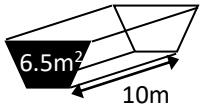
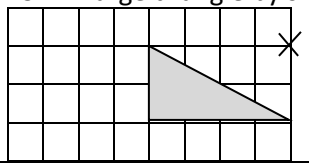
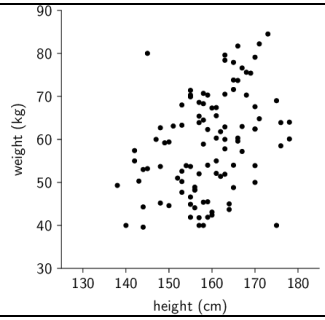
Maths Key Skills **Stage 8: Skill Check 4**

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

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability	
1. Work out: 60 ÷ 0.2	*8:1*	11. Expand & simplify: (m + 3)(2m + 2)	*8:16*	21. The probability of winning the top prize in a draw is 0.06. What is the probability of NOT winning it?	*8:26*
2. Write 18 as the product of its prime factors.	*8:2*	12. The ratio of blue: red balls in a box is 7:3. Write the proportion of RED in the box as a fraction	*8:17*		
3. Estimate by rounding to 1sf an answer to: 77.3 ÷ 3.65	*8:3*	13. 7litres of purple paint are made by mixing red and blue in a ratio of red 3litres: 4litres. How much blue paint is needed for 35litres of purple paint?	*8:18*	22. Of the 64 dogs, 28 are male. Last year 10 of the males and 16 of the females were found homes. How many of the females were NOT found homes?	*8:27*
4. Evaluate: 2^5	*8:4*	14. A bike bought for £80 was sold for 25% more. Complete the sum to find the selling price.	*8:19* **80x.....**		
5. Factorise: 10x - 15	*8:6*	15. Water flows at a rate of 8 litres in 10 minutes. What is the rate in litres/hour?	*8:20*	23. A coin is tossed twice. What is the probability of rolling a HEAD and a TAIL?	*8:28*
6. Simplify: 2^{-1}	*8:7*	16. What is the sum of the exterior angles of a hexagon?	*8:21*		
7. Make 'e' the subject of the formula d = e - f	*8:8*	17. Work out the area of a circle with radius 7cm in terms of π.	*8:22*	24. Estimate the mean score	*8:29*
8. Solve: 4y + 2 = 2y - 8	*8:10*	18. Work out the volume of this prism. 	*8:23*		
9. What is the gradient of the graph with the equation: y = 5 – 2x	*8:12*	19. Enlarge triangle by sf ½, centre X 	*8:24*	25. Circle the outliers 	*8:30*
10. Give the nth term of the sequence 1, 4, 7, 10, 13	*8:15*	20. A map scale is 1:50000. What would 10cm represent in kilometres?	*8:25*		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	

Score	Frequency	
1-5	2	
6-10	5	
11-15	9	
16-20	4	