Year 9 Maths Revision Checklist

Summer Examination

Topic 17   **Area 1 – Squares and Rectangles**

- *Understand and use metric units of area*
- *Calculate perimeters and areas of rectangles and squares*
- *Calculate perimeters and areas of compound shapes*

Topic 18   **Formulae and Directed Numbers**

- *Construct a formula using words and letters*
- *Use a formula to generate answers*
- *Use > and < signs*
- *Add and subtract with negative numbers*
- *Use negative numbers in formulae*

Topic 19   **Summarising & Comparing Data**

- *Calculate the three averages (mean, median & mode) for (i) a list of numbers and (ii) a frequency table*
- *Decide which average is the best to use*
- *Calculate and understand range.*

Topic 20   **Prime Factors, HCF, LCM**

- *Write a number as a product of its prime factors*
- *find the HCF and LCM of 2 or more numbers by listing*
- *find the HCF and LCM by prime factorisation*
- *solve problems involving HCF and LCM*

Topic 21   **Solids and Volume**

- *Draw cubes and cuboids on isometric paper*
- *Draw nets of cubes & cuboids*
- *Understand and use plans and elevations*
- *Calculate volume of cubes & cuboids*
- *Change units of volume*

Topic 22   **Algebra – Equations**

- *Simplify algebraic expressions*
- *Form equations from written information*
- *Solve equations with x on both sides*

Topic 23   Polygons (Chapter 6)

- *Recognise and name polygons*
- *Understand and use interior and exterior angles*
- *Calculate missing angles in polygons*
- *Use LOGO to draw polygons*
- *Understand tessellations*

Topic 24   Indices & Standard Form (Chapter 1)

- *Understand and use index notation and the laws of indices*
- *Understand and use zero and negative indices*
- *change between standard form and ordinary numbers*
- *Round numbers to significant figures & decimal places*

Topic 25   Fractions – Multiplying & Dividing (Chapter 3)

- *Multiply whole numbers, fractions and mixed numbers by on another*
- *Divide by a fraction or mixed number*
- *Understand and use the term reciprocal*

Topic 26   Probability 2 (Chapter 2)

- *Calculate the probability of an event **not** happening*
- *Draw a possibility space*
- *Use a possibility space to calculate probabilities*
- *Discuss the use of probability in the media*

Topic 27   Algebra – Formulae (Chapter 10)

- *Multiply out brackets, including negative terms*
- *Construct and use simple algebraic formulae*
- *Work out the formulae for a sequence*
- *Understand the idea of nth term*
- *Use Excel to generate sequences*

Topic 28   Scattergraphs (Chapter 8)

- *Draw a scattergraph*
- *Draw line of best fit and understand what it means*
- *Understand and recognise the different types of correlation*

Topic 29   Fractions & Percentages (Chapter 4)

- *Find fractions and percentages of quantities*
- *Write one quantity as a fraction of another*
- *Change between percentages, decimals and fractions*
- *Perform calculations involving percentage change*

It is also expected that you will know all of your Year 8 work. As well as using your jotters and homeworks for revision, there are several green pages in the text book which provide summary exercises that can be used at the end of certain chapters. MyMaths is another very useful resource – it will provide you with worked examples and extra questions to try on each topic that you have studied this year.