

## WJEC GCSE Geology – 3-Year Curriculum Intent (5-Term Model)

| Term  | Intent   | Implementation  | Impact   |
|---|--|---|--|
| TERM 1 –<br>Foundations: Earth,<br>Minerals & Rock<br>Cycle             | <ul style="list-style-type: none"> <li>• Build foundational knowledge of Earth materials and structure.</li> <li>• Develop core mineral/rock ID skills.</li> <li>• Establish the rock cycle as the central conceptual thread.</li> </ul> | <ul style="list-style-type: none"> <li>• Teaching on Earth structure &amp; minerals.</li> <li>• Practical mineral/rock identification.</li> <li>• Introductory field skills and vocabulary building.</li> </ul> | <ul style="list-style-type: none"> <li>• Confident rock &amp; mineral identification.</li> <li>• Clear grasp of rock cycle processes.</li> <li>• Strong baseline practical skillset.</li> </ul>  |
| TERM 2 – Igneous,<br>Sedimentary &<br>Metamorphic Rocks                 | <ul style="list-style-type: none"> <li>• Deepen understanding of formation environments.</li> <li>• Build interpretation skills using textures &amp; structures.</li> </ul>  | <ul style="list-style-type: none"> <li>• Rock labs &amp; logging.</li> <li>• Thin-section and photo interpretation.</li> <li>• Regular low-stakes assessments.</li> </ul>                                       | <ul style="list-style-type: none"> <li>• Accurate classification &amp; interpretation of rock types.</li> <li>• Strong explanatory writing and analytical thinking.</li> </ul>                   |
| TERM 3 – Tectonics,<br>Volcanoes,<br>Earthquakes &<br>Surface Processes | <ul style="list-style-type: none"> <li>• Understand dynamic Earth processes &amp; hazards.</li> <li>• Develop structural geology skills.</li> </ul>  | <ul style="list-style-type: none"> <li>• Teaching tectonics &amp; seismology.</li> <li>• Triangulation, fault-fold modelling.</li> <li>• Weathering/erosion experiments &amp; fieldwork.</li> </ul>             | <ul style="list-style-type: none"> <li>• Confident hazard/geodynamic explanations.</li> <li>• Ability to interpret seismograms &amp; structures.</li> <li>• Strong spatial reasoning.</li> </ul> |
| TERM 4 – Deep<br>Time, Fossils,<br>Correlation &<br>Resources           | <ul style="list-style-type: none"> <li>• Build understanding of geological time &amp; dating methods.</li> <li>• Teach fossil succession &amp; Earth</li> </ul>  | <ul style="list-style-type: none"> <li>• Fossil identification &amp; correlation tasks.</li> <li>• Radiometric decay simulations.</li> <li>• Teaching on hydrocarbons,</li> </ul>                               | <ul style="list-style-type: none"> <li>• Students correlate sequences &amp; explain deep time.</li> <li>• Strong fossil interpretation skills.</li> </ul>  |

TERM 5 – Maps,  
Engineering,  
Environmental  
Geology & Exam  
Mastery

history.

- Introduce resource geology.

- Build high-level geological map & cross-section skills.

- Apply geology to engineering/environmental contexts.

- Prepare for final assessment.

minerals & groundwater.

- Borehole/resource studies.

- Map skills, dip/strike, outcrop prediction.

- Engineering geology case studies.

- Slope/permeability testing.

- Full exam practice & structured revision.

- Understanding of resources & sustainability.

- Confident map reading & cross-section production.

- Strong problem-solving & applied geological thinking.

- High exam readiness.