

Subject	Science
Head of Department	Miss Standing
Teaching Staff	Mr Sneyd Mrs Leitning (2nd in Department) Mrs Davies Mr Dickinson Mr Silvester Mr Robson Mrs Robson Mr Fawcett
Department Vision	<p>The Ormiston Maritime Academy Science department is committed to ensuring ALL pupils make greater than expected progress by embedding retrieval.</p> <p>We want to inspire pupils to discuss and question the world around them, to have fun and love learning science.</p> <p>We uphold the values of the Academy and encourage students to Persevere, be independent and respect the world around them</p>
How students can 'ASPIRE to Excellence' in this field	<p>Students can ASPIRE to excellence in Science by persevering when faced with challenging concepts and questions. We continually promote no-opt out with our students. They have to answer a question whether it being them supported by peers, using their books or independently using revision guides. In Science the answers are not always easy or readily available therefore, our scientists need to develop these skills. They also need to be able to respect the opinions of others and the world around them. Some of the topics we cover involve discussion on ethical issues which people have strong opinions around. We work with students on being able to listen and respect others opinions even if they are different to their own.</p>
Rationale Behind the Curriculum Chosen	<p>In Key Stage 3 we follow the National Curriculum the rationale behind this is that it provides broad and balanced scientific content that will prepare students with a understanding of basic scientific concepts for moving on into GCSE and A-level science. In respect to our Key Stage 4 curriculum, students are following the AQA curriculum. It covers a broad and balanced list of science topics which builds</p>

	seamlessly from Key Stage 3. Other Ormiston schools follow the AQA curriculum to enable to share best practice and expertise to further develop teaching, share resources where required ask for advice on assessments, revision and grade boundaries.
Possible Careers	Studying Science can open the door to careers in Science, Technology, Engineering and Maths. Science is a valuable subject to study and is very desirable in careers such as law, civil services and the food industry. More information regarding careers in science can be found here https://nationalcareers.service.gov.uk/job-categories/science-and-research

KS3

Year Group	Topics Covered	Dates of Assessments	Link to KO
Year 7	Introduction to science Medicine Astrophysics Food technology Microbiology Roller coaster engineering & Atomic engineering	01/02/20 24/05/20	

Year 8	Introduction to science Sport Science Renewable energies Forensic science Environmental sciences Electrical engineering Rollercoaster engineering Cosmetic science (from 2021)	01/02/20 24/05/20	
Year 9	Introduction to science, Waves Particles Addiction support worker, BF1, CF1, PF1 & BF2	30/11/20 19/04/20	

KS4

Course Title	AQA Combined Science: Trilogy		
Year Group	Topics Covered	Dates of Assessments	Link to KO
Year 10	<p><u>Biology Subject Content</u> Organisation Bioenergetics Inheritance, variation and evolution</p> <p><u>Chemistry subject content</u> Atomic structure and the periodic table</p>	07/12/20 Mocks wb 26/04/20 -07/05/20	

	<p>Bonding, structure, and the properties of matter Chemistry of the atmosphere</p> <p><u>Physics subject content</u> Electricity Atomic structure Waves</p>		
Year 11	<p><u>Biology Subject Content</u> Cell biology Bioenergetics Ecology Organisation Bioenergetics Inheritance, variation and evolution Homeostasis and response.</p> <p><u>Chemistry subject content</u> Atomic structure and the periodic table Energy changes Organic chemistry Chemical analysis Bonding, structure and the properties of matter Chemistry of the atmosphere Quantitative chemistry Using resources</p> <p><u>Physics subject content Energy</u> Electricity Atomic structure Forces Waves Particle model of matter Magnetism and electromagnetism</p>	<p>Mock 1 wb 19/10/20 -13/11/20</p> <p>Mock 2 wb 08/02/20-26/02/20</p>	

Extra-Curricular & Useful Websites

Extra-Curricular Opportunities	TBC
Links to Useful Websites	Key Stage 3 – https://www.bbc.co.uk/bitesize/subjects/zng4d2p Key stage 4 AQA trilogy https://www.bbc.co.uk/bitesize/examspecs/z8r997h Free Science lesson YouTube – https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3_bw https://www.senecalearning.com www.GCSEPOD.com