Maths Key Skills **Stage 8: Skill Check 6**

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

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability	
1. Work out: 0.8 ÷ 0.02	*8:1*	11. Expand & simplify: $(2d - 1)^2$	*8:16*	21. The probabilities of getting each colour on a spinner are shown below. Find x Red 0.32 | Blue 0.08 | Green x | Yellow 0.15	*8:26*
2. Write 30 as the product of its prime factors.	*8:2*	12. The ratio of adults : students on a trip is 1:4. What proportion of the group on the trip are students?	*8:17*		
3. Estimate by rounding to 1sf an answer to: 6.14 ÷ 0.49	*8:3*	13. To make pink paint, Annie needs 1 tin of red and 3 tins of white. Describe the relationship between the 2 colours.	*8:18*	22. Of 28 students 16 were boys. 3 boys and 5 girls wear glasses. Find the probability that a student chosen will be a girl & does not wear glasses?	*8:27*
4. Evaluate: $\sqrt[7]{2187}$	*8:4*	14. A bike bought for £100 was sold for 20% less. Complete the multiplication sum to find the selling price?	*8:19* **100 x .....**		
5. Factorise: 8x - 12	*8:6*	15. A vehicle travelled 56km/h. What was the speed in mph? (8km=5miles)	*8:20*	23. A dice is thrown twice. Write down the ways of obtaining a total score of 6	*8:28*
6. Simplify: $y^2 + y^2 + y^2$	*8:7*	16. What is the size of one of the exterior angles of a pentagon?	*8:21*		
7. Make 'b' the subject of the formula a = b - c	*8:8*	17. Work out the area of a circle with radius 5cm in terms of π.	*8:22*	24. What is the modal class interval? Score | Frequency 1-5 | 2 6-10 | 5 11-15 | 9 16-20 | 3	*8:29*
8. Solve: 3(x +1) = x + 8	*8:10*	18. Work out the volume of this prism. 11cm $8cm^2$	*8:23*		
9. What is the gradient of the graph with the equation: y = 5x + 8	*8:12*	19. Describe the transformation B to A A B	*8:24*	25. Indicate on the graph where you could interpolate Scatter graph showing height of candle and time of burning Height in cm time in minutes	*8:30*
10. Give the nth term of the sequence 3 8 13 18 23	*8:15*	20. A model boat is made to a scale 1:20. The model boat is 15cm long. How long is the real boat?	*8:25*		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	