

KS2 Study Club

Maths Week 10 Workbook

Questions



GCSE Boot Camp

Topics

Congratulations, you've made it to the final week of your 10 Week Study Club!

You've worked hard over 9 weeks on a range of different topics in your weekly Maths workbooks. Is there a topic you now feel more confident about that you were unsure of before? Write it down here to remind yourself of how far you've come!

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This week you have questions in your workbook on a range of topics that we've covered together throughout your boot camp. Plus this workbook also features some extra topics to challenge your knowledge.

Why not try sitting this workbook like a mini exam paper and track your progress. Set a timer, sit in a quiet room with no distractions or answers close by and make sure you only use a calculator on questions that are on the calculator paper.

Next week we'll send you the answers to this week's workbook and 2 expert video tutorials so you can mark your mini exam paper. Don't forget that for full access to all of the corresponding videos in this workbook [sign up for a SchoolOnline subscription from £8.99 a month.](#)

This week's workbook includes questions on:

- Word problems
- Coordinates
- Fractions
- Algebra
- Estimation



Unit 10 KS2 Study Club

Word Problem

2019 Paper 2 Reasoning

19

A machine pours 250 millilitres of juice every 4 seconds.

How many **litres** of juice does the machine pour every **minute**?

Show your method

litres

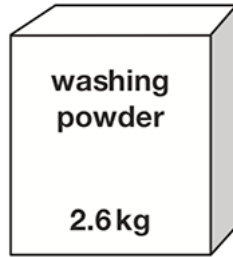
2 marks

Gram & Kilogram - Problem

2018 Paper 3 Reasoning

13

A box contains 2.6 kg of washing powder.

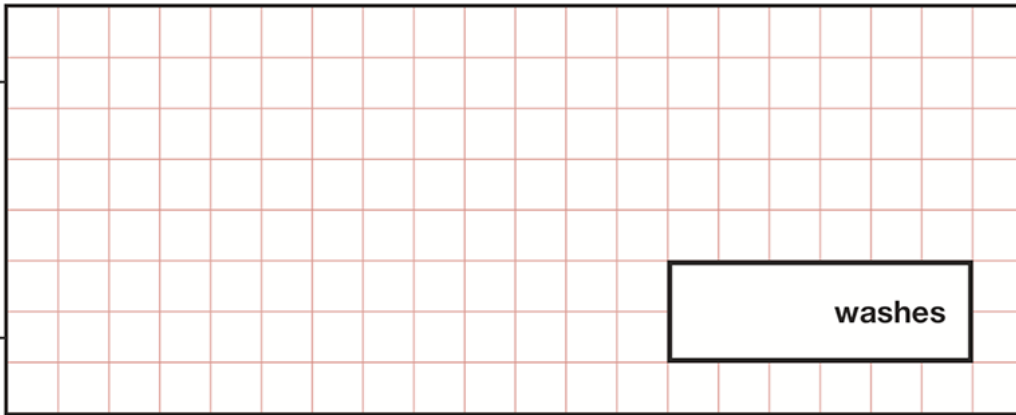


Jack uses 65 grams of powder for each wash.

He uses all the powder.

How many washes did Jack do?

Show
your
method

A large rectangular grid for showing the method. The grid is 20 units wide and 10 units high. A small rectangular box is drawn on the grid, containing the word "washes". The box is 4 units wide and 2 units high, starting from the 14th vertical line and the 7th horizontal line from the top-left corner.

2 marks

School Timetable

2017 Paper 3 Reasoning

9

Here is the morning timetable for Chen's class this week.

Time	Mon	Tue	Wed	Thu	Fri
9:00 am–10:30 am	Maths	English	Maths	English	Maths
10:30 am–11:00 am	Break	Break	Break	Break	Break
11:00 am–12:00 pm	English	Maths	Science	Maths	English

What is the **total** number of hours for **English** on this timetable?

hours

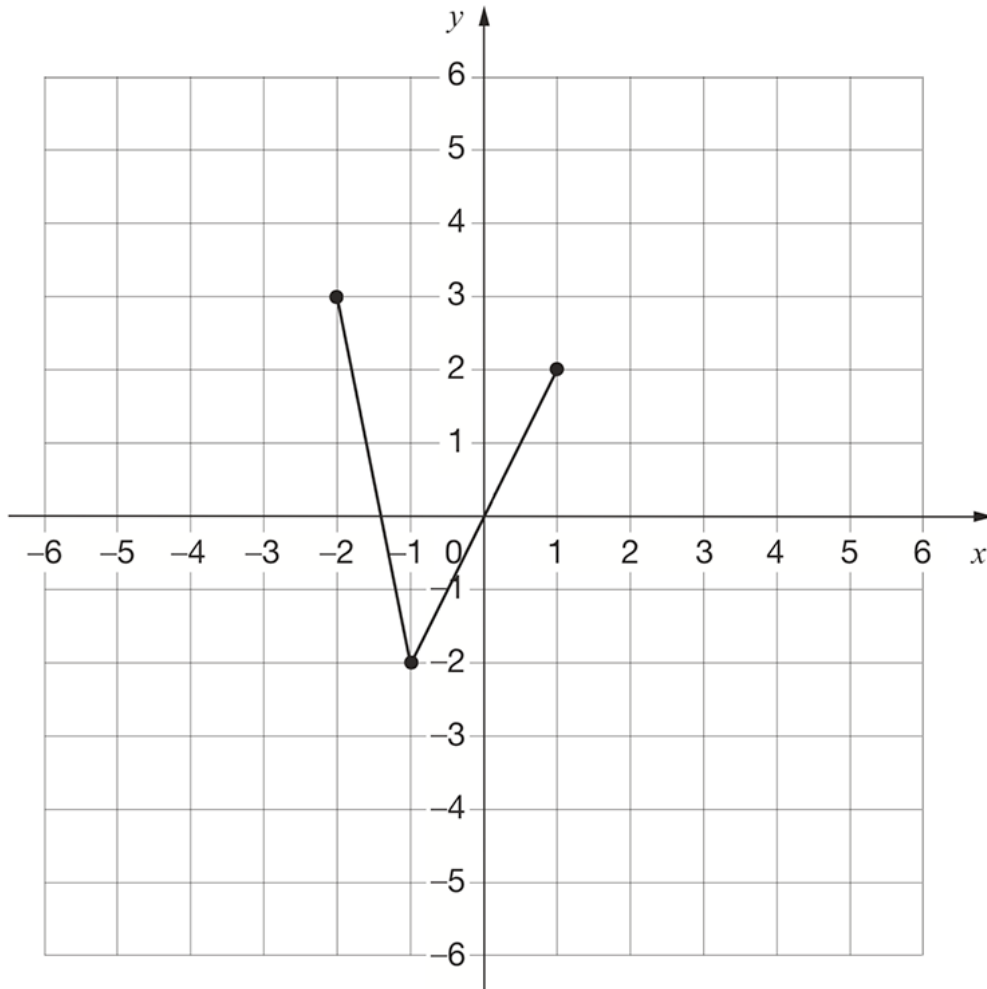
1 mark

Coordinates

2019 Paper 3 Reasoning

10

On the grid there are three points joined by two lines.



Lara plots **another point** on the grid at **(-1, 2)**.

She joins the points to make a quadrilateral.

Complete Lara's quadrilateral on the grid.
Use a ruler.

1 mark

Then Lara translates the quadrilateral **4 squares to the right**.

Draw the quadrilateral in its new position on the grid.

1 mark

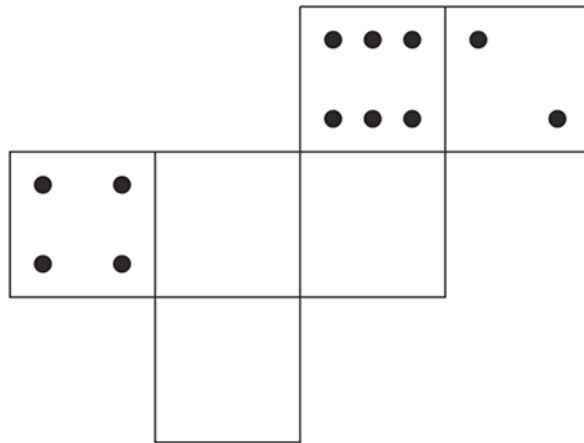
2018 Paper 3 Reasoning

17

On a dice, the sum of the dots on opposite faces is always 7



Draw dots on the three empty faces of the net so that it could fold up to make a dice.



1 mark

Sequence

2018 Paper 2 Reasoning

6

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

303,604 302,604 301,604 300,604 ...

What is the next number in the sequence?

1 mark

Missing Digits

2018 Paper 3 Reasoning

4

Write the three missing digits to make this **addition** correct.

$$\begin{array}{r} \begin{array}{|c|c|c|c|c|} \hline 5 & 3 & 2 & \square & 9 \\ \hline \end{array} \\ + \begin{array}{|c|c|c|c|} \hline 7 & 4 & 2 & \square \\ \hline \end{array} \\ \hline \begin{array}{|c|c|c|c|c|} \hline \square & 0 & 6 & 7 & 6 \\ \hline \end{array} \end{array}$$

2 marks

Fractions, Decimals and Percentages

2019 Paper 1 Arithmetic

19	$7 - 2.25 =$	

1 mark

Finding Missing Numbers

2019 Paper 2 Reasoning

6

Write the missing number to make this **division** correct.

$$0.3 \div \boxed{} = 0.03$$

1 mark

Estimation

2018 Paper 2 Reasoning

19

Layla wants to estimate the answer to this calculation.

$$3\frac{9}{10} - 2\frac{1}{8} + 1\frac{4}{5}$$

Tick the calculation below that is the best estimate.

Tick **one**.

$3 - 2 + 2$

$4 - 2 + 1$

$4 - 2 + 2$

$3 - 2 + 1$

1 mark

Ordering Fractions

2018 Paper 2 Reasoning

14

$$\frac{6}{5} \quad \frac{3}{5} \quad \frac{3}{4}$$

Write these fractions in order, starting with the **smallest**.

smallest

1 mark

Inequality

2019 Paper 2 Reasoning

12

Here are three symbols.

< > =

Write one symbol in each box to make the statements correct.

$$\frac{7}{10} \quad \square \quad 0.07$$

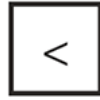
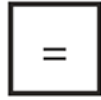
$$\frac{23}{1000} \quad \square \quad 0.23$$

1 mark

> = < symbols

2018 Paper 2 Reasoning

10



Write the correct symbol in each box to make the statements correct.

11×12 15×10

$90 \div 30$ $60 \div 20$

$120 \div 4$ $160 \div 8$

30×8 100×10

2 marks

Number Sequences

2019 Paper 2 Reasoning

8

In this sequence, the rule to get the next number is

Multiply by 2, and then add 3

Write the missing numbers.

<input type="text"/>	25	53	<input type="text"/>
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1 mark

1 mark

Multiplication - Fractions

2017 Paper 1 Arithmetic

15

$$\frac{4}{6} \times \frac{3}{5} =$$

1 mark

