



FOREST SCHOOL

11+

ENTRANCE AND SCHOLARSHIP
SAMPLE PAPERS

Sample Paper 1

**FOREST SCHOOL
ENTRANCE EXAMINATION
MATHEMATICS**

Calculators are **NOT** allowed
You are advised to show your working
Time: One hour

NAME.....

CANDIDATE NUMBER.....

1 Work out $887 + 96$

ANSWER.....

2 Work out $123 - 41$

ANSWER.....

3 Work out 876×3

ANSWER.....

4 Work out $3647 \div 7$

ANSWER.....

5 What is halfway between 120 and 300?

ANSWER.....

- 6 Krishn has 1 hour to clean the house before his parents get back from their holiday.
He has to Hoover 3 rooms, clean out his pet hamster's cage and wipe off the drawing of an elephant he accidentally did on the bathroom wall.

Each room takes 12 minutes to Hoover, it takes 18 minutes to clean out his hamster's cage and 21 minutes to rub out the elephant, which he does last.

What fraction of the elephant is **left** on the wall when Krishn's parents arrive home?

ANSWER.....

- 7 Abigail is three times as old as Ryan.
In 6 years' time Abigail will be 42.
How old will Ryan be in 2 years?

ANSWER.....

TURN OVER

8 What number is ten thousand more than 9876543?

ANSWER.....

9 Naheeda uses 10 matchsticks to make a row of 3 squares.
How many matchsticks would she need to make a row of 7 squares?



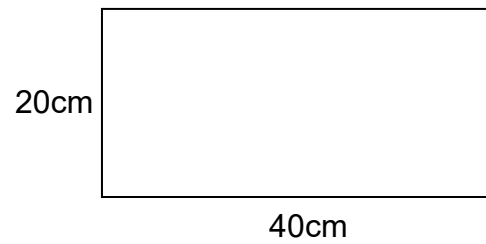
ANSWER.....

10 James is driving on the M25. He is annoyed because a 35 mile stretch of road works has a speed restriction of 50mph rather than being able to travel at 70mph.

How much longer is his journey as a result of the roadworks?

ANSWER.....minutes

- 11 Sahij has made a rectangular slab of flapjack: 20cm by 40cm.
He is not sure what size flapjacks to make from it.



- (a) What is the most 4cm by 4cm flapjacks he could make?

ANSWER.....

- (b) What is the most 5cm by 8cm flapjacks he could make?

ANSWER.....

- (c) What is the most 6cm by 7cm flapjacks he could make?

ANSWER.....

TURN OVER

12 What is $3\frac{1}{2} \div \frac{1}{4}$?

ANSWER.....

13 **SPECIAL OFFER ON MATHS BOOKS!**

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Subhan wants to get 5 of these books.

How much does he pay?

ANSWER.....

- 14** Anokhi buys 4 chocolate bars at 75p each and 3 pens at 95p each.
How much change does she receive from a £10 note?

ANSWER.....

-
- 15** A “taxicab number” is a number that can be written as the sum of two cube numbers in two different ways.

For example 1729 is a taxicab number because

$$1729 = 1^3 + 12^3 \text{ and also } 1729 = 9^3 + 10^3$$

Zain says “There are no taxicab numbers less than 30.” Is he right?

Explain your reasoning carefully

ANSWER.....

REASON.....

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

TURN OVER

16 The letter “e” appears _____ times in this sentence.

Which of the following goes in the gap above?

Seven, eight, nine, ten, eleven, twelve or thirteen

ANSWER.....

17 What is $30.03 - 3.3$?

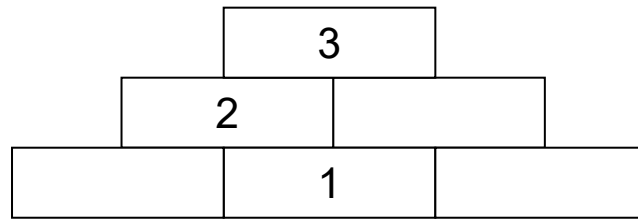
ANSWER.....

18 Theo thinks of a number and finds that three quarters of it is 24.

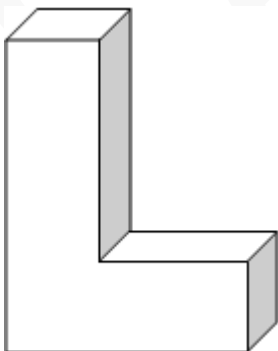
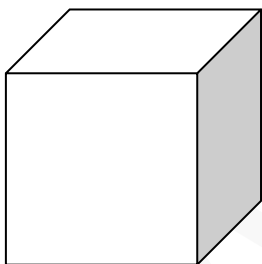
What was the number he first thought of?

ANSWER.....

- 19 Complete this subtraction pyramid, where numbers in the boxes are the difference of the two numbers below.



- 20 A cube has 8 vertices (corners), 6 faces and 12 edges.
How many vertices, faces and edges does the L – shape have?



VERTICES.....
 FACES.....
 EDGES.....

21 (a) What is 0.32 as a fraction? Give your answer in its simplest form.

ANSWER.....

(b) What is eighteen fortieths as a decimal?

ANSWER.....

22 What is 30% of 1600?

ANSWER.....

23 One quire of paper is equal to 24 sheets.
One ream is equal to 20 quires.
How many sheets are there in 2 reams?

ANSWER.....

24 What is 0.2×0.3 ?

ANSWER.....

25 (a) How many centimetres are there in 1.4 metres?

ANSWER.....

(b) How many millimetres are there in 2.3 kilometres?

ANSWER.....

26 Three prime numbers multiply together to get 110. What are they?

ANSWER.....

TURN OVER

27 Milly has some marbles at the start of the week.
One day at school she does well in her marble games with her friends and increases her total by a tenth.
The next day is not so good and she loses a tenth that time.
Has she ended up with more, less or the same as she had at the start of the week?

Explain your answer carefully.

ANSWER.....

REASON.....
.....
.....
.....

28 Amrit, Brenda and Clare share 13 sweets. Amrit gets three times as many as Brenda, and Brenda gets three times as many as Clare. How many do they each get?

AMRIT.....

BRENDA.....

CLARE.....

- 29 Gina finished her homework at 8:24pm having started at 6:52pm.
How many **minutes** did she spend on it?

ANSWER.....

- 30 A recipe for 12 cakes needs 200g of flour.
Isaac has 250g of flour.
How many cakes could he make?

ANSWER

- 31 A rectangle has an area of 20cm^2 . Its sides are doubled to make a new
rectangle.
What is the area of the new rectangle?

ANSWER.....

- 32 A clock's hands are at right angles when it shows the time 3 o'clock.
How many times are the hands at right angles again before 5 o'clock, 2 hours
later?

ANSWER.....

TURN OVER

- 33** Emma has a rectangular card 6cm by 9cm. She colours in a border of 1cm around the edge. The border is 1cm thick throughout. What fraction of the area of the rectangle is coloured in?

ANSWER.....

- 34** The first term of a sequence is 50, the second is 46 and the third is 42, and so on.
How many terms are there until the first negative term?

ANSWER.....

- 35** Nicholas makes this out of children's building blocks.
How many blocks did he use?



ANSWER.....

- 36** Jaishan notices that if he squares two numbers and finds the difference of his answers he gets the same result as multiplying the sum and the difference of the two numbers.

For example, if he chooses 9 and 3: $9^2 - 3^2 = 81 - 9 = 72$

and $(9 + 3) \times (9 - 3) = 12 \times 6 = 72$

- (a)** Show that this works with the numbers 6 and 2

ANSWER.....
.....
.....
.....

- (b)** Jaishan uses this to find $83^2 - 17^2$ WITHOUT using long multiplication.

How did he do it and what is the answer?

ANSWER.....
.....
.....
.....

TURN OVER

- 37** Bob has 15 more Match Dfex cards than Alan
Colin gives Bob 25 cards.
Bob now has 3 times as many as Alan.
How many has Alan got?

ANSWER.....

- 38** A Langford number has two 1s separated by 1 digit, two 2s separated by 2 digits etc.

For example, 312132 is a Langford number.

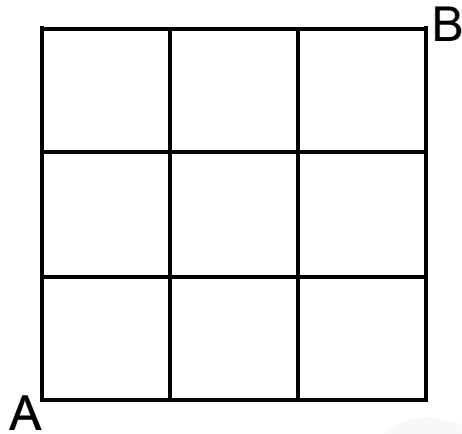
Complete this Langford number which has two 1s, two 2s, two 3s and two 4s.

2 3

— — — — —

TURN OVER

- 39 In this map of Squaretown, Tomasc is going to walk from A to B. He only ever walks north (up the map) or east (to the right on the map). How many different possible routes are there?



ANSWER.....

YOU HAVE NOW COMPLETED THE EXAMINATION.

IF YOU HAVE TIME GO BACK AND CHECK YOUR ANSWERS.

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FOREST SCHOOL

ENGLISH ENTRANCE/SCHOLARSHIP EXAMINATION

Section A: Reading

ANSWER BOOKLET 25 minutes

Name	
Candidate number	

Instructions to Candidates

- Write your name and candidate number clearly on the front of this booklet.
- You have **10 minutes** to read the passage.
- Once the reading time is over, you have **25 minutes** to complete the questions in the spaces provided.
- You should answer all the questions in this section.

Mark out of 20: _____

Peri and his brother Helgis are outside their village. Peri is trying to train a difficult falcon (a large bird of prey) to be an obedient hunter.

"I tell you, Peri, my bird is sickening for something."

Helgis tugged the back of his brother's sleeveless leather jacket to get his attention, his small dark face and dark eyes bleak with anxiety. "She's off her food and her feathers look dull. You've always told me that's a bad sign."

Peri kept his eye on the distant falcon, flying over the crag. The ground under his boots squelched as he readied himself to swing the lure, but he paid no attention to the discomfort of wet feet. 5

"I'll take a look at her when I've finished here," he promised, his voice as calm and melodious as always. There was something about him – his air of being utterly centred – that appealed to all creatures, especially winged ones. Even Helgis's anxiety eased listening to his brother's words. "Now stand back: I need room." 10

"Please don't take too long. I'm really worried about her."

"I know – and it's natural. Goldie's your first bird. We all worry too much about our first."

Helgis sighed, realising his brother was not going to come with him until he was good and ready. He often complained that Peri was as immovable as the peak of Mount Bandor; even now, as he stood ankle-deep in the mud, his shoulder-skimming black hair tied back with a leather thong, his long limbs relaxed, there was no budging him until he was finished. Yet Peri had a sure hand with the birds that kept even the tricky ones, like the falcon he was now flying, obedient to his will. Helgis wished he had even a fraction of his patience, or his skill with the falcons. 15 20

Peri caught his brother's envious look and smiled inwardly. He knew his little brother thought he was always the capable one. Helgis had announced only the night before that he wanted to be exactly like Peri when he grew up, much to the amusement of the rest of the family. They all anticipated that Helgis's hot temper might not allow it. But Peri loved his little brother dearly and hoped he could live up to the high opinion Helgis held of him. 25

"You'd best move to a safe distance," Peri said gently.

"I'll get out of your way then." Helgis jumped from tussock to tussock to reach the shelter of a rock. "I'm clear." 30

Peri slowly began to spin the lure¹ above his head, the piece of rabbit meat tied to the end humming in the wind to tempt the falcon on the wing. He put aside the problem of Helgis's sparrowhawk for later attention, concentrating on the task at hand. Would the bird respond? The crotchety falcon had been almost impossible to train so as a last resort had been given to him to straighten out. Peri guessed a previous handler had mistreated the creature or failed to be consistent with his rewards; it had developed an unpredictable and malevolent streak, as likely to dive for the trainer as the meat lure. 35

"Come on, beauty," he urged the hunter. He was the bird's last chance: if it didn't respond to him, then it would be destroyed, a thought which made Peri want to rage at the unfairness of life. 40

With a contemptuous loop over the crag, the peregrine flaunted its superb flying skills. It skimmed along the ridge, teasingly suggesting that it planned to continue on until it was out of sight. Then, finally, as if sensing that even Peri's patience was running out, it turned and rocketed towards the lure, as fast as an arrow from a longbow. It made a perfect grab for the meat, landing it on the grass. 45

Now the test: could the handler separate it from the lure? If the falcon ate the kill, it would never do as a hunter. It had to be trained to let go of what it had captured. Peri moved closer, slipping off his jacket, then threw it over the lure, making it seem to the falcon that it had 'disappeared'. He then cast a small chunk 50

of meat within easy reach. Would the falcon let go of the prize it still gripped but could not see, in favour of the reward that his trainer had offered?

The falcon raised its ebony eyes, its expression one of resentment, but then hopped off the lure to pluck the titbit from the grass. Next Peri held out his gauntleted² hand with another larger piece of meat. Rogue gave him a cold look but flapped up to snatch this reward too, allowing Peri to secure the bird in place by the jesses attached to its legs. Back under the falconer's control, Rogue was too busy eating his treat to worry that Peri was putting away the much larger feast on the end of the lure. 55

"Phew!" exclaimed Helgis, jumping out from behind his refuge. "I never thought I'd see Rogue follow orders." 60

Usually unruffled by anything that happened on the training grounds, Peri could not disguise his delight. "I didn't think I'd live to see it either. He's been the most difficult bird I've ever had to train."

1: *lure* – this is a piece of meat attached to the end of a long rope used to train the falcon to hunt

2: *gauntleted* – Peri is wearing a thick leather glove to protect his arm from the falcon's talons

1. **Reread lines 1-4.** Write down two clues that Helgis is worried. **(2 marks)**

(1) _____

(2) _____

2. **Reread lines 8-21.**

a) What promise does Peri make in this extract? **(1 mark)**

b) Write down the simile in this extract. **(1 mark)**

c) What does this simile tell us about Peri's character? **(1 mark)**

3. **Reread this sentence from lines 33-4:** "The crotchety falcon had been almost impossible to train so as a last resort had been given to him to straighten out."

a) What does "to straighten out" mean **in this sentence?** **(1 mark)**

b) In your own words, explain what “as a last resort” means **in this sentence**. (1 mark)

c) What two things does Peri suspect may have happened to the falcon before it came to him? (2 marks)

(1)

(2)

4. In lines 35-6, the author writes that the falcon “had developed an unpredictable and malevolent streak”.

a) What does she mean by this? (2 marks)

b) Why did Peri agree to take on the training of this difficult bird? Give two reasons. (2 marks)

TURN OVER



FOREST SCHOOL

Section B: Writing 40 minutes

Name	
Candidate number	

Instructions to Candidates

- Write your name and candidate number clearly on the front of this booklet.
- Choose **ONE** question and write your response in the space provided.
- You should answer all the questions in this section.

Mark out of 40: _____

Section B – Writing
Marks Available: 40

You must answer the question set. You should not write out an answer from memory. Answers which are written from memory often do not get very high marks.

You should include details from your reading of the passage to inform your writing.

Choose one of the following questions:

EITHER

(1) Write the next chapter of the story, exploring what happens to Peri.

OR

(2) Imagine you are Helgis. Write the scene with the falcon from your point of view.

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