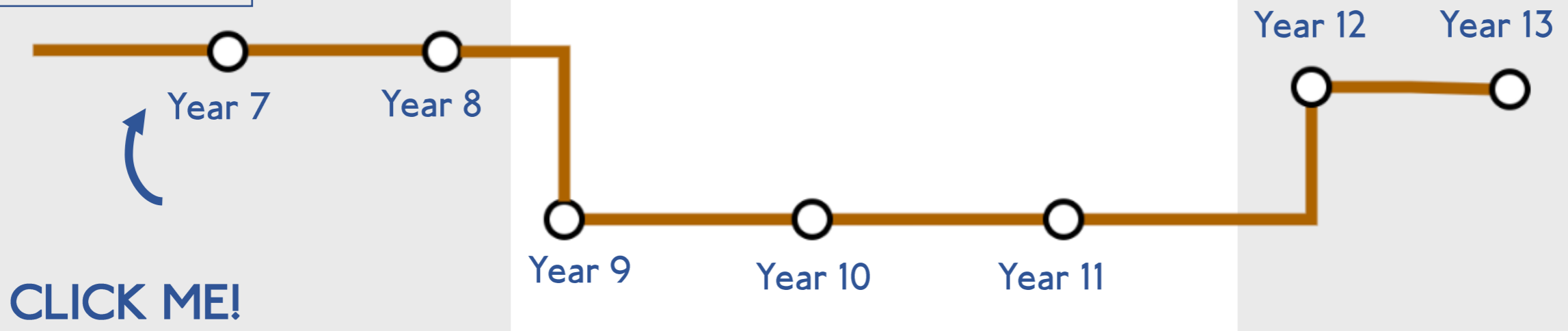


**Key**

- Geology
- Geography
- Click to see plan



# Geography & Geology Curriculum

St Thomas More High School

	Autumn Term	Spring Term	Summer Term
Topics	<p><b>What is a Geographer?</b>            Baseline test            Knowledge of the world over time            World locational knowledge            How to locate places            Using OS maps            Features on OS maps            OS maps, height, gradient and direction            How do we do fieldwork</p> <p><b>Coasts</b>            Coastal uses            Weathering            Erosion            Landforms            Transportation changing the coastline            Deposition changing the coastline            Coastal defences            Cost benefit analysis</p> <p>Trip to Southend Sea Front to complete some fieldwork, pupils will map coastal defences and land use using OS maps.</p> <p>Links to map, use these skills to apply knowledge of coasts to early fieldwork practise.</p>	<p><b>The Economy</b>            What is an economy            Farming and Manufacturing            Nissan case study            Tertiary Sector            A global economy            UK trade            Globalisation</p> <p><b>Development</b>            What is development            The global spread of money            Measuring development            Changes in development            Development within countries            Poverty            Gender inequality</p>	<p><b>The Middle East</b>            Why is the Middle East important?            Influence of physical geography            Climate issues            Middle East diverse populations            Why is the middle east a major economic region?            The United Arab Emirates            Why is Yemen so poor?            Conflict in the Middle East</p> <p>Allows us to understand the impact of the development gap, gender inequality as well as roles of different sector employment.</p> <p><b>Africa</b>            Opportunities and challenges in Africa            Physical Landscapes            Africa's past and it's present            Development in Africa            Climate and Biomes            The Sahel            China in Africa</p>
NC C	<a href="#">See National Curriculum Coverage Here</a>		
Assessment	<p>There will be a long answer question for each mid topic assessment.            End of topic assessments:            What is a Geographer – Group task and presentation            Coasts – Evaluation of fieldwork            The Economy – Test            Development – A written contrast of 2 places            The Middle East – Choice of long answer question            Africa - Test</p>		
E/L	<p>Extended learning will be set with time to complete, it will be usually research based to encourage wider reading and investigation.</p>		

	Autumn Term	Spring Term	Summer Term
Topics	<p><b>Weather and Climate</b>                      What is weather and climate                      How do we measure weather                      Recording and presenting data                      Clouds and rain                      Air pressure and anti cyclones                      Depressions                      UK climate                      A weather enquiry</p> <p><b>Populations</b>                      Changing populations                      Where do people live                      Population structures                      Controlling population size                      Migration                      Urbanisation                      Southampton – Case study</p>	<p><b>Russia</b>                      Physical Landscape of Russia                      Climate                      Biomes                      Where do people live                      Conflict in Russia                      Soviet Union and Chernobyl                      Introducing GIS</p> <p>Case study allows us to improve locational knowledge whilst connecting weather and climate to location, populations and barriers to development.</p> <p><b>Rivers</b>                      The water cycle                      Erosion, transportation and deposition                      Source to mouth                      Landforms                      Impacts on people                      Flooding                      Flood management</p>	<p><b>Asia</b>                      Monsoon                      Floods                      Mountains                      Population structure                      Urbanisation in Karnataka                      China’s economic growth                      Asia and Trade                      Zero Coronavirus in China.</p> <p>Case study allows us to revisit weather and climate (monsoons) plus populations and development. Coronavirus is a relevant significant topic too.</p> <p><b>Climate Change</b>                      The future of the planet                      Climate change evidence                      Causes                      Consequences                      Consequences for the UK                      Antarctica</p> <p>This theme of climate change will run throughout all topics.</p>
NCC	<a href="#">See National Curriculum Coverage Here</a>		
Assessment	There will be a long answer question for each mid topic assessment. End of topic assessments: Weather and Climate – Enquiry and presentation or written reflection Populations – Test Russia – Long answer question Rivers – Test Asia – Project Africa – Long answer question and specific promise to make positive impact.		
E/L	Extended learning will be set with time to complete, it will be usually research based to encourage wider reading and investigation.		

Rotation 1	
Topics	Earth's structure Timeline of past geological events: <i>Formation of the Earth</i> <i>First life</i> <i>Age of the dinosaurs</i> <i>Extinction of the dinosaurs</i> <i>First humans</i> <i>The last ice age</i>
NCC Codes	Ch8.1 Ch8.2 <a href="#">See National Curriculum Statements</a>

Rotation 1	
Topics	Rock Cycle Geohazards: <i>Volcanoes</i> <i>Earthquakes</i> <i>Tsunamis</i>
NCC Codes w/link	Ch8.3 Ch8.4 <a href="#">See National Curriculum Statements</a>

	Autumn Term	Spring Term	Summer Term
Topics	<p><b>The Living World</b>                      Small-Scale Ecosystems                      Food Chains and Food Webs                      How does Change affect Ecosystems?                      Biomes/Global Ecosystems                      Tropical Rainforest Environments                      Climatic Characteristics                      Vegetation Characteristics                      Soil Characteristics                      Plant and Animal Adaptations                      Changing Rates of Deforestation                      Causes of Deforestation                      Impacts of Deforestation                      Value of Tropical Rainforests                      Sustainable Management of Tropical Rainforests</p> <p><b>Hot Desert Environments</b>                      Climatic Characteristics                      Vegetation Characteristics                      Soil Characteristics                      Plant and Animal Adaptations                      Biodiversity and Interdependence                      Thar Desert: Opportunities                      Thar Desert: Challenges                      Causes of Desertification                      Strategies to Reduce Desertification</p>	<p><b>Urban Issues and Challenges</b>  <b>What is urbanisation?</b>                      Rio de Janeiro:                      Opportunities                      Social, Economic and Environmental Challenges and Improvements                      Squatter Settlements                      Squatter Settlement Improvements                      Urban Change in the UK (Bristol):                      UK's Population Distribution                      Bristol as a Major UK City                      Urban Change Creating Social, Economic and Environmental Challenges                      Solutions to Social, Economic and Environmental Challenges                      Temple Quarter Regeneration Project                      Sustainable Urban Development                      Characteristics of a Sustainable Urban Settlement                      Sustainable Living in Freiburg (and other settlements)                      Sustainable Traffic Management Strategies</p>	<p><b>UK Physical Landscapes</b>                      The UK's relief and landscapes  <b>Coastal Landscapes</b>                      Wave types                      Weathering and Mass movement                      Coastal Processes                      Coastal Erosional Landforms                      Coastal Depositional Landforms                      Coastal Landforms at Swanage                      Managing Coasts Hard Engineering                      Managing Coasts Soft Engineering                      TRIP TO WALTON ON THE NAZE                      Managing Coasts Managed Retreat                      Coastal Management at Walton on the Naze</p> <p><b>River Landscapes</b>                      River and River Valley Changes                      Fluvial Processes                      River Erosion Landforms                      River Erosion and Deposition                      River Landforms on the Tees                      Factors increasing Flood Risk                      Managing Floods Hard Engineering                      Managing Floods Soft Engineering                      Managing Floods at Banbury</p>
Exam Spec	<p>AQA 1.1 &amp; 1.2 &amp; 1.3  <a href="#">AQA   GCSE   Geography   Specification at a glance</a></p>	<p>AQA 3.1 &amp; 4  <a href="#">AQA   GCSE   Geography   Specification at a glance</a></p>	<p>AQA 3.1.3.1 &amp; 3.1.3.2 &amp; 3.1.3.3  <a href="#">AQA   GCSE   Geography   Specification at a glance</a></p>
Assessment	<p>There are graded assessments after each unit covered, you will be informed of specific dates two week prior to the exam date. In Year 9 students can achieve grades ranging from WT (Working towards) to 9. They will also achieve an AtL (Attitude to Learning) score ranging from 4 up to 1. Children progress at different rates. A good AtL is the most important factor. The assessments will also be used to provide your son with individualised “DIRT” tasks to support or extend.</p>		
E/L	<p>If your son has completed his extended learning (homework) and has revised and reviewed his work, we also provide Extended Learning Challenges. These can be found in his Geography Teams resources. They should be completed and returned to his class teacher. These challenges are designed to engage the boys in activities that will stimulate and extend. He will be recognised for his efforts with a school certificate.</p>		

	Autumn Term	Spring Term	Summer Term
Topics	<p><b>Changing Economic World</b>  <b>The Development Gap</b>                      Inequality in the World                      Measuring Development                      The Demographic Transition Model                      Changing Population Structure (pop pyramids)                      Causes of uneven development                      Uneven Wealth and Health                      Uneven Migration                      Reducing the development gap.                      Aid and intermediate technology                      Fair Trade                      Debt Relief                      Tourism (Jamaica)                      Skills Throughout</p>	<p><b>Changing Economic World</b>  <b>Nigeria an NEE</b>                      Location and Importance                      Political, social, cultural and environmental context                      Nigeria and the wider world                      Changing Industrial Structure                      Transnational corporations                      Impacts of aid                      Environmental Issues                      Quality of Life  <b>Changing Economic World</b>  <b>The UK a HIC</b>                      Changes in UK economy                      Post industrial economy                      UK science and business parks                      Environmental impacts of industry                      Changing rural landscapes in UK                      Changing Transport infrastructure                      The North South Divide                      The UK in the wider world</p>	<p><b>Fieldwork</b>                      Intro to fieldwork                      Trip to the Peak District                      Investigating river processes in the river Dove.                      Investigating success of regeneration in Sheffield.                      Primary data collection                      Data presentation                      Analysis and conclusions                      Evaluations                      Exam practise.</p>
Exam	<p><a href="#">AQA   GCSE   Geography   Specification at a glance</a>                      AQA 3.4 &amp; 3.2.2</p>	<p><a href="#">AQA   GCSE   Geography   Specification at a glance</a>                      AQA 3.4 &amp; 3.2.2</p>	<p><a href="#">AQA   GCSE   Geography   Specification at a glance</a>                      AQA 3.4 &amp; 3.3.2</p>
Assessment	<p>There are graded assessments after each unit covered, you will be informed of specific dates two week prior to the exam date. In Year 10 students can achieve grades ranging from WT (Working towards) to 9. They will also achieve an AtL (Attitude to Learning) score ranging from 4 up to 1. Children progress at different rates. A good AtL is the most important factor. The assessments will also be used to provide your son with individualised “DIRT” tasks to support or extend.</p>		
E/L	<p>If your son has completed his extended learning (homework) and has revised and reviewed his work, we also provide Extended Learning Challenges. These can be found in his Geography Teams resources. They should be completed and returned to his class teacher. These challenges are designed to engage the boys in activities that will stimulate and extend. He will be recognised for his efforts with a school certificate.</p>		

	Autumn Term	Spring Term	Summer Term
Topics	<p><b>The Challenge of Natural Hazards</b> What are Natural Hazards</p> <p><b>Tectonic Hazards</b> Distribution of earthquakes and volcanoes Physical processes at plate margins Effects of Earthquakes Responses to Earthquakes Living with risk. Reducing the risk</p> <p><b>Weather Hazards</b> Global atmospheric Circulation Formation of tropical storms Structure and Features of tropical storms Typhoon Haiyan Reducing effects of tropical storms UK weather hazards Somerset Floods Extreme Weather in the UK</p>	<p><b>The Challenge of Natural Hazards</b></p> <p><b>Climate Change</b> Evidence for climate change. Natural causes of climate change Human causes of climate change Managing Climate change impacts Risk from rising Sea levels</p> <p><b>The Challenge of Resource Management</b> The global distribution of resources Provision of food in the UK Provision of water in the UK Provision of Energy in the UK</p>	<p><b>Food Management</b> Global food supply Impact of food insecurity Increasing food supply The Indus Basin Irrigation System Sustainable food production Exam practise</p>
Exam Spec w/link	<p><a href="#">AQA   GCSE   Geography   Specification at a glance</a> AQA 3.1.1</p>	<p><a href="#">AQA   GCSE   Geography   Specification at a glance</a> AQA 3.1.1 &amp; 3.2.3</p>	<p><a href="#">AQA   GCSE   Geography   Specification at a glance</a> AQA 3.2.3</p>
Assessment	<p>There are graded assessments after each unit covered, you will be informed of specific dates two week prior to the exam date. In Year 11 students can achieve grades ranging from WT (Working towards) to 9. They will also achieve an AtL (Attitude to Learning) score ranging from 4 up to 1. Children progress at different rates. A good AtL is the most important factor. The assessments will also be used to provide your son with individualised “DIRT” tasks to support or extend.</p>		
E/L	<p>If your son has completed his extended learning (homework) and has revised and reviewed his work, we also provide Extended Learning Challenges. These can be found in his Geography Teams resources. They should be completed and returned to his class teacher. These challenges are designed to engage the boys in activities that will stimulate and extend. He will be recognised for his efforts with a school certificate.</p>		



	Autumn Term	Spring Term	Summer Term
Topics	<p><i>Human and physical topics running side by side.</i></p> <p><b>Contemporary Urban Environments</b></p> <p>Patterns of urbanisation since 1945 Urban Forms Social and economic issues associated with urbanisation Urban Climate Urban Drainage Urban Waste and disposal</p> <p><b>Coastal Systems and Landscapes</b></p> <p>Introduction to coastal systems and landscapes Systems and processes in coastal environments Coastal Landscape development Coastal management Quantitative and qualitative skills in coastal landscapes</p>	<p><i>Human and physical topics running side by side.</i></p> <p><b>Contemporary Urban Environments</b></p> <p>Urban environmental issues Sustainable urban development Case study info London and Mumbai</p> <p><b>Changing Places</b></p> <p>The nature and importance of places Relationships and connections Meaning and representation The use of quantitative and qualitative sources</p> <p><b>Hazards</b></p> <p>The concept of a hazard in geographical context Plate Tectonics Volcanic Hazards Seismic Hazards Seismic Event</p>	<p><i>Human and physical topics running side by side.</i></p> <p><b>Changing Places</b></p> <p>Place studies Brick Lane and Southend</p> <p><b>Hazards</b></p> <p>Storm hazards Tropical Storm Events Fires in nature Wildfire event Multi-hazard event</p> <p><b>NEA</b></p> <p>Introduction Proposal forms Literature Review and Justification</p>
Exam Spec	<p><a href="http://www.aqa.org.uk">Geography 7037 A-level Specification Specification for first teaching in 2016 (aqa.org.uk)</a> AQA A LEVEL 3.2.3 &amp; 3.1.3</p>	<p><a href="http://www.aqa.org.uk">Geography 7037 A-level Specification Specification for first teaching in 2016 (aqa.org.uk)</a> AQA A LEVEL 3.2.3 &amp; 3.2.2 &amp; 3.1.5</p>	<p><a href="http://www.aqa.org.uk">Geography 7037 A-level Specification Specification for first teaching in 2016 (aqa.org.uk)</a> AQA A LEVEL 3.2.2 &amp; 3.1.5 &amp; 3.3</p>
Assessment	<p>Year 12 will complete exam questions throughout the course which will provide us with an understanding of their respective levels, there will also be a small test at the end of each topic. There will be an assessment opportunity at the end of year 12. Year 12 grades will be from a U to an A.</p>		
E/L	<p>The A level topics require extensive working outside of the classroom, research into each topic can be completed through the reading of journals and books as well as links and articles provided by the teacher.</p>		

	Autumn Term	Spring Term	Summer Term
Topics	<p><b>NEA</b> Data collection Data presentation</p> <p><b>Global Systems and Governance</b> Globalisation Global systems International trade and access to markets Transnational corporations</p> <p><b>Water and Carbon Cycles</b> Systems framework and their application The water cycle The carbon cycle</p>	<p><b>NEA</b> Analysis Evaluation</p> <p><b>Global Systems and Governance</b> Global governance The ‘global commons’ Antarctica as a global common Globalisation critique</p> <p><b>Water and Carbon Cycles</b> Water, carbon, climate and life on earth Water and carbon in the Amazon</p>	<p><b>NEA</b> Time to finalise NEA</p> <p>Exam practise.</p> <p>Skills including cartographic, statistical, ICT</p>
Exa	<p><a href="http://www.aqa.org.uk">Geography 7037 A-level Specification Specification for first teaching in 2016 (aqa.org.uk)</a> AQA 3.3 &amp; 3.2.1 &amp; 3.1.1</p>	<p><a href="http://www.aqa.org.uk">Geography 7037 A-level Specification Specification for first teaching in 2016 (aqa.org.uk)</a> AQA 3.3 &amp; 3.2.1 &amp; 3.1.1</p>	<p><a href="http://www.aqa.org.uk">Geography 7037 A-level Specification Specification for first teaching in 2016 (aqa.org.uk)</a> AQA 3.3 &amp; 3.3.1 &amp; 3.4</p>
Assesse	<p>Year 13 will complete exam questions throughout the course which will provide us with an understanding of their respective levels, there will also be a small test at the end of each topic. There will be assessed through 2 A level exams (40% each) and their NEA (20%). Year 13 grades will be from a U to an A*.</p>		
E/L	<p>The A level topics require extensive working outside of the classroom, research into each topic can be completed through the reading of journals and books as well as links and articles provided by the teacher.</p>		

	Autumn Term	Spring Term	Summer Term
Topics	<p><b>F1: Elements, Minerals and Rocks</b>  <i>Key Idea 1: The Earth is composed of rocks which have distinctive mineralogies and textures</i></p> <p><b>F2: Surface and internal processes of the rock cycle</b>  <i>Key Idea 1: The mineralogy and texture of sedimentary rocks are the results of the surface process part of the rock cycle, driven by external energy sources</i>  <i>Key Idea 2: The formation and alteration of igneous and metamorphic rocks result from the Earth's internal energy</i></p> <p><b>F4: Earth Structure and Global Tectonics</b>  <i>Key Idea 1: The Earth has concentrically zoned structure and composition</i></p>	<p><b>F2: Surface and internal processes of the rock cycle</b>  <i>Key Idea 3: Deformation results when rocks undergo permanent strain in response to applied tectonic stresses and can be interpreted using geological maps</i></p> <p><b>F3: Time and change</b>  <i>Key Idea 1: Study of present day processes and organisms enables understanding of changes in the geological past.</i>  <i>Key Idea 2: Geological events can be placed in relative and absolute time scales</i></p> <p><b>F4: Earth Structure and Global Tectonics</b>  <i>Key Idea 2: The Earth's internal heat is the underlying cause of lithospheric plate motions that control global geological processes.</i></p>	<p><b>T1: Geohazards</b>  <i>Key Idea 1: Natural geohazards have a worldwide impact on human populations including in the British Isles.</i>  <i>Key Idea 2: Geohazard management attempts to predict and manage hazardous geological events with only limited success.</i>  <i>Key Idea 3: Engineering activities can have a major impact on the natural environment</i></p> <p><b>G1: Rock Forming Processes</b>  <i>Key Idea 1: The generation and evolution of magma involves different processes</i>  <i>Key Idea 2: The mineralogy and texture of metamorphic rocks are determined by the composition of the parent rock and the conditions of metamorphism</i>  <i>Key Idea 3: Sedimentary processes can be understood using scientific modelling</i></p> <p><b>Fieldwork</b>  <i>Isle of Arran field trip</i></p>
Exam Spec w/link	<p>F1: KI1                      F2: KI1                      F2: KI2                      F4: KI1  <a href="#">AS and A Level Geology   Edugas</a></p>	<p>F2: KI3                      F3: KI1                      F3: KI2                      F4: KI2  <a href="#">AS and A Level Geology   Edugas</a></p>	<p>T1: KI1                      T1: KI2                      T1: KI3                      G1: KI1                      G1: KI2                      G1: KI3  <a href="#">AS and A Level Geology   Edugas</a></p>
Assessment	<p>At the end of each topic (for example F2) there is a formalised end of topic test which will be used to determine working at grades on reports.                      At the end of each key idea there will be a small informal multiple-choice test.                      In January and June there will be formal mock exams.</p>		
E/L	<p>Each week students will be given a scientific paper to read. At the end of the term students will be expected to give a 5-minute presentation on one of the papers provided that term. This is in addition to any extended learning set by individual teachers.</p>		

	Autumn Term	Spring Term	Summer Term
Topics	<p><b>G2: Rock Deformation</b>  <i>Key Idea 1: Geological structures are formed when rock material undergoes deformation</i></p> <p><b>G3: Past life and past climates</b>  <i>Key Idea 1: Fossils provide evidence for the increasing diversity of life through geological time</i>  <i>Key Idea 2: A combination of global factors contributes to global climate change through geological time</i></p> <p><b>G4: Earth materials and natural resources</b>  <i>Key Idea 1: Geological processes lead to the concentration and accumulation of natural resources in deposits that can be exploited; economic deposits can be concentrated by igneous and sedimentary processes</i>  <i>Key Idea 2: Permeable rocks offer pathways for oil and gas migration; highly porous rocks can act as natural reservoirs for underground supplies of oil and gas</i></p>	<p><b>G3: Past life and past climates</b>  <i>Key Idea 3: Evidence for global climate change is interpreted from the geological record and the geochemistry of rocks</i></p> <p><b>T2: Geological map applications</b>  <i>Key Idea 1: Outcrop patterns on geological maps can be used to identify and interpret structural elements</i>  <i>Key Idea 2: Geological maps contain information relevant to a wide range of geological applications</i></p> <p><b>T5: Geology of the lithosphere</b>  <i>Key Idea 1: The Earth's heat loss leads to cooling and the development of a strong outer shell (lithosphere) underlain by a layer of lower strength (asthenosphere).</i>  <i>Key Idea 2: Oceanic lithosphere is formed at divergent plate boundaries and reabsorbed by subduction at convergent plate boundaries</i>  <i>Key Idea 3: A wide range of lithospheric processes contributed to the formation of continental crust</i></p>	<p><b>Practical Endorsement</b>  <i>Ensuring completion of all requirements of the practical endorsement.</i></p> <p><b>Statistics</b>  <i>Chi squared test</i>  <i>Mann-Witney U test</i>  <i>Spearman's rank</i></p>
Exam Spec w/link	<p>G2: KI1                      G3: KI1                      G3: KI2                      G3: KI3                      G4: KI1                      G4: KI2</p> <p><a href="#">AS and A Level Geology   Edugas</a></p>	<p>G3: KI3                      T2: KI1                      T2: KI 2                      T5: KI1                      T5: KI2                      T5: KI3</p> <p><a href="#">AS and A Level Geology   Edugas</a></p>	<p>Subject Content                      Appendix C  <a href="#">AS and A Level Geology   Edugas</a></p>
Assessment	<p>At the end of each topic (for example F2) there is a formalised end of topic test which will be used to determine working at grades on reports.</p> <p>At the end of each key idea there will be a small informal multiple-choice test.</p> <p>In January and June there will be formal mock exams.</p>		
E/L	<p>Each week students will be given a scientific paper to read. At the end of the term students will be expected to give a 5-minute presentation on one of the papers provided that term. This is in addition to any extended learning set by individual teachers.</p>		