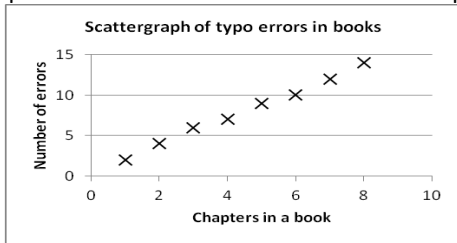


**Maths Key Skills**

**Stage 8: Skill Check 2**

Name: ..... Date: ..... Class/Group: .....

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability											
1. Work out: $0.4 \times 0.2$	8:1	11. Expand & simplify: $(2b - 2)(b + 4)$	8:16	21. These are the probabilities of lunch chosen by class 8B											
2. Write 36 as the product of its prime factors. Choose from the following: <b>A.</b> $2^2 \times 3^2$ <b>B.</b> $2^2 \times 9$ <b>C.</b> $4 \times 3^2$	8:2	12. In a class, the ratio of boys: girls is 4:3. Write the proportion of boys in the class as a fraction.	8:17	<table border="1"> <tr> <td>Lunch</td> <td>Burger</td> <td>Pizza</td> <td>Pasta</td> <td>Baguette</td> </tr> <tr> <td>Probability</td> <td>0.15</td> <td>0.35</td> <td></td> <td>0.2</td> </tr> </table> <p>Calculate the missing probability</p>		Lunch	Burger	Pizza	Pasta	Baguette	Probability	0.15	0.35		0.2
Lunch	Burger	Pizza	Pasta	Baguette											
Probability	0.15	0.35		0.2											
3. Round off 0.49 correct to 1 significant figure	8:3	13. 10 calculators cost £55. How much will 4 cost?	8:18	22. Of the 80 pupils in Y8, 38 are boys. On Monday, 4 boys and 2 girls were late. What is the probability that a pupil chosen is a girl and not late?											
4. Evaluate: $\sqrt[5]{32}$	8:4	14. A car bought for £800 was sold for 20% more. What price was it sold for?	8:19												
5. Factorise $y^2 + 5y$	8:6	15. A tap flows at 3 litres in 5 minutes. What is the average rate per hour	8:20	23. A coin is tossed twice. What is the probability of rolling two HEADS?											
6. Simplify $p^5 \div p^2$	8:7	16. What is the sum of the interior angles of a pentagon?	8:21												
7. Make 'w' the subject of the formula $P = 2w + 5$	8:8	17. What is the area of this circle in terms of $\pi$	8:22	24. Work out the modal class interval weekly pocket money.											
8. Solve $4x - 3 = 2x + 5$	8:10	18. Work out the volume of this prism.	8:23	<table border="1"> <tr> <th>Pocket money (£)</th> <th>Frequency</th> </tr> <tr> <td>1-3</td> <td>2</td> </tr> <tr> <td>4-6</td> <td>9</td> </tr> <tr> <td>7-9</td> <td>5</td> </tr> <tr> <td>10-12</td> <td>4</td> </tr> </table>		Pocket money (£)	Frequency	1-3	2	4-6	9	7-9	5	10-12	4
Pocket money (£)	Frequency														
1-3	2														
4-6	9														
7-9	5														
10-12	4														
9. What is the gradient of the graph with the equation $y = 2x + 7$	8:12	19. Enlarge triangle by sf $\frac{1}{2}$ centre X	8:24	25. Would it be possible to use this graph to extrapolate for the number of errors in 10 chapters?											
10. Give the nth term of the sequence 3 5 7 9 11 ...	8:15	20. Write down the 3-figure bearing for east direction	8:25												
Total (A)		Total (B)		Total (C)											
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)											