ACP Learning Outline - Mathematics

Unit 8 - Statistics		
Learning Aim (WALT)	**Activities**	**Learning Outcome (WILF)**
Collect and sort data	- 10Ticks L3-6 p45 - 10Ticks L6-6 p3-6 - Home Learning year 3 Statistics pages 1,2 - MyMaths (data) – collecting data (types of data, sampling, questionnaires) - MyMaths (data) – presenting data (sorting)	• Sort and classify objects using 1 criterion (E1) • Sort and classify information using more than 1 criteria (E2) • Collect information by survey (E2) • Extract numerical information from lists, tables and charts (E3) • Identify different types of data (L1) • Evaluate questionnaires and create appropriate questions to collect data (L1) • Organise data using Stem&Leaf diagrams (L1) • Use sampling to interpret population data (L1) • Organise data in groups (L1)
Record and Identify Information	- 10Ticks L3-6 p40 -Home Learning year 3 Statistics pages 3-11 -MyMaths (data) – presenting data (lists and tables, 2way tables, grouping data,	• Interpret and draw conclusions from a list or group of objects (E1) • Record results in lists, tally charts and tables (E2) • Complete tally charts and frequency tables from a list of results (E3) • Record data in groups (L1)
Represent and interpret information graphically	- 10Ticks L3-6 p40-44 -10Ticks L4-6 p3-16, 17-22 -10Ticks L5-6 p7-14, 19-24 -10Ticks L6-6 p9-10, 11-14 -10Ticks L7-6 p35-36, 39-42 -Home Learning year 2 Statistics pages 2,4,5 -MyMaths (data) – presenting data (introducing data, bar charts, pictograms, line graphs, pie charts, cumulative frequency)	• Construct and interpret simple line graphs (E1) • Construct and interpret pictograms where one picture represents one item (E2) • Construct and interpret bar charts with vertical axes scales in ones or twos (E3) • Construct and interpret pictograms where one picture represents multiple items (E3) • Construct pie charts (L1) • Construct cumulative frequency graphs (L1) • Identify continuous and discrete data sets (L2)

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Compare and analyse results	- Home Learning year 2 Statistics pages 3,6 - MyMaths (data) – presenting data (scatter graphs, box plots, histograms) - 10Ticks L6-5 p5-8, 9-10 - 10Ticks L7-1 p 31-34	• Interpret simple tables, diagrams, lists and charts (E2) • Compare 2 or more diagrams (E3) • Solve 2 step problems based on statistical information (E3) • Use scatter graphs to compare data items (L1) Compare and analyse grouped data using box plots and histograms (L2)
Probability	- MyMaths (data) – presenting data (tree diagrams) - MyMaths (data) – probability (all relevant to level) - 10Ticks L3-6 p45,46 - 10Ticks L4-6 p27-39 - 10Ticks L5-1 p39-42 - 10Ticks L6-6 p22,23 - 10Ticks L7-1 p3-18	• Identify probability using words and probability scale (E2) • List possible outcomes using sample space diagrams (E3) • • Calculate simple probable outcomes (E3) • Represent outcomes using venn diagrams (E3) Represent multiple or successive outcomes using tree diagrams (L1)
Averages	- MyMaths (data) – processing data (all topics) - 10Ticks L4-6 p23-26 - 10Ticks L5-6 p3-6 - 10Ticks L7-6 p33-34, 37-38	• Identify mode and range (E1) • Sort data and identify median values (E2) • Calculate mean from lists of numbers (E3) • Calculate averages and range from tabulated data (L1) • Estimate values from grouped data in tables (L1) Analyse trend using rolling/moving averages (L1)
Progress Check	*Reviewing progress activities – complete the appropriate tasks below* - mark and record score – gap analysis for topics (RAG) ready for when we return and review the learning area in subsequent years. *1.* **GCSE 1-2 & Entry Level – Statistics & Probability** – complete assignment paper A - *2.* **GCSE 3-5 & Functional Skills - Probability** a) Basic Probability d) Relative Frequency b) Finding Outcomes e) Venn Diagrams – grade 4 c) Mixed questions 1 & 2 f) Tree Diagrams – grade 4 ***3.*** **GCSE 3-5 & Functional Skills - Statistics** a) Mean, mode, median, range f) stem & leaf diagrams b) Pictograms g) Averages from frequency tables – grade 4 c) 2-way tables h) questionnaires d) Frequency polygons i) scatter graphs – grade 4	

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	e) Collect & represent data j) averages calculations