**S3 Revision Outline**

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| **Topic** | **Example** |
| **Significant figures** | What is 3 675 039 to 2 significant figures? ***3 700 000*** |
| **Basic Numeracy (Non-calculator)** | * Adding, subtracting, multiplying and dividing decimals, fractions and whole numbers. * Percentage calculations * Find the area or perimeter of basic shapes (circles, quadrilaterals and triangles) |
| **Compound Interest** | £3570 is invested in a bank at an interest rate of 4% per annum. How much interest will be gained over 3 years? |
| **Working Backwards Percentages** | David buys a pair of jeans in a sale for £37.50. If he received a discount of 25%, what was the original price of the jeans. |
| **Scientific Notation** | Write mm in full. |
| **Speed, Distance, Time** | * Calculations of all 3 types using a calculator and without a calculator * Speed, distance and time graphs |
| **Brackets** | * Multiply out brackets |
| **Solving Equations** | Solve: 7(a-3)= 3(a+1) |
| **Substitution** | Evaluate |

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| **Factorising** | * Factorise by highest common factor * Factorise by difference of 2 squares * Factorise trinomials |
| **Circles** | * Area of a sector: * Length of an arc * Angle calculations involving tangents, chords and a variety of triangles. |
| **Trigonometry** | * SOHCAHTOA to find the length of a side or an angle eg.  |  |  | | --- | --- | | Find x: | 13.4 cm  34°  x | |
| **Pythagoras** | |  |  | | --- | --- | | A picture frame is 25 cm high and 21.5 cm wide.  Is the frame rectangular? | http://www.ghostorchid.co.uk/images/products/gold-swept-12x16-frame477.jpg  21.5 cm  25 cm  d |   **The frame is not rectangular.** |
| **Statistics** | * Mean, median and mode * Draw and interpret pie charts * Calculate 5 figure summary (L,H, Q1, Q2, Q3) * Draw a boxplot * Draw a stem and leaf diagram (including a key) * Can calculate the Semi Inter-Quartile Range * Scattergraphs (can draw a line of best fit and describe the correlation |

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| **Simultaneous Equations** | * 4 coffees and 2 muffins cost £6. Three coffees and 2 muffins cost £4. How much would 1 coffee and 1 muffin cost?   **Make equations:**  **Substitute back into**  **Muffins cost £1 and coffee cost £0.50 so the total cost would be £1.50.** |

**Revision Resources:**

1. <http://www.mymaths.co.uk/> login: forfar and password: metre

This website has lessons and homework on every topic in the S3 course.

1. <http://www.mathsrevision.com/index_files/OnlineRevision.htm>

This website has resources listed by topic including past paper questions.

1. <http://www.bbc.co.uk/schools/gcsebitesize/maths/>

This is an alternative to MyMaths. It contains revision, activities and tests on every topic.