|  |  |  |  |
| --- | --- | --- | --- |
| **Core Knowledge Map** | | | |
| Subject: **Mathematics** | Year: 10 | | Term: Summer 1 |
| What are we learning? | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Unit 9b: Linear Graphs and Coordinate Geometry** | **Sparx IL Codes** | Sad face outline with solid fill | Nervous face outline with solid fill | Smiling face outline with solid fill | | Find the coordinates of the midpoint of a line segment from coordinates | U933 |  |  |  | | Calculate the length of a line segment given the end points. | U385 |  |  |  | | To know and use y – y1 = m(x-x1) for the equation of a straight line | - |  |  |  | | Find information from more complex diagrams using multiple steps | - |  |  |  | | | | |
| How will I be assessed | | | |
| Retrieval Tasks, Exit tickets, end of half-term test. | | | |
| Big questions: | | | |
| Can you….?   * Find the midpoint of line segment AB where A is (2,5) and B is (8, -7) * Find the length of line segment AB where A is (2,5) and B is (8, -7) * Find the equation of a line AB where A is (2,5) and B is (8, -7) * Find the y intercept of a line perpendicular to the line segment AB and passing through the midpoint of AB where A is (2,5) and B is (8, -7) | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| * Properties of parallel and perpendicular lines. * Using y = mx + c and ax + by = c to represent straight line graphs * Pythagoras’ Theorem | | * GCSE synoptic and multi-step problem solving questions. * Circle theorems and circle geometry | |
| Core knowledge: | | Key vocabulary: | |
| Equation of a straight line can also be given by**:** | | Coordinates  Midpoint  Line segment  Linear  Parallel  Perpendicular | |
| Need more help? Use the Sparx Independent Learning Codes above | | | |