



# Maths- Y10H

## MAGHULL HIGH SCHOOL – CURRICULUM MAP

| HALF TERM 6<br>June-July  | Week 1  | Week 2                 | Week 3                        | Week 4                                | Week 5             | Week 6               |  |
|---|---|------------------------|-------------------------------|---------------------------------------|--------------------|----------------------|--|
| TOPIC (S)   | Real Life Graphs  | Sketching graphs       | Revision and Assessment       | Revision and Assessment               | Mocks              | Exam Review and DIRT |  |
| Knowledge & Skills development  | <p><b>Real Life Graphs</b><br/>plot and interpret graphs in real contexts, including:</p> <ul style="list-style-type: none"> <li>reciprocal graphs</li> <li>exponential graphs</li> <li>graphs of non-standard functions</li> </ul> <p>find approximate solutions to problems such as simple kinematic problems involving distance, speed and acceleration:<br/>interpret the gradient of a straight-line graph as a rate of change</p> <p><b>Sketching Graphs</b><br/>recognise, sketch and interpret graphs of:</p> <ul style="list-style-type: none"> <li>linear functions and quadratic functions</li> <li>simple cubic functions and the reciprocal function <math>y = 1/x</math> with <math>x \neq 0</math></li> </ul> <p>Including using the symmetry of functions</p> |                        |                               |                                       |                    |                      |  |
| Assessment / Feedback Opportunities   | Topic assessments   | Self-assessment sheets | Homework (written and online) | Formative teacher assessment - verbal | Retrieval practice |                      |  |
| Cultural Capital  | <p>Graphs of real life situations<br/>Graphs to model situations<br/>Linear programming to maximise profit and minimise loss</p>  |                        |                               |                                       |                    |                      |  |
| SMSC / Promoting British Values<br>(Democracy, Liberty, Rule of Law, Tolerance & Respect) | <p>Willingness to participate in, and respond to mathematical opportunities. Use of social skills in different contexts, including working and socialising with pupils from different religious, ethnic and socio-economic backgrounds.</p>   |                        |                               |                                       |                    |                      |  |
| Reading opportunities   | <p>What's the point of maths? Murderous Maths, Marvellous Maths, Launch a rocket into space, Humble Pi.</p>   |                        |                               |                                       |                    |                      |  |
| Key Vocabulary  | <p>Graph, linear, quadratic, cubic, reciprocal, intercept, gradient, rate of change, slope, stationary, acceleration, roots, turning points, asymptotes.</p>  |                        |                               |                                       |                    |                      |  |
| Digital Literacy  | <p>Desmos, DFM, MSTEams, Geogbra.</p>   |                        |                               |                                       |                    |                      |  |
| Careers   | <p>Engineering, Business, Architecture, Building, Gaming, Banking, Economist, Statistician, Budgeting, Market Research.</p>   |                        |                               |                                       |                    |                      |  |

