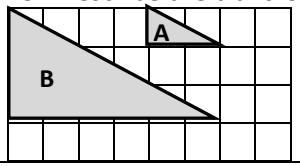
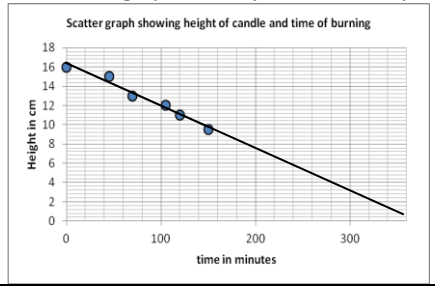
Maths Key Skills **Stage 8: Skill Check 7**

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

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Statistics & Probability	
1. Work out: 24 x 0.1	*8:1*	11. Expand & simplify: $(c + 5)^2$	*8:16*	21. The probabilities of choosing Head Girl is shown below: Find x.	*8:26*
2. Write 24 as the product of its prime factors.	*8:2*	12. The ratio of adults : students on a trip is 2:9. What proportion of the group on the trip are adults?	*8:17*		
3. Estimate by rounding to 1sf an answer to: 288 ÷ 0.49	*8:3*	13. Black : white = 1 : 4 Describe the relationship between the 2 colours.	*8:18*	22. Of 70 staff 48 choose coffee & rest tea. 18 coffee and 18 tea drinkers also take milk. Find the probability that a member chosen will drink tea without milk.	*8:27*
4. Evaluate: 2^{10}	*8:4*	14. A book bought for £24 was sold for 15% more. What was the selling price?	*8:19*		
5. Factorise: $y^2 + y$	*8:6*	15. A vehicle travelled 40m/h. What was the speed in km/h? (8km=5miles)	*8:20*	23. A dice is thrown twice. Write down the ways of obtaining a total score of 7.	*8:28*
6. Simplify: $8y^9 \div 2y^5$	*8:7*	16. How many triangles are in a decagon?	*8:21*		
7. Make 'e' the subject of the formula d = e + f	*8:8*	Work out the circumference of a circle with radius 8cm in terms of π	*8:22*	24. Estimate the mean time?	*8:29*
8. Solve: 3x – 5 = x + 5	*8:10*	18. Work out the volume of this prism.	*8:23*		
9. Where will the graph with the equation **y = 5x + 8** cut the y-axis?	*8:12*	19. Describe the transformation B to A	*8:24*	25. Indicate on the graph where you could extrapolate	*8:30*
10. Give the nth term of the sequence 5 8 11 14 17	*8:15*	20. A model boat is made to a scale 1:20. The mast is 4m long. How long is the mast on the model boat?	*8:25*		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	

Megan	Brenda	Gwynne	Mala
0.08	0.3	x	0.46

Time (t min)	f	
$0 < t \leq 6$	15	
$6 < t \leq 12$	25	
$12 < t \leq 18$	20	
$18 < t \leq 24$	12