Science – Y7

MAGHULL HIGH SCHOOL – CURRICULUM MAP

	Lessons Sequence					
TOPIC (S) **SPACE**	1. Scale of the solar system 2. The planets 3. The moon 4. Crater investigation		5. Other space objects 6. Mid topic assessment 7. Days and Seasons 8. The weight equation		9. Methods to explore space 10. Historical ideas about the solar system 11. Life cycle of stars 12. End of topic assessment	
Knowledge & Skills development	• Use of different scales of measurement • Planets distance from the sun linked to the conditions on each planet • Phases of the moon and the causes of eclipses • Descriptions of other space objects and how they behave • Causes of day and night and the seasons on Earth			• Using equations • Comparison and evaluation of different methods to explore space • Knowledge of different models of the solar system through time • The stages in the life cycle of different size stars		
Assessment / Feedback Opportunities	Targeted questioning throughout topic	Teacher assessment of practical skills during investigation - verbal	AWOL assessment – formative teacher assessment in students books	Mid topic assessment – formative assessment	Homework topic quiz – formative assessment	End of topic assessment – teacher summative assessment
Cultural Capital	• Possible visit to Jodrell bank or visiting guest speaker • Use of the school telescope					
SMSC / Promoting British Values (Democracy, Liberty, Rule of Law, Tolerance & Respect)	• Multinational organisations (e.g. ESA) working together on projects like the international space station • Listening to others during presentations • Working in groups during practicals or research tasks • Societal response to changing ideas about the nature of the solar system					
Reading opportunities	• News articles about recent space missions • The Planets by Professor Brian Cox and Andrew Cohen and may other related books • Various reading and comprehension activities embedded within scheme of work					
Key Vocabulary	Independent Variable, Dependent Variable, Control Variables, Method, Conclusion, Precaution, Evaluation, Reliable, Precision, Valid, Anomaly Solar System, Orbit, Satellite, Eclipse, Crater, Asteroid, Meteor, Comet, Galaxy, Universe, Constellation, Season, Earth's Axis, Mass, Gravity, Weight, Telescope, Astronaut, Probe, Heliocentric, Geocentric, Supernova, Nebula, Black Hole					
Digital Literacy	SharePoint resources including topic quiz, use of computers to research different planets Possible use of excel to plot graphs and analyse data, powerpoint, word, etc to present information, internet for research					
Cross-Curricular Links	Numeracy/Maths – averages (means), reading scales, graph plotting, lines of best fit, using and rearranging equations, using scientific calculators History – timeline of changing ideas about the structure of the solar system					
Careers	Careers with NASA or the ESA including astrophysicist, astronaut, aerospace engineer, etc. Engineers involved with satellites					