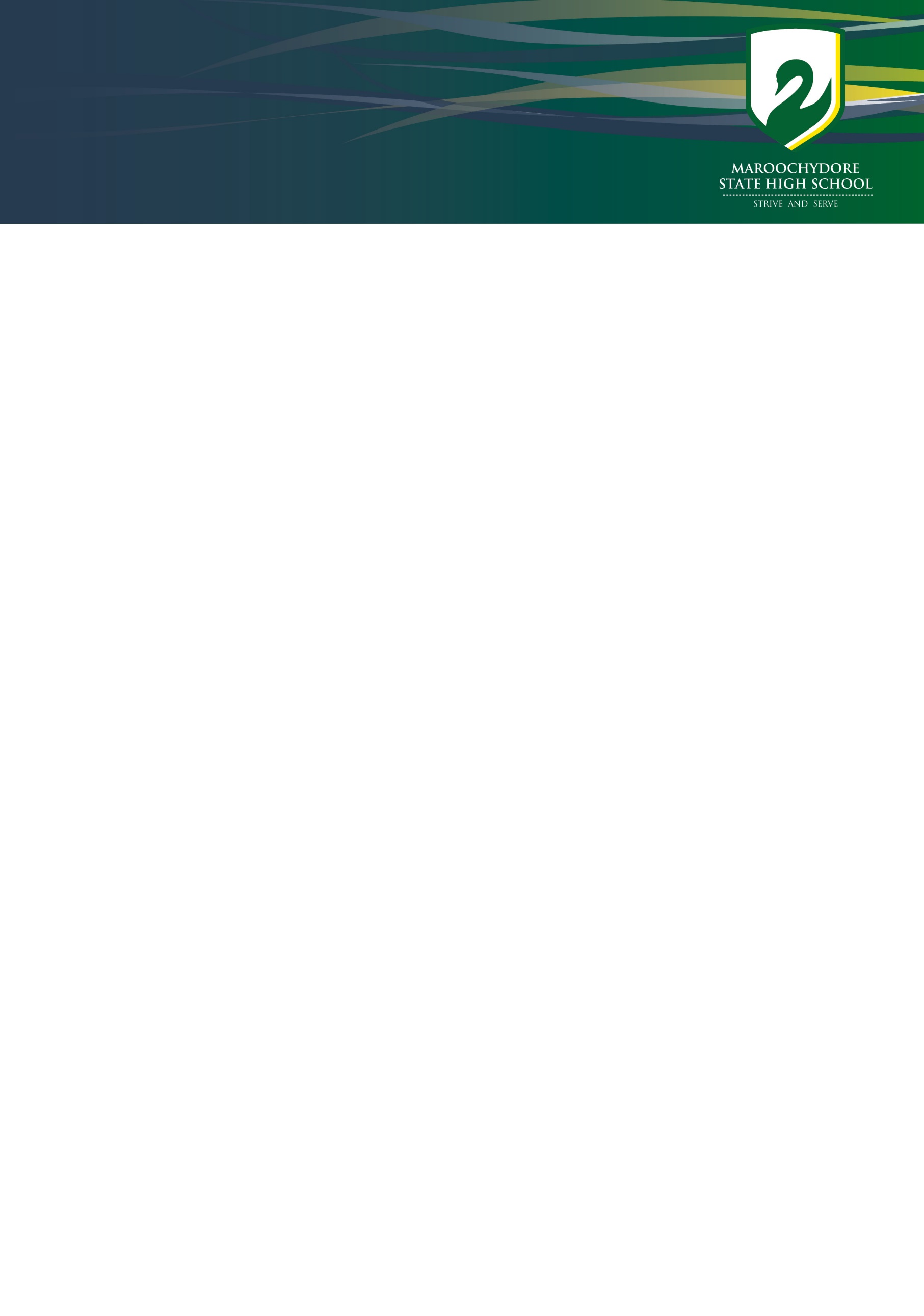


LEARNING GOALS and SUCCESS CRITERIA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year:** | | **8** | **Unit:** | **Plate Tectonics and Rocks** | |
| **Subject:** | | **Science** | **Assessment:** | **Tests: Week 4/5 and 9/10** | |
| **LG** | **LG and SUCCESS CRITERIA** | | | | **Where is this in my notebook?** |
| **1**  3 Lessons | **SC1** | I can draw a labelled diagram of the Earth’s layers. | | |  |
| **SC2** | I can describe changes that have occurred over time due to continental drift using scientific theory to justify. | | |  |
| **LG1** | **Students will be able to explain how the Earth’s structure provides evidence to support tectonic plate theory** | | |  |
| **2**  7 Lessons | **SC3** | I understand that movement at plate boundaries can be constructive and destructive. | | |  |
| **SC4** | I can identify movement at plate boundaries as convergent, divergent and transform. | | |  |
| **SC5** | I can identify and label faults and folds. | | |  |
| **SC6** | I can explain the formation of geological features at divergent and convergent plate boundaries. | | |  |
| **SC7** | I can explain why volcanoes occur at subduction zones and hot spots. | | |  |
| **LG2** | **Students will be able to identify and explain what happens at plate boundaries.** | | |  |
| **3**  2 Lessons | **SC8** | I can identify the impacts of plate movements on human populations. | | |  |
| **SC9** | I can examine solutions to reduce impacts of plate movement on human populations e.g detection technology and engineering solutions. | | |  |
| **LG3** | **Students will be able to evaluate the impacts of tectonic events to human populations.** | | |  |
| **4**  5 Lessons | **SC10** | I can distinguish the difference between a mineral and a rock | | |  |
| **SC11** | I can define the key terms of the rock cycle – weathering, erosion, deposition, compaction, cementation, melting, crystallisation, heat, pressure, uplift | | |  |
| **SC12** | I can construct a labelled diagram of the rock cycle | | |  |
| **SC13** | I can describe the role of weathering, erosion and deposition in the formation of sedimentary rocks | | |  |
| **SC14** | I can describe the role of heat and pressure in the formation of metamorphic rocks | | |  |
| **SC15** | I can describe the role of cooling and uplift in the formation of igneous rocks | | |  |
| **LG4** | **Students will be able to describe the key processes of the rock cycle** | | |  |
| **5**  4 Lessons | **SC16** | I can use a dichotomous key to identify and compare rock types based on their observable properties | | |  |
| **SC17** | I can distinguish between extrusive and intrusive igneous rocks (crystal size, location) | | |  |
| **SC18** | I can examine fossil evidence to predict how and when a sedimentary rock was formed (body, trace and opalized) | | |  |
| **SC19** | I can explain how the properties of rocks determine their use e.g. sandstone, coal, pumice, marble | | |  |
| **LG5** | **Students will understand how the formation and properties of igneous, sedimentary and metamorphic rocks influence their use** | | |  |
| **6**  3 Lessons | **SC20** | I can identify the key ores and minerals mined in Australia (coal, gold) | | |  |
| **SC21** | I can explore First Nation uses of rocks | | |  |
| **SC22** | I can investigate how First Nation people used quarrying to produce everyday objects | | |  |
| **SC23** | I can explain how mining impacts local environments and the importance of rehabilitation | | |  |
| **SC24** | I can explain the uses of rocks based on their mineral properties | | |  |
| **LG5** | **Students will recognise that mining of rocks and minerals provide valuable resources** | | |  |



**STUDENT UNIT PLANNER**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year Level:** | | | 8 | | Student checklist: 🗹 when you know… | |
| **Subject:** | | | Science | | Assessment due dates  The learning goals and success criteria for this term  Changes to routines e.g. excursions  When assessment practice lessons will occur (exemplars)  When revision lessons will occur | |
| **Term/Year:** | | | 3 / 2023 | |
| **Unit Title:** | | | Plate Tectonics and Rocks | |
| **Assessment:** | | | 2 online exams | |
| **Key Resource:** | | |  | |
| **Student Achievement:**  Last unit I achieved a \_\_\_\_\_\_\_\_result. At the end of this unit, I am aiming to achieve a \_\_\_\_\_\_\_\_ result. | | | | | | |
| **WK** | **Wk. Beg** | **Holidays or variations this week** | **Lesson 1** | **Lesson 2** | | **Lesson 3** |
| 1 | 10 Jul. 23 |  | **LG 1: SC 1**   * Introduction to Earth Structures – layers of the Earth | **LG 1: SC 2**   * Tectonic Plates and Wegener’s Theory | | **LG 1: SC 2**   * Tectonic Plates and Convection |
| 2 | 17 Jul. 23 |  | **LG 2: SC 3, 4 & 6**   * Plate Movement * Divergent | **LG 2: SC 3, 4 & 6**   * Plate movement * Convergent and Transform | | **LG 2: SC 5**   * Plate movement * Folds and Faults |
| 3 | 24 Jul. 23 |  | **LG 2: SC 7**   * Plate movement * Volcanoes | **LG 2: SC 7**   * Plate movement and Impacts   – Volcanoes | | **LG 2: SC 7**   * Plate movement – Mountain formation |
| 4 | 31 Jul. 23 |  | **LG 2: SC 3 LG 3: SC 8&9**   * Plate movement and Impacts * Earthquakes | **LG 3: SC 9**   * Plate movement and Impacts * Earthquakes | | * Revision |
| 5 | 7 Aug. 23 |  | * EXAM | **LG 4: SC 10 & 12**   * Minerals vs Rocks and the Rock Cycle | | **LG 4: SC 10,12 &15 LG5 : SC16**   * Igneous Rocks |
| 6 | 14 Aug. 23 |  | **LG 5: SC 17**   * Igneous Rocks – Intrusive vs Extrusive | **LG 4: SC 11 & 13**   * Weathering and Erosion | | **LG 4: SC 13**   * Sedimentary Rocks |
| 7 | 21 Aug. 23 |  | **LG 5: SC 18**   * Fossilisation – geological time scale | **LG 5: SC 18**   * Fossilisation – Sedimentary Rocks | | **LG 4: SC 14 LG5: 16, 18 & 19**   * Metamorphic Rocks |
| 8 | 28 Aug. 23 | Fri  Student free day | **LG 4: SC 11**   * Rock Cycle | **LG 6: SC 20 &24**   * Valuable mineral resources and extraction | | **LG 6: SC 23**   * Mining Ore, minerals and metals * rehabilitation |
| 9 | 4 Sep. 23 |  | **LG 6: SC 21 & 22**   * Indigenous resources | * Revision | | * Exam |
| 10 | 11 Sep. 23 |  | **END OF UNIT ACTIVITIES** | | | |