Lesson 1 –

Key points to learn:

- The Earth is made of layers.
- The crust is the thinnest layer and is made of rock.
- The mantle is a semi-molten layer below the crust. It is the thickest layer.
- At the centre of the Earth is the solid core made of iron and nickel.
- The temperature increases the closer you get to the core.

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Lesson 2 –

Key points to learn:

- The Earth's surface is made up of interlocking tectonic plates.
- Convection currents in the mantle cause the plates to move slowly.
- At plate boundaries earthquakes and volcanoes often occur.

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Lesson 3 –

Key points to learn:

- Igneous rocks are formed when magma cools down. They usually contain interlocking crystals made from minerals.
- Extrusive igneous rocks form above ground when magma cools quickly. They are made of small crystals.
- Intrusive igneous rocks form underground when magma cools slowly. They are made of large crystals.

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Lesson 4 –

Key points to learn:

- Weathering is when rocks get broken into smaller pieces.
- Physical weathering is caused by temperature changes (onion skin and freeze-thaw).
- Chemical weathering is caused by acid rain.
- Biological weathering is caused by plants.

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Lesson 5 –

Key points to learn:

- Sedimentary rocks are formed in layers.
- The layers are formed from small particles of rocks that have been weathered and eroded and then cemented together.
- The remains of animals and plants can be trapped within the layers to form fossils. Fossils are only found in sedimentary rocks.
- The fossils can be used to date the rocks.

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Lesson 6 –

Key points to learn:

- Metamorphic rocks are formed from igneous and sedimentary rocks by heat and pressure.
- They can have crystals and layers. The layers are often distorted.
- The sedimentary rock limestone is changed into marble.
- The sedimentary rock mudstone is changed into slate.

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Lesson 7 –

Key points to learn:

- Rocks can be turned from one type to another. This is known as the rock cycle.
- The rock cycle is comprised of nine steps – weathering, erosion, transportation, deposition, burial/compression/cementation, heat/pressure, melting, cooling and exposure.

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Lesson 8 –

Key points to learn:

- Use key words and statements to produce a rock cycle.

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Lesson 9 –

Key points to learn:

- The Earth's resources are finite. They are a limited resource that may run out.
- Metals can be obtained from ores, fossil fuels can be burnt to release energy and oil can be made into plastic.
- Limited resources can be made to last longer by reducing, reusing and recycling.

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Lesson 10 –

Key points to learn:

- Carbon constantly changes from one form to another
- The way that the carbon changes is called the Carbon Cycle
- Photosynthesis, Respiration, Combustion and Decomposition are key processes in the Carbon Cycle

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Lesson 11 –

Key points to learn:

- The Earth's atmosphere is a layer of gases that surrounds the Earth
- The atmosphere is made of 78% nitrogen, 21% oxygen and 0.04% carbon dioxide
- Since the formation of the atmosphere the amount of oxygen and carbon dioxide have increased and the amount of carbon dioxide has decreased

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Lesson 12 –

Key points to learn:

- The Greenhouse Effect traps heat energy from the Sun and keeps the Earth warm enough to support life
- Human activity is causing the amount of carbon dioxide in the atmosphere to increase
- Increasing amounts of carbon is causing global warming and climate change

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