|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ch** | **Topic** | **Course Tasks** | **Key Skills** | **Experiences & Outcomes** |
| **13** | **Measurement**  **Pages 127-130** |  | 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** | **Patterns**  **Pages 131-141** |  | 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** |
| **15** | **Coordinates**    **Pages 142-145** |  | 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 / MTH 3-18a** |
| **16** | **3-Dimensions**  **Pages 146-155** |  | Recognise and draw nets of some 3D objects - cube, cuboid, cylinder, cone, pyramid, triangular prism.  Create skeletons of simple 3D shapes using wire, straw or rolled up 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**  Through practical activities, I can show my understanding of the relationship between 3D objects and their nets.  **MTH 2-16b**  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** | **Statistics**  **Pages 156-159** |  | 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** |
| **18** | **Probability**  **Pages 160-163** |  | By experimentation or from given data, be able to  predict how “likely” an event will occur.  Simple chance (probability) using fractions could  be introduced here regarding events such as :-  • tossing a coin.  • rolling a six-sided die.  • picking a card - colour, spade, ace etc.  • choosing counters from a bag. | *I can conduct simple experiments involving chance and communicate my predictions and findings using the vocabulary of probability.*  ***MNU 2-22a*** |