



## ALL IN ONE PLACE BASE CAMP MATHS BASICS TEST 1 Maximum score 100

### INSTRUCTIONS

- There is no time limit for the test
- Work quickly but accurately
- Only ask for help once you have completed the test
- Only use a calculator if the question states you can
- Write your working and answers on this test
- Use the solution sheet to check your work

## ABOUT MATHS TESTS

Yes! A test... Some students hate the word and the idea of doing a test. They think they won't be able to answer the questions or complete the test on time.

Tests aren't meant to frighten anybody. They're there so you, your teacher and your parents can see how you're doing.



You can use your tests and scores to

- see what you're good at
- see which concepts you still need to work on
- improve time management
- build confidence and independent working
- apply what you've learnt at school and at home
- prepare for school and 11+ exams

## BASICS TESTS

Maths Basics test ... That doesn't mean it's all easy. The test covers the important ideas and concepts you have learnt in Maths up to Year 5. A score of 80% plus means that you have a great Maths foundation and ready to move on to the Intermediate and then the Advanced tests. Basic doesn't mean simple. Basic is everything you need to move forward and do even better in Maths.



## DOING THE TEST

Imagine you are doing a class test – do this test in the same way.

**TIME** There is no time limit for this test so you don't get anxious or stressed – you still need to work accurately and manage your time well.

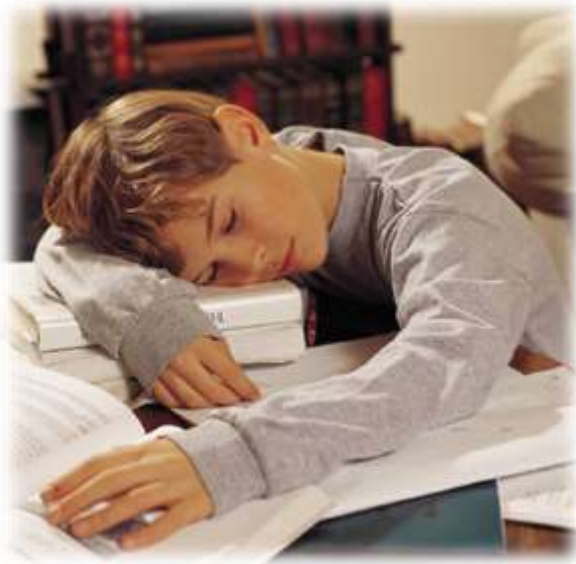
**BANK MARKS** If you can do a question, leave it and return to it later; it's good to build a bank of marks – you know that you are achieving and build your confidence.

**SHOW AND TELL** Show all working – teachers like to see how you got an answer; plus, you'll get some marks even if the answer is incorrect. Showing your working means showing you care.

**NEATLY NOW** Write neatly and make sure your answers are clear to that anybody can read them. The same goes for drawing – label and use a ruler. Neat works makes a good impression, shoddy stuff, no matter how good, will get you on the wrong side of your teacher or examiner.

**CHECK NOT CHOKER** Check your work, but don't over check – sometimes people check too many times and change right answers into wrong ones.

**SHOW THEM HOW TO DO IT** Work independently without help from computers, books, or anybody. Don't daydream or waste time – this is your time to show everybody how to do it!





## ARE YOU READY FOR THE REAL THING?

Time to get going. There are 100 marks for you to get, so good luck. The questions are not arranged from easy to the most difficult, but have a random order. This structure will help you prepare for school tests or 11+ examinations.



### Remember

**TIME BANK NEATLY SHOW CHECK**



#### JUMP 1

- a. Write the number **1 203** in words.  
**[1 mark]**

**ANSWER**

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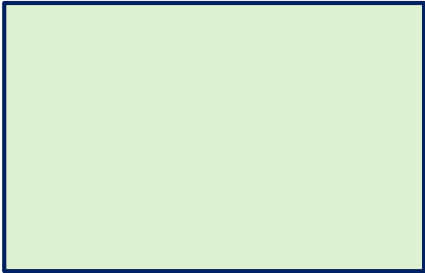
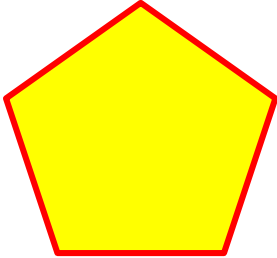
- b. Write **twenty thousand two hundred and two** in digits.  
**[1 mark]**

**ANSWER** \_\_\_\_\_



**JUMP 3**

a. Write the names of **SHAPE A** and **SHAPE B** in the spaces.  
[2 marks]

	
<p><b>SHAPE A is a</b></p> <p>_____</p>	<p><b>SHAPE B is a</b></p> <p>_____</p>

b. Which shape has a larger order of rotational symmetry - **SHAPE A** or **SHAPE B**?  
[1 mark]

**ANSWER** \_\_\_\_\_

c. Draw a diagonal on **SHAPE A**.  
[1 mark]

d. What is the name of the two triangles that make up **SHAPE A**?  
[1 mark]

**ANSWER** \_\_\_\_\_





**JUMP 4**

Tracey and Garrett order a pizza.

a. What fraction of the pizza does each slice represent?

**[1 mark]**

**ANSWER** \_\_\_\_\_

b. Shade, or clearly mark, three eighths of the pizza.

**[1 mark]**

c. Tracey gets two slices and greedy Garrett takes four. What is the ratio of Tracey's slices to Garrett's? Write the ratio in the simplest form.

**[2 marks]**

**ANSWER** \_\_\_\_\_

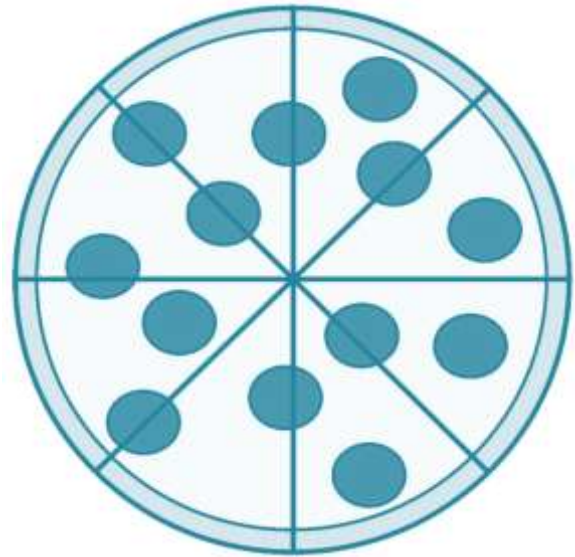
d. What proportion of the pizza does Garrett get? Write your answer as a decimal.

**[1 mark]**

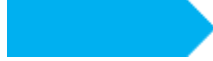
**ANSWER** \_\_\_\_\_

e. Accurately measure the diameter of the pizza with a ruler. Then add information to the table.

**[4 marks]**



Pizza diameter in millimetres	_____ mm
Pizza diameter in centimetres as a decimal to one place	_____ cm
Pizza diameter in centimetres to the nearest whole number	_____ cm
Pizza radius in centimetres to the nearest whole number	_____ cm



**JUMP 5**

a. Label the vertex, edge and face of the cube. Use **V** for vertex, **E** for edge and **F** for face.

**[3 marks]**

b. The length of an edge of the cube is 2 cm. Calculate the perimeter of a face.

**[1 mark]**

**ANSWER** \_\_\_\_\_ **cm**

c. What is the surface area of the whole cube?

**[2 marks]**

**ANSWER** \_\_\_\_\_ **cm<sup>2</sup>**

d. What is the volume of the cube?

**[2 marks]**

**ANSWER** \_\_\_\_\_ **cm<sup>3</sup>**

e. How many cubes will fit into a cuboid with a volume of 800 cm<sup>3</sup>?

**[2 marks]**

**ANSWER** \_\_\_\_\_

f. Each cube has a mass of 35 grams. What is the mass of 56 cubes?

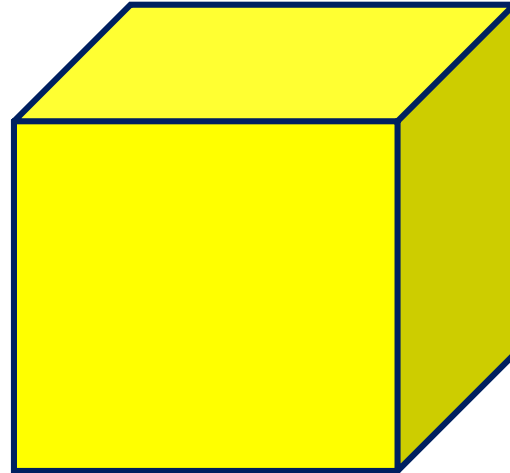
**[2 marks]**

**ANSWER** \_\_\_\_\_ **g**

g. Express the mass in kilograms to 2 decimal places.

**[1 mark]**

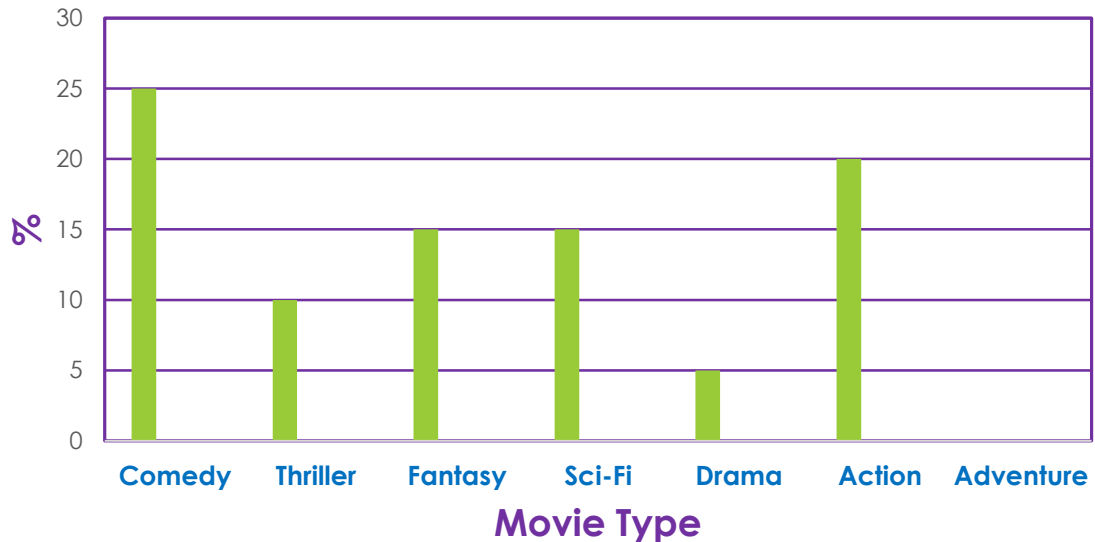
**ANSWER** \_\_\_\_\_ **kg**





A group of 200 students were asked to name their favourite type of movie. The bar chart shows the results of the survey.

**Favourite Movie Type (%)**



a. How many students represent 100%?

**[1 mark]**

**ANSWER** \_\_\_\_\_

b. Work out the percentage of students whose favourite movie type is adventure. Draw this information on the bar chart.

**[2 marks]**

c. What movie type was the second most favourite?

**[1 mark]**

**ANSWER** \_\_\_\_\_

d. What movie types were more popular than drama, but less popular than fantasy?

**[2 marks]**

**ANSWER** \_\_\_\_\_ **and** \_\_\_\_\_





e. Add the missing information to the table.

**[3 marks]**

Movie Type	Percentage of Students	Number of Students
Comedy	25	50
Thriller		20
Fantasy	15	30
Sci-Fi	15	
Drama		
Action	20	
Adventure	10	

f. Which type of graph could also be used to represent this data? Circle one option.

**[1 mark]**





histogram	line graph	pie chart	scatter graph
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**JUMP 10**

	
<p><b>CLOCK 1</b></p>	<p><b>CLOCK 2</b></p>
	
<p><b>CLOCK 3</b></p>	<p><b>CLOCK 4</b></p>

a. On **CLOCK 1**, accurately draw the hour and minute hands to show the time quarter to eleven.

**[1 mark]**

b. What time is shown on **CLOCK 2**?

**[1 mark]**

**ANSWER** \_\_\_\_\_

c. What is the difference in time between **CLOCK 2** and **CLOCK 3**?

**[1 mark]**

**ANSWER** \_\_\_\_\_ **minutes**



## JUMP 11

Use your BIDMAS skills to find the answer to these calculations.

a.  $2 \times 3 + 6$

[1 mark]

ANSWER \_\_\_\_\_

b.  $5 + 8 \div 4$

[2 marks]

ANSWER \_\_\_\_\_

c.  $-9 \times -1 + 2^2$

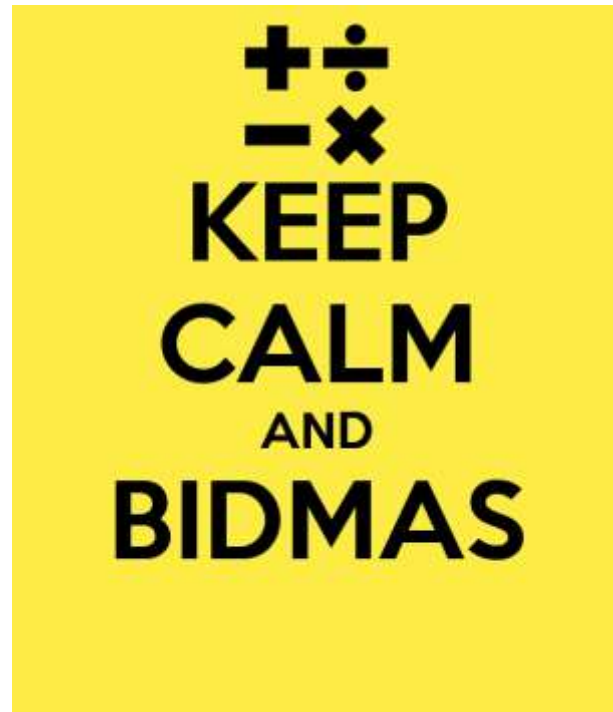
[3 marks]

ANSWER \_\_\_\_\_

d.  $2(3 + 6) - 3(3 - 6)$

[3 marks]

ANSWER \_\_\_\_\_



## JUMP 13

Your town has 20 vampires and 35 werewolves.

a. What is the ratio of werewolves to vampires?

[1 mark]

ANSWER \_\_\_\_\_

b. Write the ratio of vampires to werewolves as a fraction in the simplest form.

[2 marks]

ANSWER \_\_\_\_\_





a. Simplify the algebraic expression  
[1 mark]

$$a + 2b - a + b$$

ANSWER \_\_\_\_\_

b. Find the value of  $x$  in this one-step equation.  
[2 marks]

$$10 - 2x = 2$$

c. Betsey has  $f$  20p coins and Brad has  $f$  50p coins. Write an algebraic expression for the number of coins they both have.

[2 marks]

ANSWER \_\_\_\_\_

d. They have £1.10 altogether. How many coins does each person have?

[2 marks]



ANSWER Betsey has \_\_\_\_\_ 20p coins and Brad has \_\_\_\_\_ 50p coins

## THERE YOU GO

Well done! Your first Maths test done.

Two more things for you to do

- work out your percentage
- decide how good you are at different Maths topics





## YOUR PERCENTAGE

Add up your marks and write your percentage for the test in the table. Also decide what percentage you'd like to score next time.

<b>My score for this test</b>	<b>%</b>	<b>My score in the next test</b>	<b>%</b>
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## MATHS TOPICS

Rate your understanding of each Maths topic. Write an **X** in each row showing your decision.

<b>TOPIC</b>	<b>GOOD</b>	<b>OKAY</b>	<b>PRACTISE</b>
Fractions and Decimals			
Percentage			
Word problems			
Shapes			
Ratio and Proportion			
Units of Measurement			
Area, Volume, Perimeter			
Using graphs			
Multiples, Factors, Primes			
Time			
BIDMAS			
Algebra			