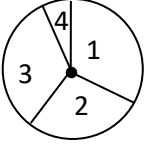
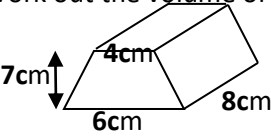
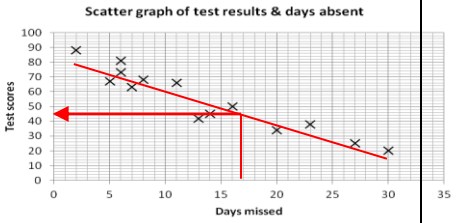
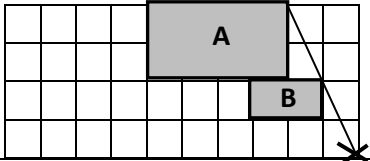


Maths Key Skills

Stage 8: Skill Check 14

Name: Date:

Class/Group:

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability													
1. If $5.6 \times 3.5 = 19.6$ What is 56×3.5 ?	8:1 196	11. Expand & simplify $(x - y)(x + y)$	8:16 $x^2 - y^2$	21. On a spinner $P(1) = 0.34$ $P(2) = 0.26$ $P(3) = 0.36$ Work out $p(4)$	8:26 $1 - 0.96 = 0.04$												
2. Write 56 as the product of its prime factors.	8:2 $2^3 \times 7$	12. $\frac{3}{5}$ of a class are girls. Write the ratio of Boys : Girls	8:17 B:G = 2:3														
3. Estimate by rounding to 1sf an answer to: $\frac{626}{3.1 \times 9.7}$	8:3 $\frac{600}{30} = 20$	13. For green, you mix 7 parts yellow to 5 parts blue. How much of each colour is needed to make 6 litres of green?	8:18 Y=3.5litres B=2.5litres	22. 48 people attended a school club for tennis or athletics; 28 were males. 13 females chose tennis. Find the probability that one person chosen was a female who chose athletics?	8:27 $\frac{7}{48}$												
4. If $3^5 = 243$, what is 3^6 ?	8:4 $243 \times 3 = 729$	14. A school had 840 pupils last year. This year saw a 5% decrease. Complete the multiplier to get this year's population of pupils?	8:19 840×0.95	23. A spinner has equally likely numbers 1,2,3 & 4. The spinner is spun twice. What is the probability of scoring a total of 5 from 2 spins?	8:28 $\frac{4}{16}$ or $\frac{1}{4}$												
5. Factorise: $2a^2 + 6a$	8:6 $2a(a + 3)$	15. Convert 20m/min to km/h?	8:20 $\frac{20 \times 60}{1000} = 1.2 \text{ km/h}$	24. Work out the median class interval.	8:29 6-10												
6. Simplify: $a^2 \times a^2 \times a^2 \times a^2$	8:7 a^8	16. What is the size of the exterior angle of an octagon?	8:21 $360 \div 8 = 45^\circ$	<table border="1" data-bbox="1594 896 1912 1126"> <thead> <tr> <th>Score</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>1-5</td> <td>2</td> </tr> <tr> <td>6-10</td> <td>9</td> </tr> <tr> <td>11-15</td> <td>5</td> </tr> <tr> <td>16-20</td> <td>3</td> </tr> <tr> <td>21-25</td> <td>1</td> </tr> </tbody> </table>	Score	Frequency	1-5	2	6-10	9	11-15	5	16-20	3	21-25	1	
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7. Make 'l' the subject of the formula $P = 2l + 2b$	8:8 $l = \frac{P-2b}{2}$	17. Work out the area of a circle with radius 20cm in terms of π .	8:22 $400\pi \text{ m}^2$	25. Interpolate the test result for 17 days missed	8:30 ≈ 45												
8. Solve: $b + 9 = 4 - 4b$	8:10 $5b = -5$ $b = -1$	18. Work out the volume of this prism. 	8:23 $\frac{1}{2}(4+6) \times 7 = 35 \text{ cm}^2$ $35 \times 8 = 280 \text{ cm}^3$														
9. Write down the y-intercept of the graph with the equation $y = 3 - 4x$	8:12 3	19. Describe the transformation A to B 	8:24 Enlargement Scale factor $\frac{1}{2}$ Centre X														
10. Give the first 3 terms of the sequence with the nth term = $5 - 2n$	8:15 3, 1, -1	20. A map has a scale of 1 : 50000 What real life distance is represented by 6cm? Give you answer in km.	8:25 3km														
Total (A)		Total (B)		Total (C)													
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)													