

Learning checklist Geology

Level 4

- I know that there are different kinds of rock.
- I know how limestone is useful.
- I know that glaciers and rivers can both move rocks.
- I know that heat changes the properties of things.
- I know that there are three rock types.
- I know that some rocks form in layers.
- I know that some rocks can melt.
- I know that heat changes the type of rock.
- I know that there is a rock cycle.

Level 5

- I know the names of several rocks and how to choose rocks for particular uses.
- I know how to recognise rocks dumped by glaciers.
- I know examples of brittle materials.
- I can explain what is meant by the load of a river.
- I can describe the changes that heat causes.
- I can explain the formation of fossil fuels and how they link to the sun.
- I know what is happening to our reserves of fossil fuels and understand how we can make them last longer
- I know that there are igneous, sedimentary and metamorphic rocks.
- I know that sedimentary rocks form in layers or strata.
- I know that there are different theories of the age of the Earth.
- I know that metamorphism produces new rocks.
- I know that metamorphic rocks are often hard and shiny.
- I know that igneous rocks were once molten.
- I can describe the stages of the rock cycle.

Level 6

- I know the three types of rock and their properties
- I know that glaciated rocks can tell a story.
- I know that some rocks are brittle and can fracture.
- I know how heat produces metamorphic rocks.
- I can describe the formation of sedimentary rocks.
- I know how oil is located, extracted and transported.
- I can compare the advantages and disadvantages of a range of energy resources.
- I know the characteristics of the three rock types.
- I know that sedimentary rocks can contain fossils.
- I can describe some theories to explain the age of the Earth.
- I can explain how material is recycled in the rock cycle.

Level 7

- I know how to recognise and describe different categories of rock and how they formed.
- I know that the properties of rocks determine their uses.
- I know how pressure and heat give different metamorphic rocks.
- I understand the importance of fossils in dating rocks.
- I can identify the three rock types from descriptions.
- I know why only sedimentary rocks have fossils.
- I understand the uncertainties surrounding the age of the Earth.
- I know that metamorphic rocks have uses related to their properties.

I can distinguish between types of igneous rocks.

Level 8

I know that rocks contain clues to their formation in terms of structures and components.

I can explain the relationship between categories of rocks.

I know how to access a rock for a particular use in terms of its properties.

I understand how fossils are internal date indicators for rock formations.

I can relate the locations of metamorphic minerals to the source of the heat.