Science - Year 3 – Autumn - What are the differences between rocks, fossils and soil?

The Rivers
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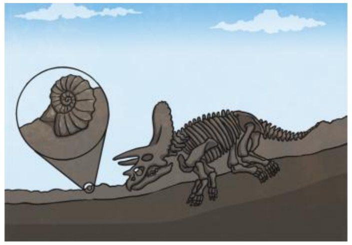
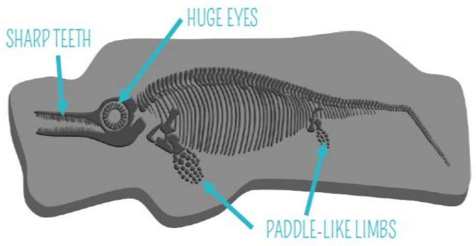
What I already know:

I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
I can describe the simple physical properties of a variety of everyday materials, using words like hard/soft, transparent/opaque
I can compare and group together a variety of everyday materials on the basis of their simple physical properties.
I know how to compare the differences between things that are living, dead, and things that have never been alive.

What I need to know:

- There are different kinds of rocks which can be classified based on their appearance and simple physical properties.
- Sedimentary and Igneous are two types of rock.
- Igneous rock does not crumble and is harder than sedimentary rock.
- Harder rocks (such as granite) can be used the form the shape of softer rocks (like flint)
- Rocks change due to the processes of erosion and weathering.
- Fossils are formed when things that have lived are trapped within rock.
- Fossils form in sedimentary rock
- Paleontologists study the former life on Earth through fossils.
- Fossils can help us learn about things that lived long ago.
- Soils are made from rocks, air, water and organic matter.
- Micro-organisms live in soil which can only been seen through a microscope.
- Mary Anning was a vitally important paleontologist.
- Mary Anning did not get the recognition she deserved because she was a woman and from a poor background.
- Independent variable is the variable we change.
- Dependent variable(s) is what we measure and observe,
- Control variable(s) are what we keep the same.





SDG Link:

This SDG calls for reducing inequalities in income as well as those based on age, sex, disability, race, ethnicity, origin, religion or economic or other status within a country.

10 REDUCED INEQUALITIES

Vocabulary Focus

Tier 1:

Hardness – how hard something is.
Soft – easy to bend or shape; not firm or hard.
Soil – is a mixture of small rocks, organic matter (dead animals and plants), air and water.
Group - a number of people or things that are located, gathered, or classed together:

Tier 2:

Rock – a solid material that occurs naturally in the Earth.
Material - anything used for building or making new things.
Natural – of or produced by nature.
Man-made – made or formed by human beings; not natural.
Properties – the attributes, qualities, or characteristics of something
Fossil – The remains or trace of a living animal or plant from a long time ago. These are found embedded in earth or rock.
Process – changes or acts that happen one after another.
Formed – be made into a specific shape or form.
Decay – To break down or become destroyed by a slow, natural process.
Imprint - a mark or design made by pressing or printing on a surface.
Legacy - anything that is passed down from ancestors or someone who came before.
Evidence – something that gives proof of or a reason to believe something.
Discovery - the act of finding something
Chalky soil – Chalky soil is a light brown soil. Water drains through it quickly**.**
Clay soil – usually sticky and has small particles. They contain very few air gaps and water does not drain through it easily
Sandy soil - is pale coloured and has large particles. These create lots of small air gaps. Water drains through them easily, so it usually feels dry**.**

Tier 3:

Sedimentary – Softer rocks that formed from sediment that is deposited over time, usually as layers at the bottom of lakes and oceans.
Igneous - having to do with hard rocks that are formed by a volcano or other source of great heat.
Paleontology - The science the former life of the Earth, as preserved in fossils.
Paleontologist - a scientist who studies the former life of the Earth, as preserved in fossils.
Organice matter- Spiral tube. When the stirrup moves, fluid inside the cochlea moves.
Peat - Does not contain any rock particles. It's made from very old, decayed plants and is dark, crumbly and rich in the useful chemicals that plants need called nutrients
Independent variable - The variable we will change
Dependent variable - The variable(s) we will measure or observe
Control variable – The variable(s) we will keep the same