

**Berwick Middle School**

Preparation for Year 6 SATS  
Maths

# Mathematics

- The mathematics tests have undergone the biggest change in recent years.
- Children will sit three tests: paper 1, paper 2 and paper 3.
- Paper 1 is for arithmetic lasting for 30 minutes, covering calculation methods for all operations, including use of fractions, percentages and decimals.
- Questions gradually increase in difficulty. Not all children will be expected to access some of the more difficult questions later in the paper.
- Papers 2 and 3 cover problem solving and reasoning, each lasting for 40 minutes.
- Pupils will still require calculation skills but will need to answer questions in context and decide what is required to find a solution.

# Mathematics

- Paper 1 is for **arithmetic** lasting for 30 minutes, covering calculation methods for all operations, including use of fractions, percentages and decimals. There are around 35 questions in this test.
- Questions gradually increase in difficulty. Not all children will be expected to access some of the more difficult questions later in the paper.

## Maths Paper 1: Arithmetic

14	$3.005 + 6.12 =$	<input type="text"/>	<input type="checkbox"/>

32	4 3 <input type="text"/> <input type="text"/> <input type="text"/> 8	<input type="text"/>	<input type="checkbox"/>
	Show your method		

# Arithmetic Sample Questions

16  $15.98 + 26.314 =$

1 mark

24  $\frac{4}{7} + \frac{5}{7} =$

1 mark

17  $125.48 - 72.3 =$

1 mark

25 20% of 1,800 =

1 mark

18  $122,456 - 11,999 =$

1 mark

26  $15 \times 6.1 =$

1 mark

# Mathematics

- Papers 2 and 3 cover **problem solving and reasoning**, each lasting for 40 minutes.
- Pupils will still require calculation skills but will need to answer questions in context and decide what is required to find a solution.

19

Miss Mills is making jam to sell at the school fair.

Strawberries cost £7.50 per kg.

Sugar costs 79p per kg.

10 glass jars cost £6.90

She uses 12kg of strawberries and 10kg of sugar to make 20 jars full of jam.

Calculate the total cost to make 20 jars full of jam.

# Sample Questions

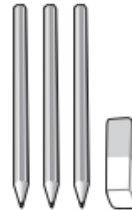
## Maths Paper 2 / Paper 3 : Reasoning

9

6 pencils cost **£1.68**

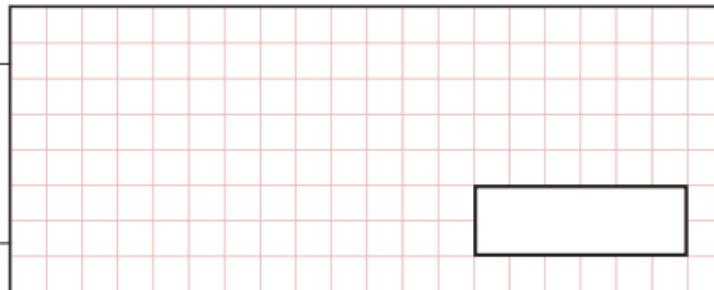


3 pencils and 1 rubber cost **£1.09**



What is the cost of 1 rubber?

Show  
your  
method



2 marks

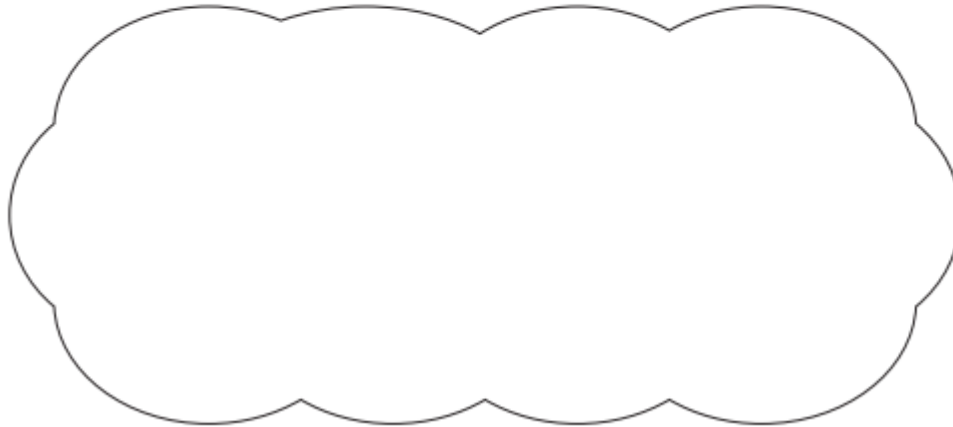
# Sample Questions

## Maths Paper 2 / Paper 3 : Reasoning

21

$$5,542 \div 17 = 326$$

Explain how you can use this fact to find the answer to  $18 \times 326$

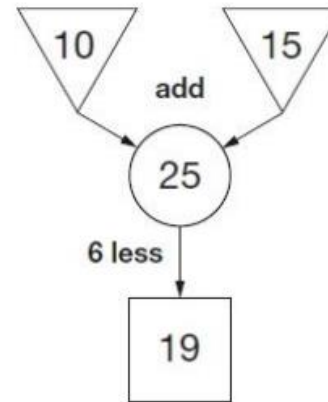


1 mark

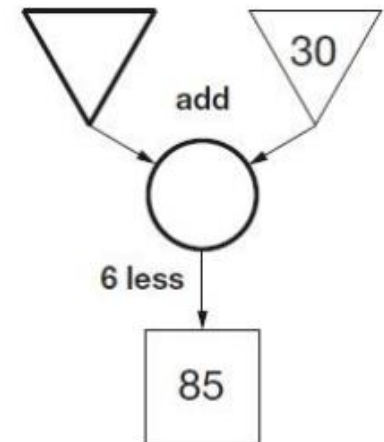
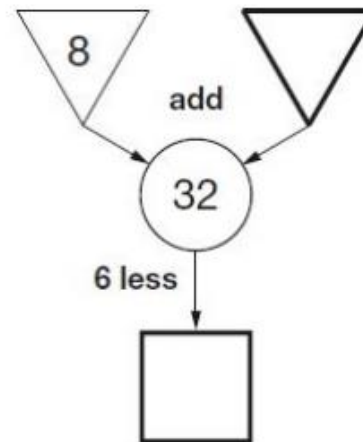
# Maths Homework at BMS

- Every night your child will be given 6 arithmetic questions to complete and approx. 3 reasoning/problem solving questions.
- Their homework should take approx. 10 minutes, however they may be a little slower to start with.

In this diagram, the numbers in the triangles add together to make the number in the circle.  
The number in the square is 6 less than the number in the circle.



Write the four missing numbers in these diagrams.



<b>32</b>	4 3   1 1 1 8		
Show your method			2 marks



# What will happen between now and SATS?

- Lessons will include numerous arithmetic and reasoning style questions to fully prepare your child.
- We do practice SATS week which will inform us which interventions need to take place. Please do not be alarmed if your child is asked to attend a /several intervention(s).
- Maths interventions at BMS may include:
  - Small maths revision groups which take place during non-core subjects (RE /PSHE etc)
  - Morning registrations for 10-15 minutes
  - Lunchtime /Before school Greater depth groups (Parents will be informed)
- Extra support
  - Drop-in support sessions at lunchtimes run by Maths Teachers closer to SATS week. (Access to more reasoning papers / homework help /support with any misconceptions)

# How to Help Your Child with Maths

- Ensure your child's homework is done every night. Talk them through how to tackle the tricky reasoning questions.
- Work through the Twinkl Parent's Practice and Revision Toolkit! (This will be emailed to you!)
- Encourage your child to play times tables games! Compete against them and get involved!
- Practice standard methods of addition, subtraction, multiplication and division
- Have a look at the CGP Revision books (contact the office for a discounted price)
- Play mental maths games including counting in different amounts, forwards and backwards.
- Encourage opportunities for telling the time.
- Encourage opportunities for counting coins and money; finding amounts or calculating change when shopping.
- Look for examples of 2D and 3D shapes around the home.
- Identify, weigh or measure quantities and amounts in the kitchen or in recipes.

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- What do you need to find out?
- What do you already know?
- Is there any information missing / you need to find out?
- What operation do you need to use?
- Is there another way to solve this question?
- Is there a more effective method to solving this problem?
- Is my answer given in the correct units?
- Have you fully answered the question?

# Good Revision Websites

<http://www.bbc.co.uk/bitesize/ks2/> - fun games and activities for both Maths and Literacy

<http://resources.woodlands-junior.kent.sch.uk/revision/> - a great site for all-round revision

[https://www.cgpbooks.co.uk/interactive\\_ks2](https://www.cgpbooks.co.uk/interactive_ks2) - tests and games for all subjects

[http://www.offbyheart.co.uk/english/yr6\\_e\\_g.php](http://www.offbyheart.co.uk/english/yr6_e_g.php) – Games to practice SPAG and Maths skills

<http://www.spellingcity.com/churchlane/> - a fantastic spelling website set-up by another Year 6 teacher – lots of previous spelling tests which are great for practice

<http://www.compare4kids.co.uk/literacy.php> - English boot camp!

<http://www.compare4kids.co.uk/spag.php> - SPAG Test