**Year 8 Revision List – HIGHER Paper**

|  |  |  |
| --- | --- | --- |
| **Algebra** | Sketch linear graphs |  |
| Collect together like terms and simplify algebraic expressions  |  |
| expanding single brackets |  |
| substitution into formulae including brackets and use formulae |  |
| find and use nth term of an arithmetic sequence |  |
| plot straight line graph from a table of values |  |
| plot and use conversion graphs |  |
| Complete and interpret travel graphs |  |
| use y = mx+c to draw a line |  |
|  | use averages to compare data sets |  |
| **Data** | calculate the mean and mode of frequency table and estimate mean using a grouped frequency table |  |
| list combinations of sets systematically using sample space diagrams |  |
| probability – use fact that probabilities sum to 1 |  |
| use of frequency trees for experimental results |  |
| expectation of an event |  |
| construct and interpret pie charts |  |
| construct and interpret stem and leaf diagrams include back to back |  |
| construct and interpret dual diagrams |  |
|  | calculate with negative numbers + - x ÷ |  |
| **Number** | use order of operations BIDMAS - include powers |  |
| apply calculator skills: powers, roots, brackets, ANS key, sign change, fraction |  |
| find products of prime factor, HCF, LCM |  |
| simplify ratios, share in a given ratio |  |
| use direct proportion in real life contexts: recipes, best buys problems |  |
| convert fraction, decimal and percentage |  |
| calculate fractions of amounts |  |
| add/subtract/multiply/divide fractions |  |
|  | plot bearings |  |
|  | calculate surface area: cuboid/triangular prism |  |
| **Shape** | calculate volume of cuboids and prisms |  |
|  | nets, plans and elevations, isometric drawing |  |
|  | calculate area: rectangle, triangle, parallelogram, trapezium |  |
|  | use angle properties: around a point, on a line, in a triangle, vertically opposite angles |  |
| Angles in parallel lines |  |
| Angles in triangles and polygons |  |
| Mileage charts |  |