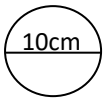
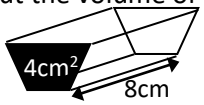
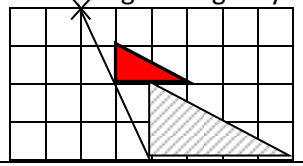
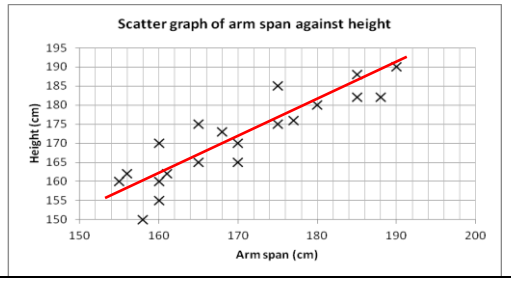
Maths Key Skills **Stage 8: Skill Check 3 - Answers**

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

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability	
1. Work out: $9 \div 0.3$	*8:1* **30**	11. Expand & simplify: $(y - 1)(y - 2)$	*8:16* **y^2-3y+2**	21. The probability of passing my driving test is 0.93. What is the probability of failing it?	*8:26* **0.07**
2. Write 12 as the product of its prime factors.	*8:2* **$2^2 \times 3$**	12. The ratio of blue: red balls is 4:1 Write the proportion of BLUE in the box as a fraction.	*8:17* $\frac{4}{5}$	22. Of the 40 rabbits, 17 are male. There are 8 black males & 15 black females. What is the probability that a rabbit chosen is a female and not black?	*8:27* $\frac{8}{40} = \frac{1}{5}$
3. Estimate by rounding to 1sf an answer to: 23.4×3.65	*8:3* **20x4=80**	13. To make 5litres of purple paint, red and blue are mixed in the ratio of 3: 2. How much red paint would be needed for 20litres of purple paint?	*8:18* **12 litres**		
4. Evaluate: 3^4	*8:4* **81**	14. A car bought for £550 was sold for 20% more. Complete the sum to find the selling price.	*8:19* **550x1.2**	23. A coin is tossed twice. What is the probability of tossing two TAILS?	*8:28* *HH,HT,TH,TT* $\frac{1}{4}$
5. Factorise: 8d - 8	*8:6* **8(d – 1)**	15. A remote car travels 50m in ¼ h. What was its speed?	*8:20* **200m/h**		
6. Simplify: 7^0	*8:7* **1**	16. What is the sum of the exterior angles of a pentagon?	*8:21* **360^0**	24. Work out the median class interval weekly pocket money.	*8:29* **£(4-6)**
7. Make 'd' the subject of the formula: $w = 5d + 1$	*8:8* **$d=\frac{w-1}{5}$**	17. Work out the perimeter of this circle in terms of π. 	*8:22* **10π cm**		
8. Solve: $2(x + 1) = x + 5$	*8:10* **2x+2=x+5** **x = 3**	18. Work out the volume of this prism. 	*8:23* **$32cm^3$**		
9. What is the gradient of the graph with the equation $y = x + 6$?	*8:12* **1**	19. Enlarge triangle by sf ½ centre X 	*8:24*	25. Draw on the line of best fit? 	*8:30*
10. Give the nth term of the sequence: 3, 7, 11, 15, 19 ...	*8:15* **4n - 1**	20. A map scale is 1:1000. What would 10cm represent in metres?	*8:25* **100m**		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	

Pocket money (£)	Frequency
1-3	2
4-6	9
7-9	5
10-12	4