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

A: Number & Algebra		B: Algebra, Proportion, Geometry & Measure		C: Geometry & Measure, Statistics & Probability	
1. Write the answer in standard form $(6.1 \times 10^6) \times (2 \times 10^{-5})$	10:1	11. Interpret the line DE	10:13	21. A cylinder of height 8cm holds 200ml. A similar cylinder has a height of 10cm. How many ml does this one hold?(3sf)	10:26
				22. Mark another angle equal to 58^0. Give the reason	10:19
2. Estimate to 1dp the value of : 3.15^5	10:2	12. What inequality is represented here?	10:14	24. A bag contains 3 blue beads and 7 green beads. Two beads are selected without replacement. Work out the probability of selecting two green beads.	10:28
				23. Work out the MEDIAN.	10:29
3. Evaluate: $64^{-2/3}$	10:3	13. Find the nth term of this sequence: 0, 1, 4, 9, 16, 25 ...	10:15		
4. Convert $0.\dot{3}\dot{6}$ to a fraction.	10:4	14. The nth term of a geometric sequence is $\sqrt{7}^n$. Work out the first 3 terms.	10:16		
5. With 5 starters, 7 mains & 6 desserts, how many possible 3 course meals are there?	10:5	15. To get fit, Jay walks 2miles & will increase the distance by 5% each week. How far will he walk in the 10th week?	10:17		
6. Expand: $(2x+1)(x+2)(x-2)$	10:6	16. **A=40 D= 120** Find an equation for A in terms of D if A is inversely proportional to D	10:18		
7. Factorise: $4x^2 + 12x + 9$	10:7	17. Find the angle of an arc length 4.2cm and a diameter of 9cm correct to nearest 1/10 degree.	10:21	25. These box plots show the test scores for girls & boys. Who had the highest average score?	10:30
8 Give the gradient of a line perpendicular to: $y = 2x + 1$	10:8	18. Give the area of sector radius 4cm & angle 292^0 (correct to 3sf)	10:22		
9. Work out the equation of a line joining (-1,2) and (7,6)	10:9	19. Find the SA of a sphere of radius 8.6cm (correct to 3sf). $(SA=4\pi r^2)$	10:23		
10. Work out the roots of the quadratic graph with the equation: $x^2 - 8x + 7 = 0$	10:12	20. Give the volume of a sphere of radius 8.6cm (correct to 3sf). $(V = \frac{4}{3}\pi r^3)$	10:24		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	