENTAL STRATEGIES -
do these in your head

Q	Question	Answer
1	$\square + 7 = 10$	
2	What is double 9?	
3	Halve 40	
4	$111 + 30$	
5	$66 + 63$	
6	$17 + 9 = 17 + 3 + \square$	
7	$3 + 468$	
8	$33 + 70 = 30 + 70 + \square$	
9	Double 58	
10	What is half of 7?	
Total out of 10		

TIMESTABLES -
do these in your head

Q	Question	Answer
1	$6 \times 2 = \square$	
2	$36 \div 6 = \square$	
3	$5 \times \square = 15$	
4	$56 \div \square = 7$	
5	$3 \times 9 = \square$	
6	$5 \div 5 = \square$	
7	$\square \times 9 = 9$	
8	$\square \div 6 = 3$	
9	$8 \times 3 = \square$	
10	$18 \div 3 = \square$	
Total out of 10		





Problem solving!

Apply your core skills to the challenge question below...




Writing cheques

Write the missing numbers on these cheques.


The first one is done for you.


Pay <i>J. Baker</i>	Date: 30.04.08

Thirty-eight pounds and	£ 38 . 67


sixty-seven pence	
_____	 H. Norris


Pay <i>T. Jones</i>	Date: 30.04.08

One hundred and two pounds and 	£

seventy pence	
_____	 H. Norris

Pay <i>B. Torres</i>	Date: 30.04.08

One hundred and twenty pounds and 	£

seven pence	
_____	 H. Norris



HOMWORK 8: SEQUENCES

Recall and Recap:

Fill in the boxes to complete the sequence and give the rule for each:

Q1) 4, 12, 20, , ,

Q2) 4, 10, 16, , ,

Q3) 5, 9, 13, , ,

Q4) 2, 6, 10, , ,

Q5) 7, 10, 13, , ,

Q6) 46, 43, 40, , ,

Write the rules here:

Think hard...



These patterns are made from sticks



Pattern 1



Pattern 2



Pattern 3

- (a) Draw pattern 4
- (b) Draw pattern 5
- (c) How many sticks will there be in pattern 6?
- (d) How many sticks will there be in pattern 10?



Problem solving!

Apply your core skills to the challenge questions below...

- . The numbers in this sequence decrease by the same amount each time

Write the next two numbers

70 63 56 49

-
- . The numbers in this sequence increase by 13 each time

Write in the two missing numbers

101

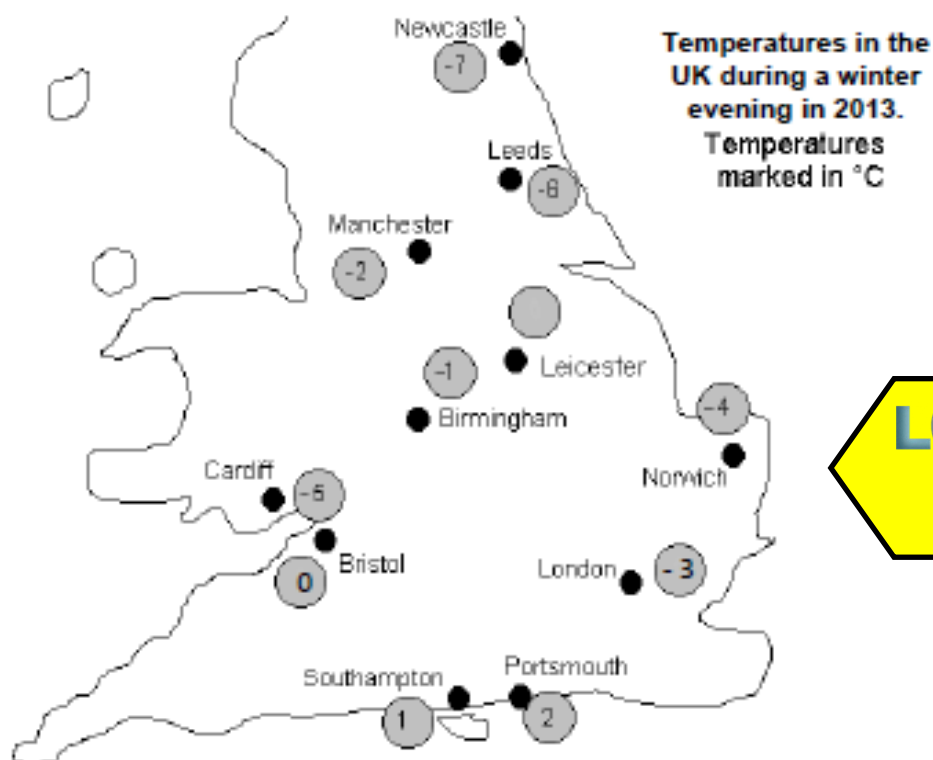
114

127

140



HOMEWORK 9: REAL LIFE MATHS



Section A: Decide which city is warmer or colder.

	Which city is warmer?
Cardiff or Southampton	
Portsmouth or London	
Manchester or Bristol	
Birmingham or Cardiff	
Newcastle or Leeds	

	Which city is colder?
Southampton or Leeds	
Bristol or Portsmouth	
Cardiff or Leeds	
Manchester or London	
Birmingham or Bristol	

Section B: Use the temperatures above to answer the following questions.

- Which city was the coldest that evening?
- Work out the difference between the highest and lowest temperature.
- The temperature in Leicester was 10°C lower than the temperature in Portsmouth. Include the temperature of Leicester on the map.
- The following evening the temperature in Manchester fell by 6°C . What was the temperature in Manchester the following evening?

The table shows the minimum and maximum daily temperatures in six cities in the USA in January.

City	Minimum °C	Maximum °C
New York	0°C	10°C
Los Angeles	8°C	18°C
Chicago	-4°C	8°C
Houston	11°C	20°C
Boston	-2°C	13°C
Anchorage	-12°C	-5°C



(a) Which city recorded the lowest **minimum** temperature?

.....
(1)

(b) What is the difference in °C between Boston's minimum and maximum temperature?

.....°C
(1)

(c) What is the difference in °C between Anchorage's minimum and maximum temperature?

.....°C
(1)



HOMWORK 10: NUMERACY

Literacy challenge – Missing vowels!

Below are 3 keywords in maths, but some of the letters are missing. Can you fill the blanks?

F _ C _ ORS

MU _ TI _ _ ES

QUA _ R _ LA _ ER _ L

Recall and Recap

MENTAL STRATEGIES -
do these in your head



Q	Question	Answer
1	$1 + \square = 20$	
2	Double 54	
3	$22 + 10$	
4	$44 - 40$	
5	$7 = 2 + \square$	
6	$75 - 11 = 75 - 5 - \square$	
7	$6 + 6 + 6 + 6 + 6 = 6 \times \square$	
8	What is the time on the clock?	pm
9	Double 7	
10	What is half of 44?	
Total out of 10		



TIMESTABLES -
do these in your head

Q	Question	Answer
1	$6 \times 6 = \square$	
2	$2 \div 2 = \square$	
3	$6 \times \square = 12$	
4	$40 \div \square = 5$	
5	$1 \times 9 = \square$	
6	$40 \div 8 = \square$	
7	$\square \times 7 = 49$	
8	$\square \div 3 = 1$	
9	$2 \times 2 = \square$	
10	$48 \div 6 = \square$	
Total out of 10		

★		★★	
A1	$6 - 1$	B1	85×740
A2	$8 - 5$	B2	$8007 - 5127$
A3	$4 + 7$	B3	$3305 - 3152$
A4	$7 - 3$	B4	$2527 + 4242$
A5	4×4	B5	23×941
A6	$9 - 1$	B6	$6113 + 9417$
A7	$10 - 8$	B7	$9659 + 2820$
A8	6×4	B8	116×54
A9	10×0	B9	18×746
A10	$9 - 2$	B10	$3856 - 2529$



1. Write in digits:

a) Three hundred and fifty two

d) Nine hundred thousand

b) Five thousand and eight

e) Four hundred and six thousand

c) Twenty six thousand and fourteen

f) 1 million and five

2. Which of these is 8 tenths?

a) 0.08

b) 0.8

c) 8.0

d) 80

3. Round 483 to the nearest hundred

4. Work out half of each of these numbers:

a) 9

b) 42

c) 90

d) 81

5. Round each of these numbers to the nearest whole number:

a) 4.8

b) 2.67

c) 3.5

d) 27.405



HOMWORK 11: SUBSTITUTION

Recall and Recap:

Given that $a = 3$, evaluate:

a) $10a$

e) $4a + 2$

i) $5 - a$

b) a^2

f) $7 + a$

j) a^3

c) $\frac{a}{3}$

g) $7a$

k) $4 + 2a$

d) $5a - 1$

h) $2a + 5$

l) $3a - 2$

LOOK

G20

If $a = 7$ $b = 10$ $c = 3$ $d = 8$ and $e = 15$

Find the value of each expression.

(a) $a + 5$

(b) $b - 4$

(c) $c + d$

(d) $e - d$

(e) $2a$

(f) $4b$

(g) $3e$

(h) $5c$



Problem solving!

Apply your core skills to the challenge questions below...

$$n = 7$$



What is $n + 4$?

$$w = 4$$

What is $3w - 2$?

$$c = 9$$

What is $2c + 5$?



HOMework 12: MATHSWATCH



For this week's homework, your teacher will set you a task to complete on the website Mathswatch. The task will be based on the content you have learnt over the past half term in your maths lessons. You can use the space on the next page to do any working out if you need to.

Below are the log in instructions you will need in order to access and complete this homework task.

If you have any issues logging in, you must speak to your class teacher as soon as possible.

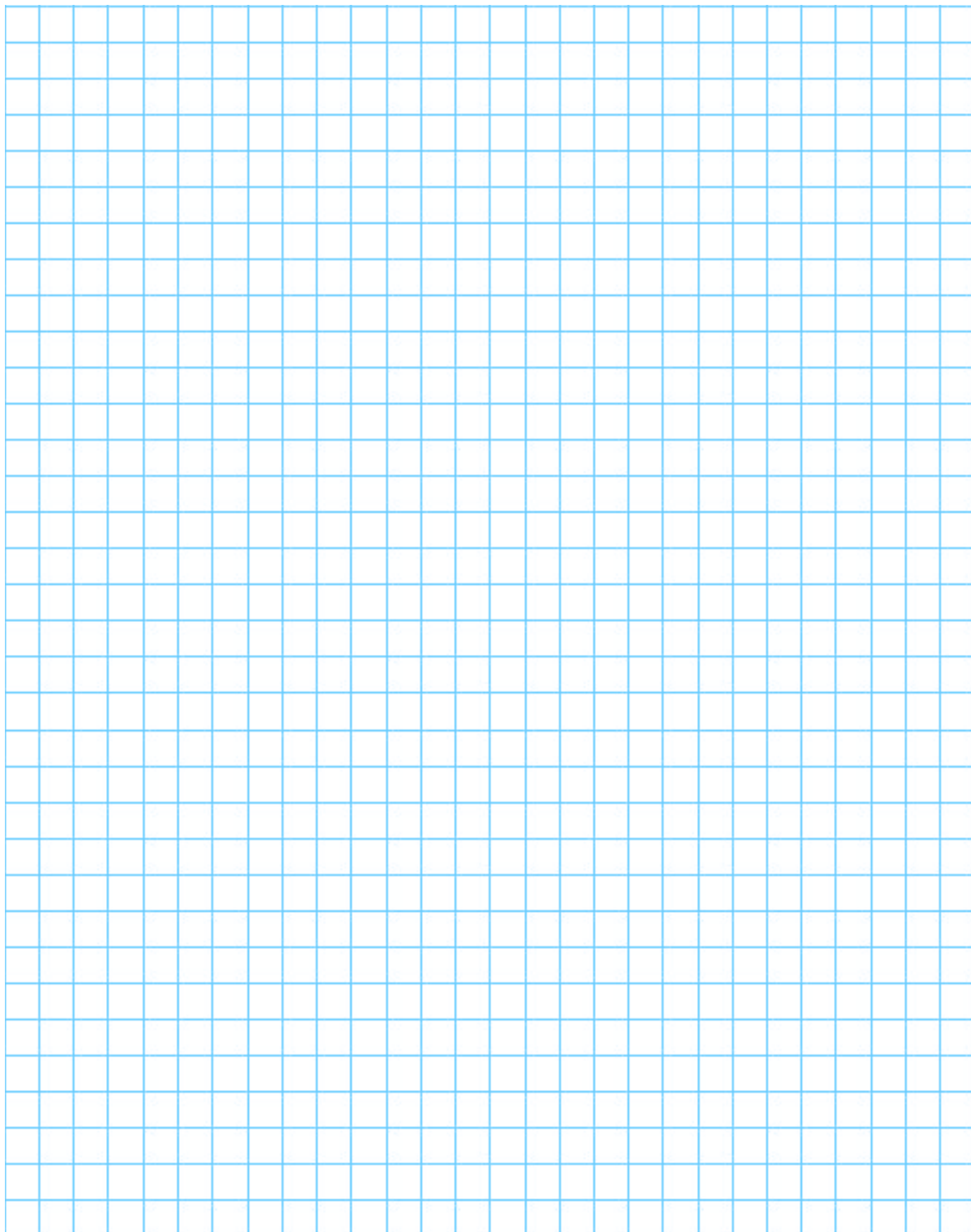
Username— firstnamelastname@benjamin

Password— your DOB (format: monthDYYYY)

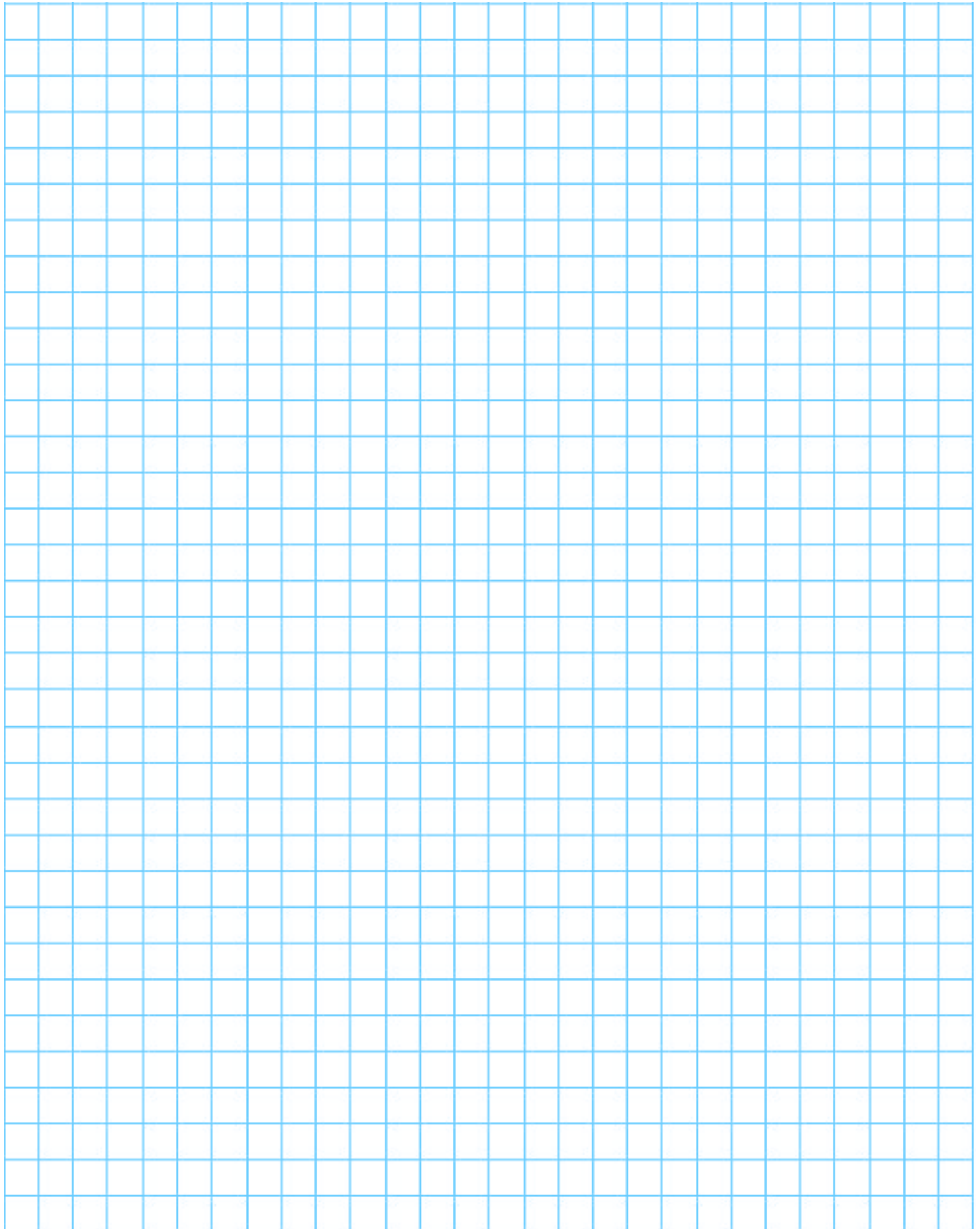
If you need a printed copy of this homework task, make sure you speak to your class teacher before the due date and they will print a copy for you to complete.



Additional working out space:



Additional working out space:



ANSWERS—WEEK 1

Q	Question	Answer
1	$3 + 17$	20
2	What is double 55?	110
3	$112 + 10$	122
4	$29 - 10$	19
5	$6 = 1 + \square$	5
6	$58 - 11 = 58 - 8 - \square$	3
7	$73 + 73 = \square \times 73$	2
8	Draw hands on the clock face showing 10:10 am	See clock above
9	$7 + 3$	10
10	$\square + 46 = 100$	54

Q	Question	Answer
1	$6 \times 7 = \square$	42
2	$24 \div 4 = \square$	6
3	$4 \times \square = 28$	7
4	$24 \div \square = 4$	6
5	$7 \times 6 = \square$	42
6	$18 \div 6 = \square$	3
7	$\square \times 4 = 4$	1
8	$\square \div 2 = 3$	6
9	$5 \times 7 = \square$	35
10	$54 \div 6 = \square$	9

A1	35	B1	16560
A2	5	B2	76
A3	2	B3	5028
A4	4	B4	6931
A5	15	B5	13533
A6	1	B6	77
A7	8	B7	418
A8	11	B8	75081
A9	24	B9	12024
A10	3	B10	35025
	★		★★

3

ANSWERS—WEEK 2

- 1) $1000 + 300 + 20 + 6 = \overline{1326}$
- 2) $2000 + 100 + 60 + 4 = \overline{2164}$
- 3) $4000 + 500 + 20 + 3 = \overline{4523}$
- 4) $7000 + 100 + 30 + 9 = \overline{7139}$
- 5) $5000 + 600 + 80 + 3 = \overline{5683}$

6235 → <u>6</u>	8302 → <u>8</u>	1428 → <u>1</u>	389 → <u>0</u>
-----------------	-----------------	-----------------	----------------

4) Write down which digit is in the **thousands** place:

6035 → <u>0</u>	3502 → <u>5</u>	1238 → <u>2</u>	839 → <u>8</u>
-----------------	-----------------	-----------------	----------------

3) Write down which digit is in the **hundreds** place:

2743 → <u>4</u>	5194 → <u>9</u>	8320 → <u>2</u>	307 → <u>0</u>
-----------------	-----------------	-----------------	----------------

2) Write down which digit is in the **tens** place:

1267 → <u>7</u>	4235 → <u>5</u>	3190 → <u>0</u>	8302 → <u>2</u>
-----------------	-----------------	-----------------	-----------------

1) Write down which digit is in the **ones** place:

535	530	592	528
460	562	476	427

Who am I?

If you round me to the nearest 100, I become 500.
My tens digit is a multiple of 3.

2) I am not a multiple of 10.

684	835	583	782
296	328	495	962

Who am I?

My hundreds digit is even.
I am not a multiple of 5.

I am greater than 350.

1) I am a 3 digit number.

ANSWERS—WEEK 4

A1	2	B1	1616
A2	3	B2	3115
A3	45	B3	64
A4	13	B4	4820
A5	6	B5	1356
A6	1	B6	79
A7	11	B7	8675
A8	56	B8	8872
A9	5	B9	4549
A10	4	B10	1419
	★		★★

Q	Question	Answer
1	$5 \times 1 = \square$	5
2	$24 \div 8 = \square$	3
3	$5 \times \square = 30$	6
4	$45 \div \square = 9$	5
5	$6 \times 1 = \square$	6
6	$40 \div 4 = \square$	10
7	$\square \times 1 = 10$	10
8	$\square \div 3 = 9$	27
9	$6 \times 4 = \square$	24
10	$2 \div 2 = \square$	1

Q	Question	Answer
1	$\square + 3 = 5$	2
2	$68 + \square = 100$	32
3	What is half of 4?	2
4	$189 - 10$	179
5	$161 + \square = 240$	79
6	$74 = 24 + \square$	50
7	$629 - 627$	2
8	$9 \times 5 = 45$, so $45 \div 9 = \square$	5
9	Write 8:23 am in 24 hour clock format	08:23
10	2:15 pm is how many minutes after 2:05 pm?	10

[2]

1

Indicates -2 on the third thermometer
i Responses for the second and third
thermometers transposed but otherwise
correct
Mark as 0, 1

1

Indicates 8 on the second thermometer
i Inaccurate indication
Accept provided the indication is nearer to
the correct integer than either of the
neighbouring integers

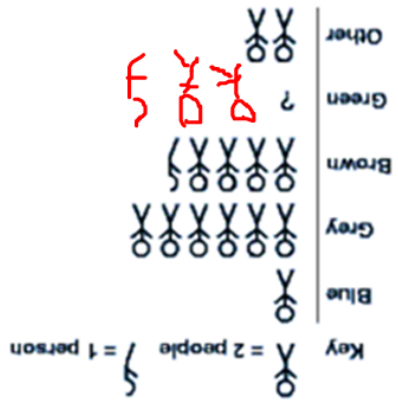
ANSWERS—WEEK 5

- Q1) Mean = 10, Mode = 15, Median = 10, Range = 12
- Q2) Mean = 13, Mode = 18, Median = 14, Range = 14
- Q3) Mean = 13.4, Mode = 15, Median = 15, Range = 16
- Q4) Mean = 12.8, Mode = 20, Median = 15, Range = 17
- Q5) Mean = 15.8, Mode = 21, Median = 18, Range = 17

5 people have green eyes, mark this on the diagram.

How many people have brown eyes? **9**

How many people have grey eyes? **12**



Pictograms

Remember a Key!

Which fruit is the mode? **Red**

Colour	Tally	Frequency
Yellow		2
Green		4
Blue		5
Red		8
Frequency		

Complete the table from the data above.

Cross the items out as you tally them so you don't lose track

Red	Blue	Red	Blue	Green	Blue	Green	Blue	Red
Blue	Red	Red	Yellow	Green	Red	Green	Red	Red
Red	Blue	Red	Blue	Red	Yellow	Green	Blue	Red
Green	Blue	Green	Blue	Green	Blue	Green	Blue	Red

| = 1 item
 |||| = 5 items

5.

Gives the value 3 in the key and

completes 3 circles for each of the Yes and No rows

i **Circles not shaded, or inaccurate in size**

Accept provided the pupil's intention is clear

2

or Shows or implies the value 9

eg

• Completes 9 circles for one or both rows

or

Draws the same number of circles for each of the Yes and No rows, provided this number is not 4, even if the value in the key is incorrect or omitted

1

(U1)

[2]

ANSWERS—WEEK 7

Q	Question	Answer
1	$6 \times 2 = \square$	12
2	$36 \div 6 = \square$	6
3	$5 \times \square = 15$	3
4	$56 \div \square = 7$	8
5	$3 \times 9 = \square$	27
6	$5 + 5 = \square$	1
7	$\square \times 9 = 9$	1
8	$\square \div 6 = 3$	18
9	$8 \times 3 = \square$	24
10	$18 \div 3 = \square$	6

Q	Question	Answer
1	$\square + 7 = 10$	3
2	What is double 9?	18
3	Half 40	20
4	$111 + 30$	141
5	$66 + 63$	129
6	$17 + 9 = 17 + 3 + \square$	6
7	$3 + 468$	471
8	$33 + 70 = 30 + 70 + \square$	3
9	Double 58	116
10	What is half of 7?	3.5

A1	4	B1	2967
A2	2	B2	1124
A3	3	B3	17
A4	6	B4	41280
A5	30	B5	10010
A6	12	B6	87
A7	1	B7	11725
A8	9	B8	3885
A9	11	B9	64
A10	18	B10	38
	*		**

£ 120.07

£ 102.70

i

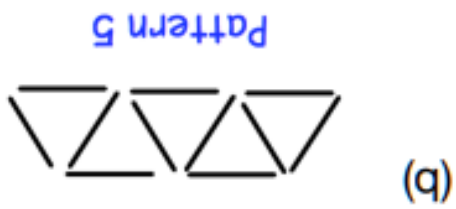
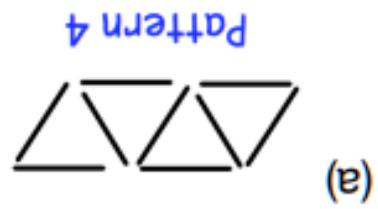
Non-standard notation

Condone any unambiguous notation
eg, for the first mark accept
• £ 102 = 70

ANSWERS—WEEK 8

(d) 21 sticks

(c) 13 sticks



Q1) 28, 36, 44 Rule: Add 8	Q2) 22, 28, 34 Rule: Add 6	Q3) 17, 21, 25 Rule: Add 4	Q4) 14, 18, 22 Rule: Add 4	Q5) 16, 19, 22 Rule: Add 3	Q6) 37, 34, 31 Rule: Subtract 3
-------------------------------	-------------------------------	-------------------------------	-------------------------------	-------------------------------	------------------------------------

88

101

114

127

140

153

Write in the two missing numbers

The numbers in this sequence increase by 13 each time

70

63

56

49

42

35

Write the next two numbers

The numbers in this sequence decrease by the same amount each time

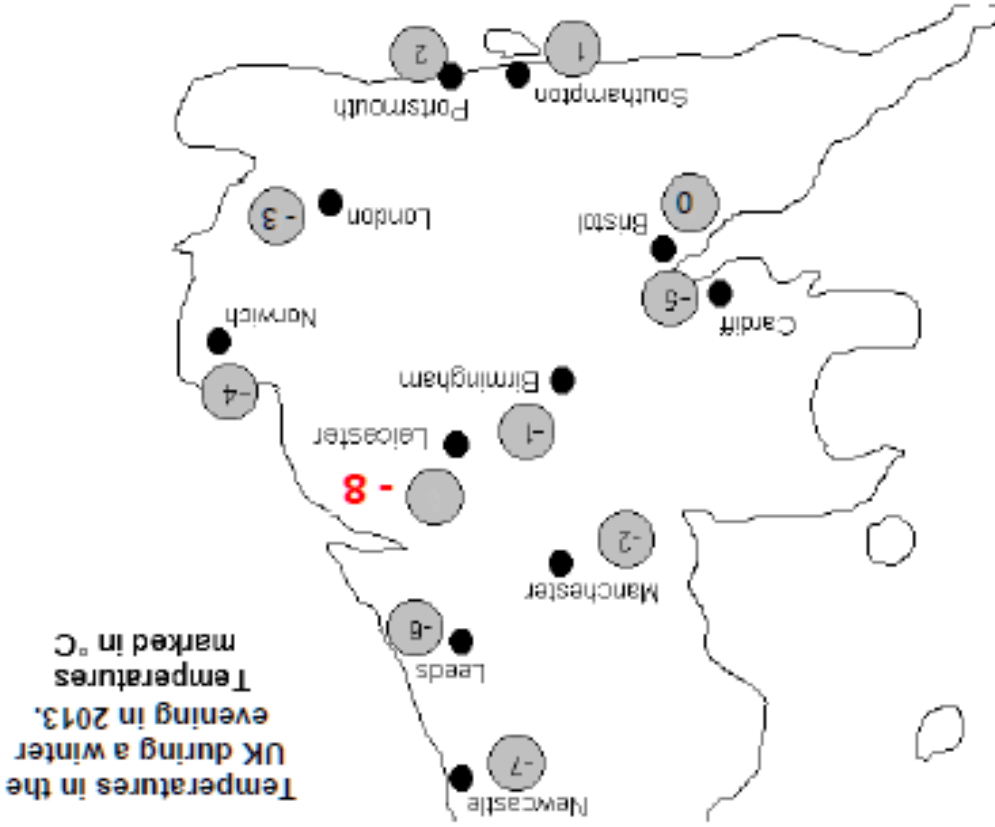
ANSWERS—WEEK 9

- Section B:** Use the temperatures above to answer the following questions.
- 1) Which city was the coldest that evening? **Newcastle**
 - 2) Work out the difference between the highest and lowest temperature. **9°C**
 - 3) The temperature in Leicester was 10°C lower than the temperature in Portsmouth. Include the temperature of Leicester on the map. **-8°C**
 - 4) The following evening the temperature in Manchester fell by 6°C. What was the temperature in Manchester the following evening? **-8°C**

Newcastle or Leeds	Leeds
Birmingham or Cardiff	Birmingham
Manchester or Bristol	Bristol
Portsmouth or London	Portsmouth
Cardiff or Southampton	Southampton
Which city is warmer?	

Birmingham or Bristol	Birmingham
Manchester or London	London
Cardiff or Leeds	Leeds
Bristol or Portsmouth	Bristol
Southampton or Leeds	Leeds
Which city is colder?	

Section A: Decide which city is warmer or colder.



The table shows the minimum and maximum daily temperatures in six cities in the USA in January.

City	Minimum °C	Maximum °C
New York	0°C	10°C
Los Angeles	8°C	18°C
Chicago	-4°C	8°C
Houston	11°C	20°C
Boston	-2°C	13°C
Anchorage	-12°C	-5°C

(a) Which city recorded the lowest **minimum** temperature?

Anchorage

(b) What is the difference in °C between Boston's minimum and maximum temperature?

(1) *15*

(c) What is the difference in °C between Anchorage's minimum and maximum temperature?

(1) *7*

ANSWERS—WEEK 10

Q	Question	Answer
1	$6 \times 6 = \square$	36
2	$2 \div 2 = \square$	1
3	$6 \times \square = 12$	2
4	$40 \div \square = 5$	8
5	$1 \times 9 = \square$	9
6	$40 \div 8 = \square$	5
7	$\square \times 7 = 49$	7
8	$\square \div 3 = 1$	3
9	$2 \times 2 = \square$	4
10	$48 \div 6 = \square$	8

Q	Question	Answer
1	$1 + \square = 20$	19
2	Double 54	108
3	$22 + 10$	32
4	$44 - 40$	4
5	$7 = 2 + \square$	5
6	$75 - 11 = 75 - 5 - \square$	6
7	$6 + 6 + 6 + 6 + 6 = 6 \times \square$	5
8	What is the time on the clock?	4:50 pm
9	Double 7	14
10	What is half of 44?	22

A1	5	B1	62900
A2	3	B2	2880
A3	11	B3	153
A4	4	B4	6769
A5	16	B5	21643
A6	8	B6	15530
A7	2	B7	12479
A8	24	B8	6264
A9	0	B9	13428
A10	7	B10	1327
	*		**

1. Write in digits:

a) Three hundred and fifty two

352

b) Five thousand and eight

5,008

c) Twenty six thousand and fourteen

26,014

2. Which of these is 8 tenths?

a) 0.08

b) 0.8

c) 8.0

d) 80

3. Round 483 to the nearest hundred

500

4. Work out half of each of these numbers:

a) 9

4.5

b) 42

21

c) 90

45

d) 81

40.5

5. Round each of these numbers to the nearest whole number:

a) 4.8

5

b) 2.67

3

c) 3.5

4

d) 27.405

27

ANSWERS—WEEK 11

(a) 12 (b) 6 (c) 11 (d) 7
(e) 14 (f) 40 (g) 45 (h) 15

a) $10a$ 30
b) a^2 9
c) $\frac{3}{a}$ 1
d) $5a - 1$ 14
e) $4a + 2$ 14
f) $7 + a$ 10
g) $7a$ 21
h) $2a + 5$ 11
i) $5 - a$ 2
j) a^3 27
k) $4 + 2a$ 10
l) $3a - 2$ 7

Given that $a = 3$, evaluate:

23

$$18 + 5 = 23$$

$$2 \times 9 + 5$$

What is $2c + 5$?

3. $c = 9$

10

$$12 - 2 = 10$$

$$3 \times 4 - 2$$

What is $3w - 2$?

2. $w = 4$

11

$$7 + 4$$

What is $n + 4$?

1. $n = 7$

EXTRA SUPPORT

If you need help with completing your homework, please use the Mathswatch clips in the LOOK boxes first. If you are still stuck, speak to your class teacher.

If you need to contact the Head of Maths regarding any worries or concerns, you can contact Miss Pankhurst at:

j.pankhurst@benjaminbritten.school

RESOURCES PROVIDED BY:

Numeracy Ninjas
Mr Carter Maths
Miss B's Resources
NRich
Worksheet Works
10Ticks

