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| **Ch** | **Topic** | **Course Tasks** | **Key Skills** | **Experiences & Outcomes** |
| **13** | **Length, Area, Volume & Weight**  **Pages 113-144** |  | Estimate and measure :-  • weights in g and kg,  • volumes in ml and litres  • areas in cm2 and m2 .  Use a ruler to draw and measure in cm and mm.  Be familiar with units of length, weight, area and  volume.  Convert from one unit to another :-  • 550 cm = 5·5 m.  • 4.05 litres = 4050 ml.  Solve problems involving units of length, weight, area and volume.  Find perimeter by adding lengths and area by  counting squares.  Use of formulae (rules) to find the perimeter and  area of a rectangle, square or right angled triangle.  Find the volume of cubes and cuboids by counting and use of formula.  Find volume of liquid in ml and litres.  Solve problems involving all of the above, sometimes with the use of a calculator. | *I can use my knowledge of the sizes of familiar objects or places to assist me when making an estimate of measure.*  ***MNU 2-11a***  *I can use the common units of measure, convert between related units of the metric system and carry out calculations when solving problems.*  ***MNU 2-11b***    *I can explain how different methods can be used to find the perimeter and area of a simple 2D shape or**volume of a simple 3D object.*  ***MNU 2-11c*** |
| **14** | **Coordinates**  **Pages 145-151** |  | Know the terms axes, x-axis, y-axis, horizontal and vertical axes, x-coordinate and y-cordinate.  • A point has coordinates A(3, 5).  • What is the x-coordinate of the point on  the following grid ? ....... | I can use my knowledge of the coordinate system to plot and describe the location of a point on a grid.  **MTH 2-18a** |
| **15** | **Patterns**    **Pages 152-159** |  | Recognise number patterns involving multiples :-  eg 2, 4, 6, 8, ...., .....,  50, 45, 40, ...., .....,  Describe and continue more complex sequences :- • 58, 44, 30, ....., .....,  • 1, 1, 2, 3, 5, 8 ....., .....,  Describe and continue sequences involving square and triangular numbers.  Linear Patterns - from a diagram or table, be able  to describe it in words.  e.g. Bars = 3 x Posts – 3.  Apply the rule to extend or find a particular value  for the pattern. | Having explored more complex number sequences, including well-known named number patterns, I can explain the rule used to generate the sequence, and apply it to extend the pattern.  **MTH 2-13a** |
| **16** | **3-Dimensions**  **Pages 160-167** |  | Know the names and properties of 3D shapes  Know how their surfaces are created and what shapes are used to make them.  Recognise/pick out these 3D shapes in the real world.  Draw 2D representations of 3D shapes on plain,  squared or isometric paper. | Having explored a range of 3D objects and 2D shapes, I can use mathematical language to describe their properties, and through investigation can discuss where and why particular shapes are used in the environment.  **MTH 2-16a**  I can draw 2D shapes and make representations of 3D objects using an appropriate range of methods and efficient use of resources.  **MTH 2-16c** |
| **17** | **Multiples & Factors**  **Pages 168-172** |  | Write multiples of numbers.  • 6, 12, 18, 24 are first four multiples of 6. (excl.0)  Write factors of numbers.  • 1, 2, 4, 8 are factors of 8. | Having explored the patterns and relationships in multiplication and division, I can investigate and identify the multiples and factors of numbers.  **MTH 2-05a** |
| **18** | **Statistics**  **Pages 173-187** |  | Answer questions relating to graphs. Bar graphs, line graphs, simple pie charts. (1/2, 1/3’, 1/4’, 1/6’, 1/8’)ths.  Recognise that some information presented in real life charts can be deliberately misleading :-  e.g. bar charts where columns do not start at zero.  Carry out a survey, either individually or as part of a group and collate the findings in a well organised way.  Discuss how the survey was carried out and discuss the results of the survey in an appropriate manner.  Display the results of a survey done individually or as a group, using tables, databases, spreadsheets, bar graphs, line graphs, or simple pie-charts. - possibly with the aid of a computer. | *Having discussed the variety of ways and range of media used to present data, I can interpret and draw conclusions from the information displayed, recognising that the presentation may be misleading.*  ***MNU 2-20a***  *I have carried out investigations and surveys, devising and using a variety of methods to gather information and have worked with others to collate, organise and communicate the results in an appropriate way.*  ***MNU 2-20b***  I can display data in a clear way using a suitable scale, by choosing appropriately from an extended range of tables, charts, diagrams and graphs*,* making effective use of technology.  **MTH 2-21a** |