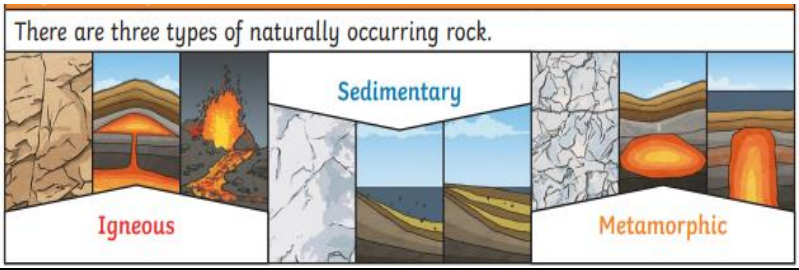
Coley Primary School – Knowledge Organiser

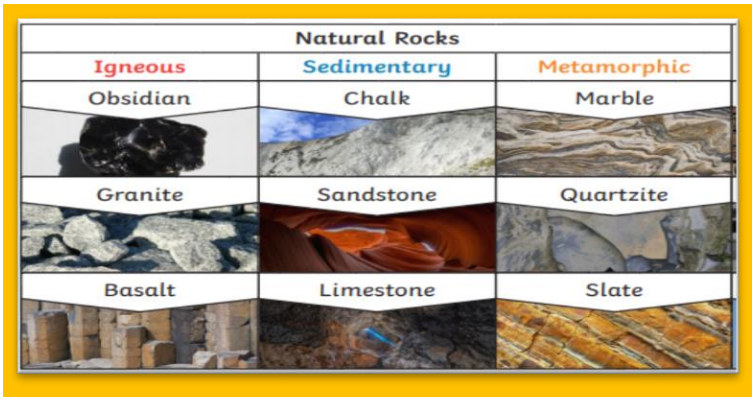
SUBJECT FOCUS: Chemistry	Science: Rocks	YEAR 3	TERM 6

WHAT? – Key Knowledge

- Compare and group together different kinds of rocks (including those in the locality) on the basis of appearance and simple physical properties
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock
- Recognise that soils are made from rocks and organic matter.
- Use scientific language: say, read and spell scientific vocabulary.



Igneous rock are rocks that form when lava cools creating crystal structure rocks	Sedimentary rocks are formed by layers of sediment collecting and solidifying, these rocks will have layers throughout.	**Metamorphic rocks** are formed when other rocks are affected by great temperature and pressure.



Working Scientifically Challenge:

- Can they compare and group together different rocks based on their simple physical properties?
- Can they describe and explain how different rocks can be useful to us?
- Can they describe and explain the differences between sedimentary and igneous rocks, considering the way they are formed?
- Can they describe how fossils are formed within sedimentary rock?

Did you know….

Mary Anning: *a famous scientist*



Mary Anning is remembered as being one of the greatest fossil hunters to ever live. She was born on 21 May 1799. She lived in the English seaside town of Lyme Regis in Dorset. Her family were very poor, which meant she didn't get to attend school much. Instead, she mainly taught herself to read and write. Mary would spend her time searching the coast looking for what she called 'curiosities'. Later in her life, as she developed a better understanding of her finds, she realised they were actually fossils.

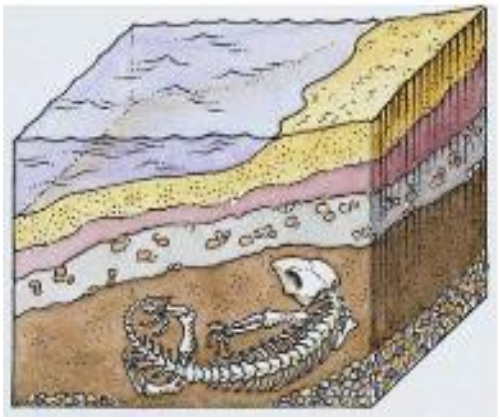
Over the course of her life she made many incredible discoveries. This made her famous among some of the most important scientists of the day. They would visit her for advice and to discuss scientific ideas about fossils.

WHAT? – Key vocabulary

crystals	Transparent, tinged.
rough	Uneven, not level.
permeable	soaks up liquid easily.
fossils	The remains or impression of an animal or plant in a rock.
soil	The upper layer of earth in which plants grow.
appearance	The way something looks.
texture	The way something feels
impermeable	Does not allow water to pass through it.
Durable	Resistance to weathering.
Density	Measures how 'bulky' the rock is (how tightly packed the molecules are).

Diagrams and symbols

Fossilisation:



Fossils are remains of plants or animals that are formed in sedimentary rock.

I wonder…

Can they…

- classify igneous and sedimentary rocks?
- begin to relate the properties of rocks with their uses?

Possible experiences: *Curious minds…*

- **Hard Rocks Investigation:** Explore scratching rocks to see which is the hardest.
- **Rock (Science in a Flash),** by Georgia Amson-Bradshaw