Paper B. 2015

# Numeracy Paper 11+

Name.....

Candidate Number.....

Seat Number.....

**This is a multiple-choice test.**
**Please fill in the details on the multiple-choice answer sheet.**

**This numeracy paper contains 45 questions, which you have 40 minutes to complete.**

**Clearly fill in the answers on the multiple-choice answer sheet. Erase any mistakes.**

**For working out, you can use this paper or the rough paper supplied.**

ElevenPlusMock.org.uk

**Q1.** What is 9999 x 4? Choose one answer from the answer sheet.

**Q2.** What is 14.21 – 7.87?

**Q3.** What is thirty million, five hundred and two thousand, one hundred and seven in figures?

**Q4.** What is $\frac{1}{2}$ of a $\frac{1}{2}$?

**Q5.** How many hundreds make up one million?

**Q6.** Add one quarter and a third.

Look at the following numbers and then answer questions 7 and 8:

**15, 9, 10, 8, 3, 7, 8, 16, 9, 8, 4, 14, 2**

**Q7.** What is the range?

**Q8.** What is the median?

**Q9.** Bob cycles 10 km in 4 hours. Gavin drives the same route at a speed of 50 km an hour. If Bob leaves at 12 noon, what time must Gavin leave if he wants to arrive at the destination at exactly the same time as Bob?

**Q10.** How many minutes are there between 9.30 a.m. and 2.10 p.m. on the same day?

**Q11.** A teacher fills a large tank of water over a period of time. She starts with 1 cup of water on day one. Every day she doubles the amount of water in the tank. For example, at the end of day two there are two cups of water in the tank. After three days there are four cups, etc. If it takes 28 days to exactly fill the tank, on which day was the tank a quarter full?

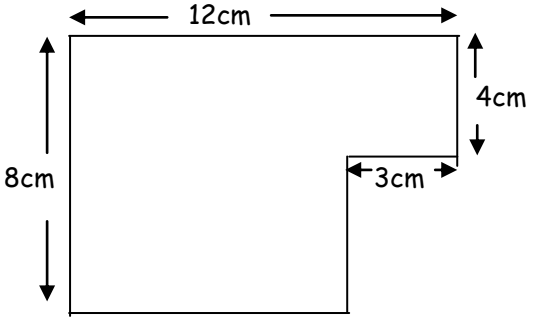
**Q12.** If 8y - 10 = 4y + 2, what is the value of y?

**Q13.** What is 30% of 700?

**Q14.** Farmer Joe has cows and chickens. He counts 16 heads and 52 legs when looking at all his livestock. How many chickens does he have?

**Q15.** Mark thinks of a number. He takes it away from 20 and then multiplies by two. His answer is 12. What was Mark's original number?

**Q16.** What is the area of the following shape?

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**Q17.** What is the perimeter of the above shape?

**Q18.** Maria has 356 photos and she wants to stick them into albums. If the albums hold 34 photos each, how many albums will Maria need in which to mount all her photos?

**Q19.** Arushi has a 25% chance of picking out a red sweet at random from a bag. If there are 60 sweets in total, how many red sweets are there?

Consider the following numbers and then answer questions 20-24:

**1, 2, 4, 5, 6, 7, 8, 9, 12, 15, 16, 18, 21, 23, 25, 32, 48, 64, 100, 144**

**Q20.** What is the smallest prime number multiplied by the largest odd number?

**Q21.** What is the largest square number divided by the smallest even number?

**Q22.** What is the largest cube number divided by the highest common factor of 8 and 12?

**Q23.** What is the smallest square number added to the highest prime number?

**Q24.** If I choose a number at random, what is the chance my number is divisible by 5?

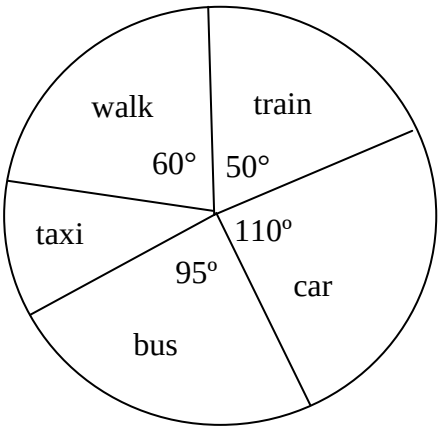
**Q25.** Which of the following numbers is closest to 1?

0.01 0.1 1.011 0.97 1.02

**Q26.** Kate needs 100g of soil and 40ml of water for each flower she wishes to plant in the garden. If Kate has 1kg of soil and half a litre of water, how many flowers can she plant?

**Q27.** Sneha starts with the number 60. She multiplies it by 2 and then rounds it to the nearest 50. She then multiplies her answer by 6 and then rounds it to the nearest 500. She then multiplies her answer by 5 and rounds it to the nearest 1000. What is Sneha's final answer?

**Q28.** 720 pupils in a school were asked how they travel each day. The results were put in the following pie graph.

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How many children took a taxi?

**Q29.** Three points, A (2,1), B (5,1) and D (2,4) are drawn on a graph. What is the fourth point C, if the shape ABCD is a square?

**Q30.** Alice has invited five boys and some girls to her party. There are 16 balloons, 64 sweets, 32 stickers, 48 toys and 24 cakes that are ready to go into party bags. If each child gets exactly the same number of balloons, sweets, stickers, toys and cakes as each other to take home (and all the goodies are used up), how many visiting children are present at the party?

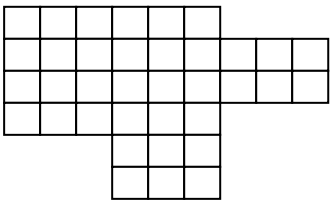
**Q31.** Jamie buys 13 games for £5.99 each. How much change will he receive from £100?

**Q32.** What is the next number in the sequence?

**1, 2, 4, 7, 11, 16, 22, 29, …….**

**Q33.** What will be the first three digit number in the above sequence?

**Q34.** The following shape is made up of small squares measuring 5mm by 5mm



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What is the total area of the shape in $cm^2$

**Q35.** Three children weigh an average of 25 kg. A fourth child is weighed, and the average weight goes up by 5kg. How much does the fourth child weigh?

**Q36.** Sam takes 10 minutes to wash and dress in the bathroom every morning and then he spends 20 minutes eating breakfast. It takes 35 minutes for Sam to walk to school. If school begins at 8.30 a.m., at what time must Sam set his alarm to arrive on time?

**Q37.** In class 6A, the girls are awarded 3 times as many house points as the boys in the summer term. If the girls are awarded 63, how many house points were given to the whole class?

**Q38.** If I put the following fractions in order of size, which one will come in the middle?

13/27 5/8 8/17 3/7 21/39

**Q39.** 10% of Mrs. Smith's class were away on Monday. 20% were away on Tuesday, but none were away on Wednesday or Thursday. Half the class were away with a bug on Friday. If Mrs. Smith registered 24 children away during the week, how many children are in her class normally?

**Q40.** 6 pens cost the same as 12 rubbers.
A rubber costs three times as much as a pencil.
A pencil sharpener costs the same as two rubbers and 1 pen.

If a pencil costs 10p, how much does the pencil sharpener cost?

**Q41.** Which of these triangles has a different area to the other four?

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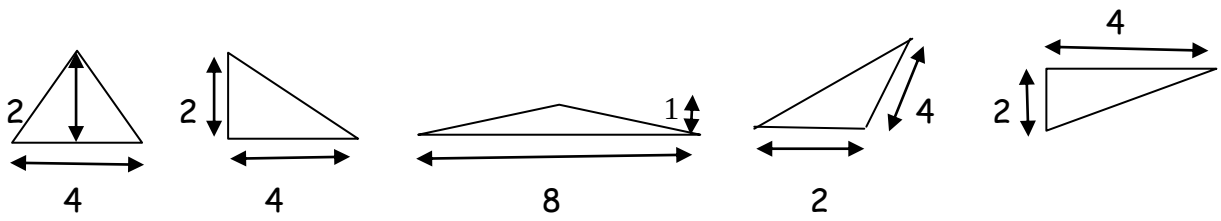
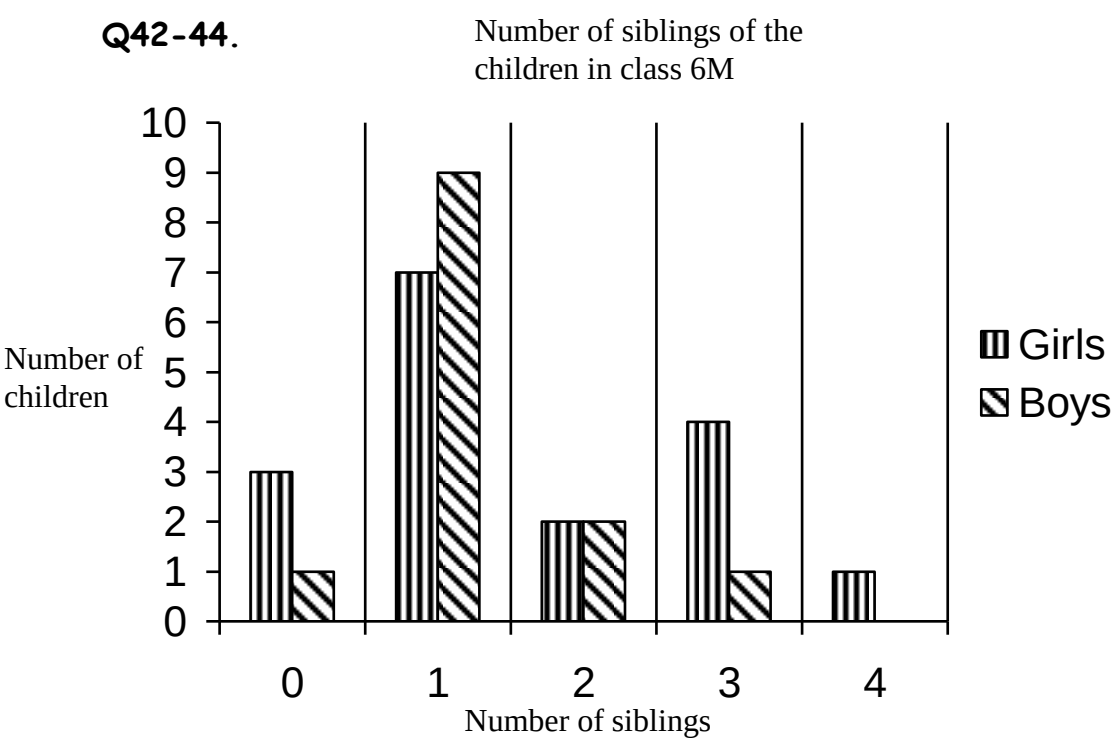



**Q42-44.**




**Q42.** How many children are in class 6M altogether?

**Q43.** How many siblings do the girls in class 6M have altogether?

**Q44.** How many more girls than boys have three siblings?

**Q45.** How many different four digit numbers can you make from the numbers 1,2,3 and 4? You cannot use the numbers more than once.

End of Test