|  |  |  |  |
| --- | --- | --- | --- |
| **Core Knowledge Map** | | | |
| Subject: **Mathematics** | Year: 10 | | Term: Spring 2 |
| What are we learning? | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Unit 8 – Handling Data** | **Spark IL**  **Code** | Sad face outline with solid fill | Nervous face outline with solid fill | Smiling face outline with solid fill | | Two-way tables | U981 |  |  |  | | Calculate mean, median & mode for discrete data | U526,U456  U260,U291 |  |  |  | | Find averages from charts and tables | U569,U854  U877 |  |  |  | | Calculate an estimate of the mean from grouped frequency tables | U569 |  |  |  | | Compare averages using charts and diagrams | U717,U981  U312 |  |  |  | | Stem and leaf diagrams | U200,U909 |  |  |  | | Which is the best average to use? | U717 |  |  |  | | Frequency polygons | U840 |  |  |  | | Histograms | U185,U814  U983,U267 |  |  |  | | Cumulative frequency and box plots | U182,U642,U879,U837  U507 |  |  |  | | | | |
| How will I be assessed | | | |
| Retrieval Tasks, Exit tickets, end of half-term test. | | | |
| Big questions: | | | |
| Can you….?   * Describe the pros and cons for using each of the mean, median and mode averages. * Explain how to find the median and IQR from a cumulative frequency curve. * Work out what percentage of the total data is less than the upper quartile. * Draw and label the main 5 features on a box plot. * Describe the difference between the range and the interquartile range. * Explain what the area of a bar in a histogram represents. | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| * Estimate of mean from grouped frequency table (Y9) * Cumulative frequency curves (Y9) * Construct Pie Charts (Y7) * Two way tables (Y8) | | * GCSE synoptic and multi-step problem solving questions. * Histograms are revisited in A-Level statistics. | |
| Core knowledge: | | Key vocabulary: | |
| * **A histogram** is used to represent grouped data with unequal class widths. | | Mean, Median and Mode  Range  Interquartile range  Discrete and Continuous Data  Histogram  Frequency Polygon  Cumulative  Box Plot  Upper and Lower quartiles | |
| Need more help? Use the Sparx Independent Learning Codes above | | | |