**Topic Overview: Earth Structure**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Ref | Outcome | Achieved | ☺ |
| Emerging 1 | E7ScE1.1 | Understand the earth is made up different layers. |  |  |
|  | E7ScE1.2 | Recall the uses of some rocks |  |  |
|  |  |  |  |  |
| Emerging 2 | E7ScE2.1 | Know the three rock layers inside Earth are the crust, the mantle, and the core. |  |  |
|  | E7ScE2.2 | Know there are Sedimentary, igneous and metamorphic rocks |  |  |
|  |  |  |  |  |
| Developing 3 | D7ScE3.1 | Describe how weathering can break up rocks |  |  |
|  | D7ScE3.2 | Describe how igneous and metamorphic rocks are formed |  |  |
|  |  |  |  |  |
| Developing 4 | D7ScE4.1 | Describe how weathered rocks are eroded |  |  |
|  | D7ScE4.2 | Describe how sedimentary rocks are formed |  |  |
|  |  |  |  |  |
| Securing 5 | S7ScE5.1 | Explain the differences between chemical and physical weathering |  |  |
|  | S7ScE5.2 | Explain why a rock has a particular property based on how it was formed. |  |  |
|  |  |  |  |  |
| Securing 6 | S7ScE6.1 | Identify the causes of weathering and erosion and describe how they occur. |  |  |
|  | S7ScE6.2 | Explain how the grain size of evidence for the speed of cooling |  |  |
|  |  |  |  |  |
| Mastering 7 | M7ScE7.1 | Identify circumstances that indicate fast processes of change on Earth and those that indicate slower processes. |  |  |
|  | M7ScE7.2 | Construct a labelled diagram to identify the processes of the rock cycle. |  |  |
|  |  |  |  |  |
| Mastering 8 | M7ScE8.1 | Predict what type of weathering would occur in different places. |  |  |
|  | M7ScE8.2 | Describe similarities and differences between the rock cycle and everyday physical and chemical processes. |  |  |
|  |  |  |  |  |
| Mastering 9 | M7ScE9.1 | Evaluate Werners theory |  |  |
|  | M7ScE9.2 | Predict planetary conditions from descriptions of rocks on other planets. |  |  |

**Keywords**

|  |
| --- |
| **Rock cycle:** Sequence of processes where rocks change from one type to another. |
|
| **Weathering:** The wearing down of rock by physical, chemical or biological processes. |
|
| **Erosion:** Weathering of rock and its movement by water, ice or wind (transportation). |
| **Minerals:** Chemicals that rocks are made from. |
| **Sedimentary** **rocks:** Formed from layers of sediment, and which can contain fossils. Examples are limestone, chalk and sandstone. |
|
| **Igneous rocks:** Formed from cooled magma, with minerals arranged in crystals. Examples are granite, basalt and obsidian. |
|
| **Metamorphic rocks:** Formed from existing rocks exposed to heat and pressure over a long time. Examples are marble, slate and schist. |
| **Strata:** Layers of sedimentary rock. |