

## Year 8 Science - Geology Outcomes

### Structure of Earth

1. Describe the layers that make up the Earth
2. Describe the different types of tectonic plate boundaries and how the movement of these plates has changed the Earth over time
3. Describe the types of volcanoes, their features and how each type occurs
4. Explain how convection currents work and how they affect tectonic plates
5. Describe how earthquakes occur and how humans measure the severity of earthquakes
6. Describe the different types of folds and faults, what causes them and how they change the landscape

### Weathering and Erosion

7. Describe the process of weathering including the different types
8. Describe the different ways erosion can occur

### Minerals, Rocks, Crystals

9. Describe what a mineral is
10. Describe each of the tests used to identify minerals; Moh's scale of hardness\*, colour\*, streak\*, cleavage\*, fluorescence, radioactivity, magnetic properties, double refraction, polarising effect (\* most important)
11. Describe what a rock is
12. Describe how an igneous rock forms, including the difference between intrusive and extrusive igneous rocks
13. Describe how a metamorphic rock forms
14. Describe what a crystal is and how the rate of cooling affects the formation of crystals.
15. Name and draw some common crystal shapes
16. Describe how sedimentary rocks form
17. Explain how rocks change over time using the rock cycle

### Fossils

18. Describe the four different types of fossils
19. List the required steps for a fossil to form in sedimentary rock
20. Describe how the law of super position can help to age fossils and rocks
21. Use correlation to identify fossils of similar age at different dig sites

### Soils

22. Explain the three stages of soil formation
23. List the different parts that make up soil and why each part is useful