ST JOHN'S

SUMMER MATHS

CHALLENGES

YEAR 5
X AND ÷

Week 1: Arithmetic

Use long multiplication

$$3 \ 2 \ \times \ 4 \ 5$$

1) Multiply the top ones digit by the bottom ones.

```
x   3 2
    4 5
_____
      0
    1
```

2 x 5 = 10
Carry the one.

2) Multiply the top tens digit by the bottom ones.

```
x   3 2
    4 5
_____
  1   6 0
      1
```

3) Add a zero below the ones digits.

```
x   3 2
    4 5
_____
1   6 0
    1
      0
```

This shows that you are multiplying by 40 rather than 4

4) Multiply the top ones digit by the bottom tens.

```
x   3 2
    4 5
_____
1   6 0
    1
    8 0
```

4 x 2 = 8

5) Multiply the top tens digit by the bottom tens.

```
x   3 2
    4 5
_____
  1   6 0
      1
1 2   8 0
```

4 x 3 = 12

6) Add the two answers together.

```
x     3 2
      4 5
_____
  1   6 0
      1
1 2   8 0
_____
1 4   4 0
```

1) 1821 x 39

2) 1652 x 28

3) 2342 x 89

4) 1102 x 50

5) 1828 x 30

6) 1882 x 96

7) 2279 x 68

8) 1829 x 88

@SarahFa

Week 1: Arithmetic
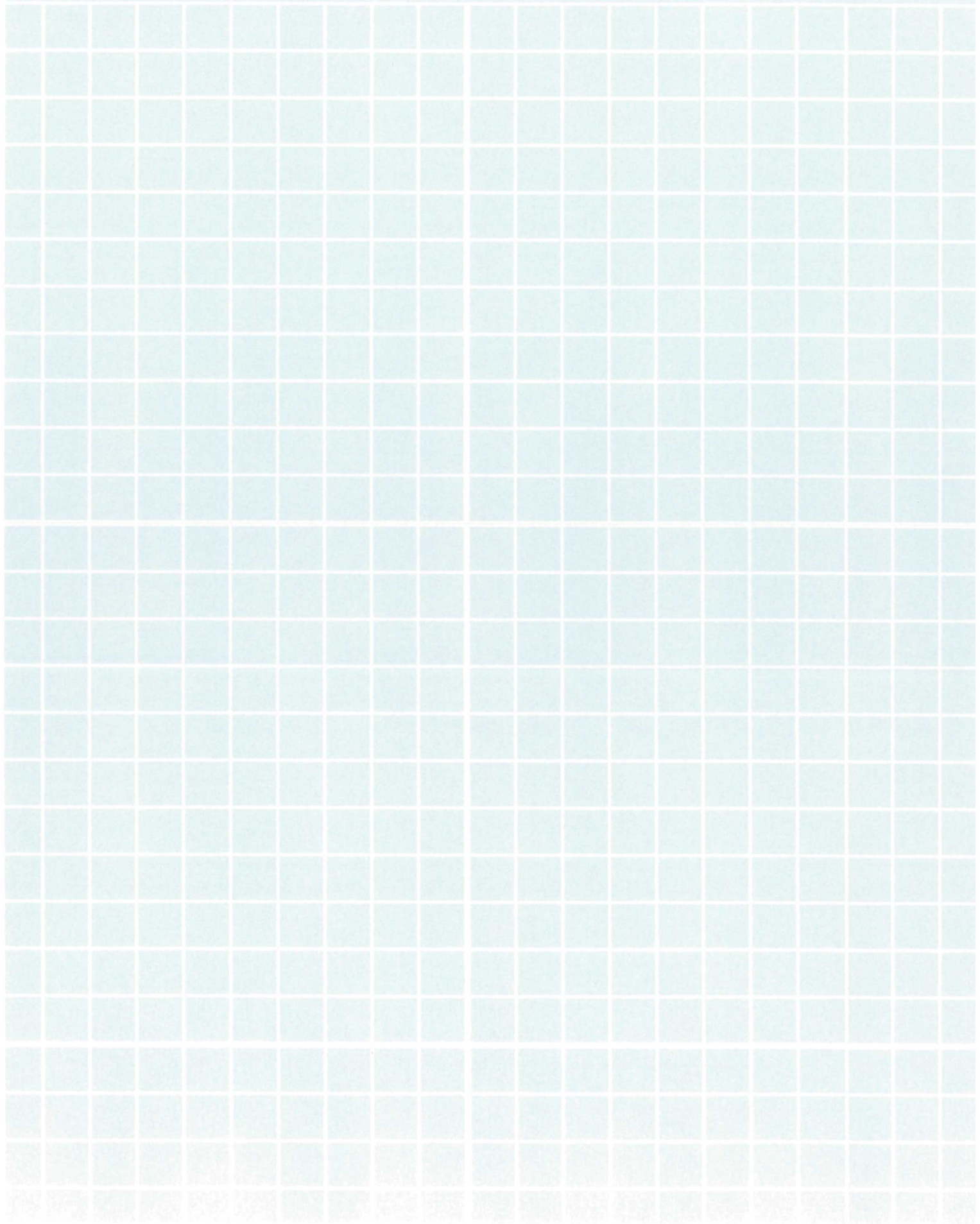
Week 2: Reasoning

Section 1

Order these numbers from smallest to largest:

5768, 5668, 5786, 5686, 5666

Section 2

Round these numbers to the nearest 1000:
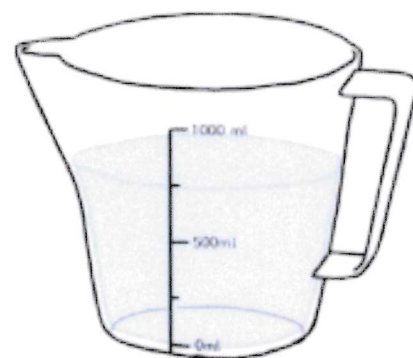
2846 ⟶

1538 ⟶

Section 3

Use these signs < or > to show which number is greater than or less than.

4289　　　　4298

2008　　　　2080

Section 4

Convert litres to millilitres:

5.5l =

2.1l =

Week 2: Reasoning

Section 5

Simplify the fractions:

$\frac{5}{25}$ = ☐

$\frac{3}{21}$ = ☐

$\frac{6}{14}$ = ☐

Section 6

Complete these calculations:

$639 \div 3 =$ ☐

$133 \times 2 =$ ☐

Section 7

There is a 20% off everything in a shop. How much money would you get off from a dress costing £65?

☐

Section 8

Write these Roman numerals as digits:

LXII	
XVII	

Week 3: Arithmetic

Use short division

$$24 \div 4 = 6$$

divisor → quotient → dividend

$$4\overline{)2\ 4}\ ^6$$

$$6\ 2\ 5 \div 4 =$$

$$4\overline{)6\ _2 2\ _2 5}\ ^{1\ 5\ 6}$$

1) Starting from the left, see how many times the divisor will go into each digit of the dividend

$$4\overline{)6\ _2 2\ _2 5}\ ^{1\ 5\ 6\ r\ 1}$$

2) When you reach the last digit, if there is a remainder, add a 'r' and the number that is left over.

1) $1256 \div 8$

2) $7263 \div 9$
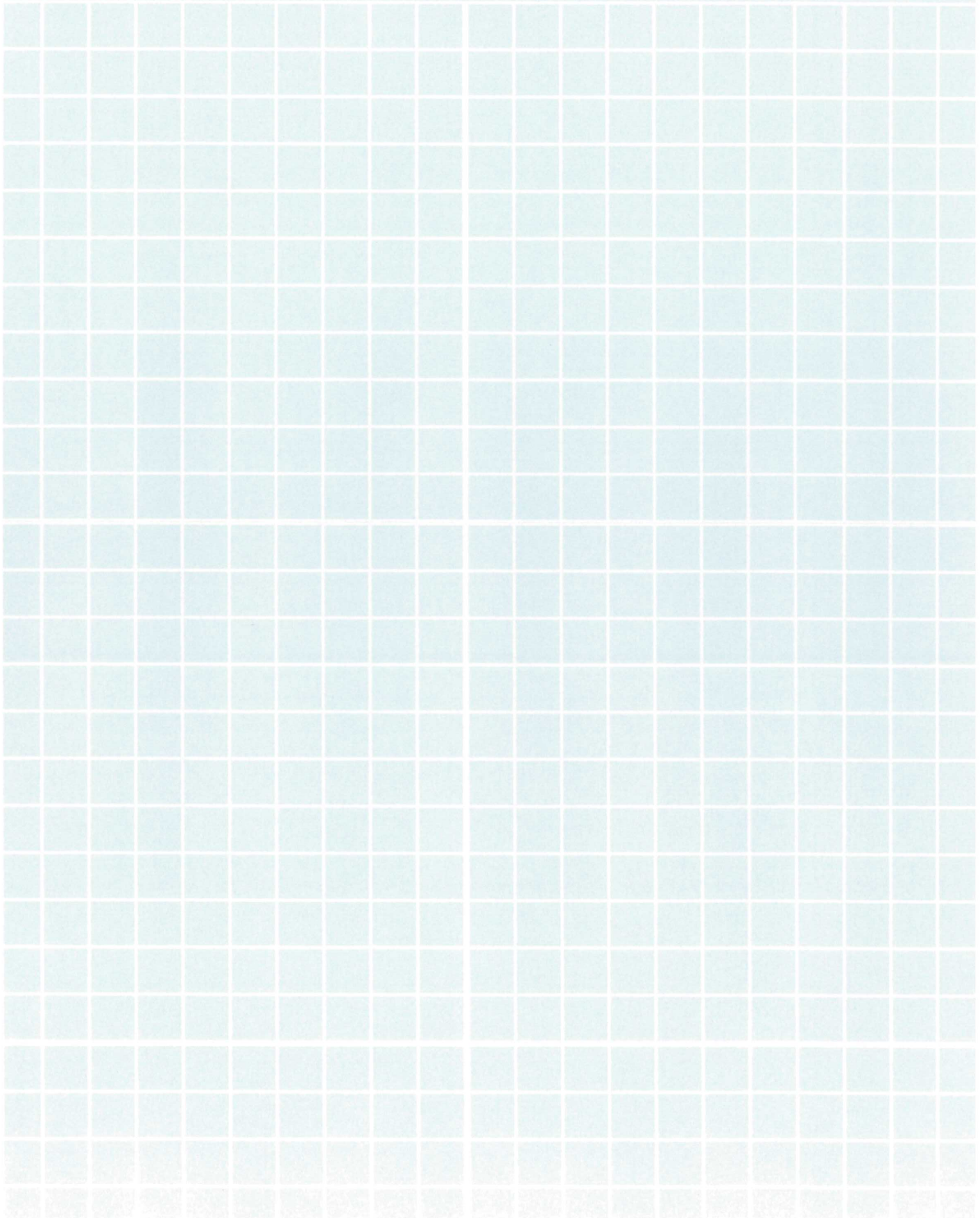
3) $1520 \div 4$

4) $2090 \div 5$

5) $3654 \div 6$

6) $1040 \div 8$

7) $4620 \div 7$

8) $1590 \div 3$

Week 3: Arithmetic

Week 4: Reasoning

Section 1

Count forwards in steps of 10 from:

23			

178			

Count forwards in steps of 100 from:

301			

812			

Section 2

Circle the prime numbers:

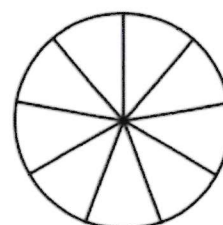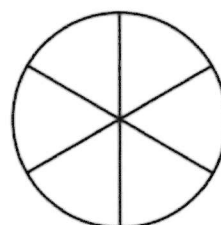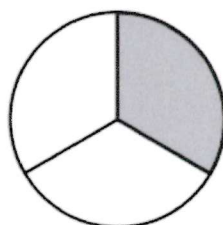| 1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

Section 3

Calculate:

3 x 6 =

4 x 7 =

5 x 9 =

10 x 8 =

Section 4

Shade the following circles so the same fraction is shaded in all.

Week 4: Reasoning

Section 5

Round the following numbers to the nearest whole number:

3.4 ⟶ [   ]

12.5 ⟶ [   ]

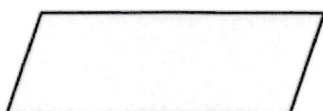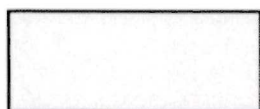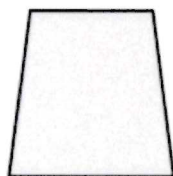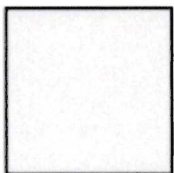9.1 ⟶ [   ]

99.7 ⟶ [   ]

Section 6

A television programme starts at 3.35pm and ends at 4.15pm.

For how long does the program last?
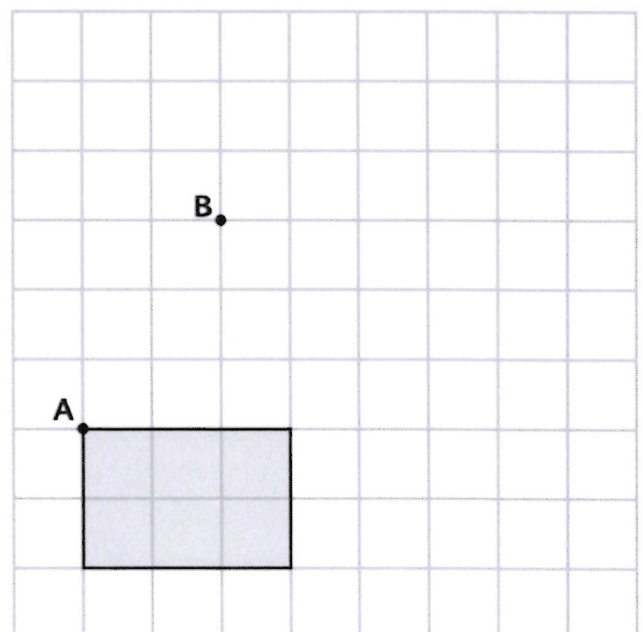
[   ]

Section 7

Tick the rectangles.

Section 8

Translate this shape from point A to point B:

Week 5: Arithmetic

1) 1685 x 4

2) 3152 x 2

3) 1391 x 2

4) 3171 x 3

Week 5: Arithmetic

5) 4905 ÷ 5

6) 2961 ÷ 9

7) 7830 ÷ 9

8) 3148 ÷ 4

Week 6: Reasoning

Section 1

In the number 2307, which digit represents the hundreds?

In the number 4982, what place value does the digit '8' represent?

Section 2

Calculate the following in your head:

23 + 61 =

45 + 33 =

78 − 24 =

91 − 51 =

Section 3

Calculate:

34 x 10 =

561 x 10 =

780 ÷ 10 =

3090 ÷ 10 =

Section 4

Use the < or > signs to compare these fractions:

$\frac{2}{3}$		$\frac{1}{3}$
$\frac{1}{4}$		$\frac{3}{4}$
$\frac{7}{8}$		$\frac{5}{8}$

Week 6: Reasoning

Section 5

Write the following numbers in digits:

two point six = [ ]

eight point three = [ ]

Write the following numbers in words:

0.4 = [ ]

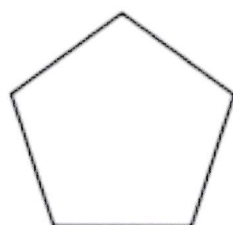7.1 = [ ]

Section 6

Calculate the perimeter of these rectangles.
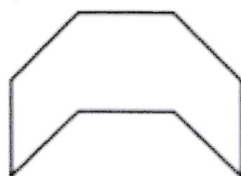
2cm

10cm | not to scale | = [ ]

4cm

7cm | not to scale | = [ ]

6cm

6cm | not to scale | = [ ]

Section 7

Write **regular** or **irregular** below each shape.

....

....

Section 8

Here is a table showing the number of boys and girls in each Year 5 class.

	5a	5b	5c	Total
Boys	15	18	13	
Girls		12	15	
Total	30			

Complete the table.