GCSE Foundation Maths

Topic Test 1: Number Essentials

Assessment Details	Specifications
Topics Covered	Fractions, Percentages, Standard Form, Ratio Sharing
Tier	Foundation (Target Grades 3 - 5)
Time Allowed	45 minutes
Total Marks	35 marks
Your Total Mark	**/ 35**

Instructions & Exam Tips:

- Answer all questions in the spaces provided.
- **Show all working out** — method marks may be awarded even if the final answer is incorrect.
- Calculators may be used for all questions **except** where explicitly marked as non-calculator.
- Check your answers carefully if you finish before the time limit.

Section 1: Fractions [9 marks]

1) Work out: 3/5 + 1/4
   Give your answer as a fraction in its simplest form. **[2 marks]**

Working Space (Question 1)

Answer: _____

2) Work out 2 ⅓ x 4/7
Give your answer as an improper fraction or a mixed number in its simplest form. **[3 marks]**

Working Space (Question 2)

Answer: _____

3) Work out: 5/6 ÷ 2/3
Give your answer as a mixed number in its simplest form. **[2 marks]**

Working Space (Question 3)

Answer: _____

4) In a school of 480 pupils, ⅜ travel by bus and ¼ cycle to school. The rest walk. How many pupils walk to school? **[2 marks]**

Working Space (Question 4)

Answer: _____

Section 2: Percentages [9 marks]

5) **Non-calculator:** Work out 35% of £180. **[2 marks]**

Working Space (Question 5)

Answer: £_____

6) A coat has an original price of £75. In a sale, it is reduced by 20%. Calculate the sale price of the coat. **[2 marks]**

Working Space (Question 6)

Answer: £_____

7) Gemma buys an antique vase for £140 and sells it for £182.
Work out her percentage profit. **[3 marks]**

Working Space (Question 7)

Answer: _____

8) Jack invests £1,500 in a savings account paying 3% compound interest per year.
Work out the total amount in the account after 2 years.
Round your answer to 2 decimal places. **[2 marks]**

Working Space (Question 8)

Answer: _____

Section 3: Standard Form [8 marks]

9) Complete each part below:

a) Write 45,000 in standard form. **[1 mark]**

Answer: _____

b) Write 0.00062 in standard form. **[1 mark]**

Answer: _____

c) Write 7.05×10^4 as an ordinary number. **[1 mark]**

Answer: _____

10) Work out $(2.4 \times 10^5) \times (3 \times 10^3)$
Give your answer in standard form. **[2 marks]**

Working Space (Question 10)

Answer: _____

11) Work out: $(8 \times 10^7) \div (2.5 \times 10^3)$.
Give your answer in standard form. **[2 marks]**

Working Space (Question 11)

Answer: _____

Section 4: Ratio Sharing [9 marks]

12) Share £450 in the ratio 2 : 3: 4. **[2 marks]**

Working Space (Question 12)

Answer: £_____ : £ _____ : £ _____

13) The ratio of adults to children at a cinema is 3 : 7.
There are 56 children. Work out the number of adults. **[2 marks]**

Working Space (Question 13)

Answer: _____ adults

14) Sophie and Daniel share some money in the ratio 4 : 9.
Daniel receives £65 more than Sophie.
Work out the total amount of money shared. **[3 marks]**

Working Space (Question 14)

Answer: £_____

15) In a bag, the ratio of red counters to blue counters is 2 : 5.
The ratio of blue counters to green counters is 3 : 4.
Write the ratio of red counters to green counters in its simplest form (a : b).
[2 marks]

Working Space (Question 15)

Answer: _____ : _____

Sections	Total Marks
1. Fractions	9
2. Percentages	9
3. Standard Form	8
4. Ratio Sharing	9
TOTAL MARKS	35