

# IPSWICH HIGH SCHOOL

WOOLVERSTONE HALL  
SUFFOLK, ENGLAND

Year  
7

Maths

45 minutes

- Attempt all questions.
- It is important to show your working as this may be awarded marks, even if your final answer is incorrect. Do not rub your working out.
- If you cannot do a question, do not spend too long on it. Leave it and go on to the next one and if you have time come back to it at the end.
- If you run out of space to answer a question, continue your answer on the blank sheet at the end of the paper.

## SECTION A

1. Work out the answers to the following:

(a)  $476 + 368$  (2)

(b)  $647 - 279$  (2)

(c)  $374 \times 8$  (2)

(d)  $1652 \div 7$  (2)

2. Gas cookers cost £350 each. If a school needs to buy 16 of them, how much will they have to spend?

(3)

3. Write down the number that is a hundred less than five thousand.

(1)

4. Two numbers differ by 5 and their product is 24. What are they?

(2)

5. How many millimetres are there in a metre?

(1)

6. Put the following numbers in order of size, starting with the largest:

93.5

124

96

102

(2)

7. Write down two fractions that are equivalent to one fifth.

(2)

8. Phoebe thought of a number, multiplied it by five and then subtracted four. The answer she got was 41. What was the number?

(2)

9. Use all the following numbers:

9

3

5

7

(a) Rearrange the numbers to make the largest possible number.

(1)

(b) Rearrange the numbers to make the smallest number that is divisible by 5.

(1)

10. A restaurant buys orange juice in 1 litre cartons. They serve the juice either in a wine glass which holds 100ml, or a glass tumbler which holds 200ml. On an average day, they sell 25 wine glasses full of orange and 12 tumblers full of orange. How many cartons of juice are needed on an average day?

(6)

11. Today Fred will be exactly 38 years and 6 months old. In which year was he born?

(2)

12. Jamie leaves his house to walk to his grandma's house at 3.20 p.m. It normally takes him 45 minutes, but on the way he spends 10 minutes in a sweet shop. What time will he arrive at his grandmother's house?

(2)

13. Fatima decides that she is going to get fit. She is going to start on Monday by jogging for half a kilometre every morning and then each day she is going to increase this by 100 metres.

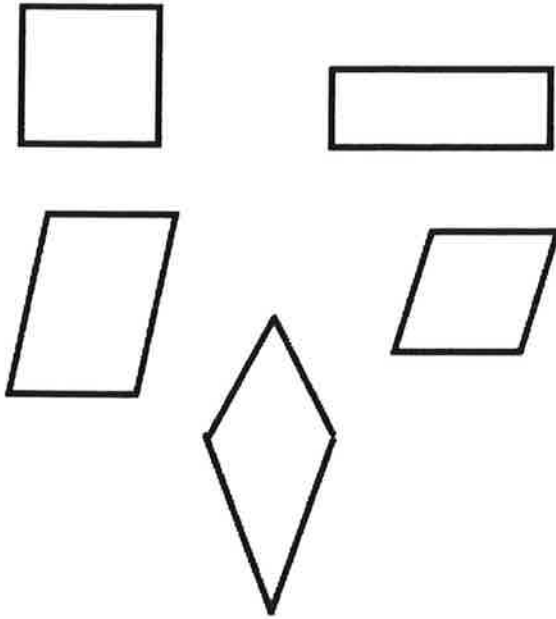
a. How far will she jog on Friday?

(3)

b. How far will she have jogged in total by Sunday evening?

(2)

14.



Use the capital letters to label the shapes above

- A = square
- B = parallelogram
- C = rhombus
- D = rectangle
- E = kite

(3)

Write down the letters of the quadrilaterals that have

all sides equal .....

all angles 90 degrees.....

exactly one line of symmetry.....

No lines of symmetry.....

Four lines of symmetry.....

(7)

15. Write the next two numbers in the sequences:

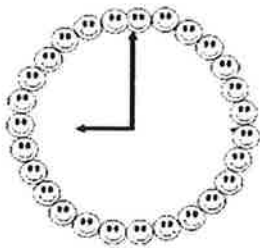
(a) 1, 3, 5, 7, ....., ....., .....

(b) 2, 4, 8, 16, ....., ....., .....

(c) 1500, 1450, 1400, ....., ....., .....

(6)

16. At nine o'clock the hands of a clock make an angle of 90 degrees with each other. Work out the angle made between the hands at



(a) Six o'clock

(1)

(b) Half past ten

(3)



**SECTION B**

**These questions are designed to make you think hard! Do not worry if you cannot finish all of them but try to have a go and show your working clearly.**

17.



The ingredients to make a chocolate birthday cake are as follows:

- 150 grams flour
- 120 grams sugar
- 60 grams butter
- 3 tablespoons cocoa
- 3 eggs
- 90 grams icing sugar

Unfortunately, the person wanting to make the cake finds that she has only two eggs. Work out how much of each ingredient she needs to use with only two eggs.

..... grams flour

..... grams sugar

..... grams butter

..... tablespoons cocoa

2 eggs

.....grams icing sugar

(5)



18.

Bees beat their wings ridiculously fast at a rate of 230 beats per second. They fly at a speed of 7 metres per second. From where you are sitting now in the teaching block to the entrance to the school grounds is about 350 metres.

- a. How long would it take a bee to fly (in a straight line) from the teaching block to the entrance?

(2)

- b. How many times will the bee have beaten their wings in this time?

(3)

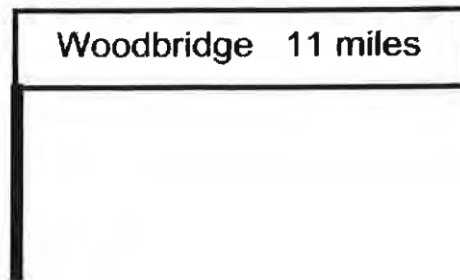


19.

For Christmas, Mike was given an electric toothbrush. He read the instructions carefully. They stated that your mouth should be divided into four areas – right upper, right lower, left upper and left lower. Each area should be brushed for 30 seconds and after every 30 seconds the toothbrush beeps to tell you when to move from one area to another.

If Mike follows these instructions and if he brushes his teeth twice a day, **approximately** how many hours a year will he spend brushing his teeth?

SPECIMEN



Great Britain has not gone completely metric yet as we still have distances on road signs labelled in miles. Miles are what are known as imperial units of length, as are yards and inches.

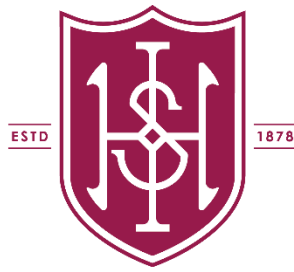
1 yard = 3 feet

1 mile = 1760 yards

A boy decides to run from Ipswich to Woodbridge which is a distance of 11 miles. He runs down his garden and notices that after 5 steps he has travelled 20 feet. If he runs like this all the way from Ipswich to Woodbridge, how many steps will he take on the way?

(6)

**Now go back and check your work carefully**



# IPSWICH HIGH SCHOOL

WOOLVERSTONE HALL  
SUFFOLK, ENGLAND

Year  
7

*English*

One hour

- Attempt all questions.
- If you cannot do a question, leave it, go on to the next one, and if you have time come

back to it at the end.

### **Section A – Comprehension**

*Michael, a twelve year old boy, is shipwrecked on a desert island with his dog. Here, he meets a strange man who appears to live on the island.*

He was no more than a few feet away from me when he stopped. We stood looking at each other in silence for a few moments. He was leaning on his stick, trying to catch his breath. "Americajin? Americajin? American? Eikokujin? British?"

"Yes," I said, relieved to have understood something at last. "English, I'm English."

It seemed a struggle for him to get the words out. "No good. Fire, no good. You understand? No fire." He seemed less angry now.

"But my mother, my father, they might see it, see the smoke." It was plain he didn't understand me. So I pointed out to sea, by way of explanation. "Out there. They're out there. They'll see the fire. They'll come and fetch me."

Instantly he became aggressive again. "Dameda!" he shrieked, waving his stick at me. "No fire!" I thought for a moment he was going to attack me, but he did not. Instead he began to rake through the sand at my feet with his stick. He was drawing the outline of something, jabbering incomprehensibly all the time. It looked like some kind of a fruit at first, a nut perhaps, a peanut. Now I understood. It was a map of the island. When it was done he fell on his knees beside it, and piled up mounds of sand, one at each end – the two hills. Then, very deliberately, he etched out a straight line, top to bottom, cutting the smaller end of the island off from the larger one.

"You, boy. You here," he said, pointing back towards my cave at the end of the beach. "You." And he stabbed his finger in the mound of sand that was my hill. Then across the whole of the sand map he began to write something. The lettering was not letters at all, but symbols – all kinds of ticks and pyramids and crosses and horizontal lines and slashes and squiggles – and he wrote it all backwards, in columns, from right to left.

He sat back on his haunches and tapped his chest. "Kensuke. I, Kensuke. My island." And he brought his hand down sharply like a chopper, separating the island in two. "I, Kensuke. Here. You, boy. Here." I was already in no doubt as to what he meant. Suddenly he was on his feet again waving me away with his stick. "Go, boy. No fire. Dameda. No fire. You understand?"

I did not argue, but walked away at once. When, after a while, I dared to look back, he was kneeling down beside what was left of my fire, and scooping still more sand on to it.

When I next looked back, the fire was not smoking at all. It had been completely smothered, and the old man was nowhere to be seen.

For the rest of that day I stayed in my cave. For some reason I felt safe there. I suppose I had already begun to think of it as home. I had no other. I felt as an orphan must feel, abandoned and alone in the world. I was frightened, I was angry, I was completely bewildered.

I took a long hard look at my situation. I was marooned on an island in the middle of nowhere, very probably with a madman for company, and a bunch of howling monkeys (at least one orang-utan amongst them) – and God knows what else might be hidden in the forest – and millions of mosquitoes that would eat me alive every night. I knew only one thing. I had to get away. But how? How was I ever going to get off the island unless I could attract the attention of some passing ship? I could be here for the rest of my life. The thought didn't bear dwelling on.

**Please answer all questions in full sentences.**

- 1) This extract is narrated by a young boy, Michael. What is a narrator?

.....  
.....  
.....

(1)

- 2) "He sat back on his haunches and tapped his chest. "Kensuke. I, Kensuke. My island." And he brought his hand down sharply like a chopper, separating the island in two. "I, Kensuke. Here. You, boy. Here." I was already in no doubt as to what he meant."

What do you think Kensuke is trying to tell Michael?

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.....  
.....  
.....  
.....

(2)

- 3) Why do you think that Michael felt safe in his cave? Give as many reasons as you can.

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(3)

- 4) Find three words that explain how Michael felt about being stranded on the island. What do these words suggest to you about his experience?

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(4)

5) Why do think that Michael wanted to light a fire and why might Kensuke not want him to do so?

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(5)

SPECIMEN

