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| **Year:** | **8** | **Unit:**  | **Rock My World** |
| **Subject:** | **Science** | **Assessment:**  | **Exam – week 9/10** |
| **LG** | **LEARNING GOALS and SUCCESS CRITERIA** | **I feel confident with this…(Date/Ref)** | **I only need a little help with this** | **I can do some of this but need a lot of help** | **I don’t know this at all-yet!** |
| **1**6 Lessons | **SC1** | I can **recall** the 4 layers of the Earth and label them on a diagram |  |  |  |  |
| **SC2** | I can **describe** the main features – composition, temperature and depth – for each of the four layers of the Earth |  |  |  |  |
| **SC3** | I can **explain** the difference between rocks, minerals and non-minerals  |  |  |  |  |
| **SC4** | I can **define** the terms lustre, streak and cleavage |  |  |  |  |
| **SC5** |  I can **describe** and **classify** common minerals on the basis of their properties such as hardness, colour, lustre, cleavage and streak. |  |  |  |  |
| **LG1** | ***Students will recognise that rocks are a collection of different minerals*** |  |  |  |  |
| **2**10 Lessons | **SC6** | I can **describe** the way rocks are classified into three types – igneous, sedimentary and metamorphic |  |  |  |  |
| **SC7** | I can **describe** common features of igneous, sedimentary and metamorphic rocks  |  |  |  |  |
| **SC8** | I can **classify** types of igneous, sedimentary and metamorphic rocks based on their appearance and/or a description of how they formed.  |  |  |  |  |
| **SC9** | I can **investigate** the effect of cooling rate on crystal growth |  |  |  |  |
| **SC10** | I can **compare** the differences between extrusive and intrusive igneous rocks |  |  |  |  |
| **SC11** | I can **explain** how different types of fossils are formed and model this process |  |  |  |  |
| **SC12** | I can **explain** why fossils are found mainly in sedimentary rock |  |  |  |  |
| **SC13** | I can **interpret** a diagram of the Geological Time Scale to order fossils by how old they are  |  |  |  |  |
| **LG2** | ***Students will be able to identify a range of common rock types using a key based on observable physical and chemical properties*** |  |  |  |  |
| **3**2 Lessons**4**3Lessons | **SC14** | I can **describe** what pressure is and how it is measured |  |  |  |  |
| **SC15** | I can **differentiate** between force and pressure |  |  |  |  |
| **SC16** | I can **explain** the role of heat and pressure in the formation of rocks |  |  |  |  |
| **SC17** | I can **investigate** the effects of pressure in metamorphic rock formation using a simulation or model |  |  |  |  |
| **LG3** | ***Students will be able to consider the role of forces and energy in the formation of different types of rocks and minerals*** |  |  |  |  |
| **SC18** | I can **explain** the main processes involved in the formation of igneous, sedimentary and metamorphic rocks (weathering, erosion, deposition, sedimentation, compaction, cementation, solidification, melting, cooling) |  |  |  |  |
| **SC19** | I can **construct** a labelled diagram to **represent** the rock cycle |  |  |  |  |
| **LG4** | ***Students will be able to represent the stages in the formation of igneous, metamorphic and sedimentary rocks and give an indication of timescales involved*** |  |  |  |  |
| **5**3Lessons | **SC20** | I can **define** the terms mineral, ore, and metal.  |  |  |  |  |
| **SC21** | I can **describe** at least two basic processes for extracting metals from minerals |  |  |  |  |
| **LG5** | ***Students will recognise that some rocks and minerals, such as ores, provide valuable resources***  |  |  |  |  |