Year 3 – Summer 1 – Science – Pupil Knowledge Organiser

What do I already know?	What am I learning now?
• Objects are made from everyday materials. • A material's properties make it suitable for different jobs. • Solid objects made from soft/flexible materials can change their shape when we squish, bend, twist, or stretch them. • Solid objects made from hard/rigid materials cannot change shape easily.	1. What are rocks? 2. How might we compare rocks? 3. What are fossils? 4. What is soil made from? 5. Which type of soil does water drain through the quickest? 6. Assessment Week

Key Knowledge: Materials

A stone is a simply a small rock.

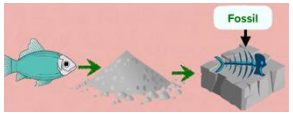
Pebbles are stones that have been made smooth by the sea.

Hard rocks are difficult to break or scratch, whereas soft rocks are easy to break or scratch.

Igneous rocks: grainy or crystalline texture; can be shiny or dull.

Sedimentary rocks: visible layers; contain fossils; rough or sandy texture; are soft.

Metamorphic rocks: wavy patterns; smooth and shiny; are quite hard.



Usually when an animal or plant dies, their body decays away.

If it's buried under layers of rock for thousands of years, its hard parts are preserved as a fossil is formed.

Fossils show us that the animals and plants that lived a very long time ago are different to those today.

Sandy soil: large particles with lots of air gaps.

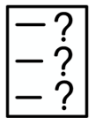
Clay soil: very small particles with few air gaps.

Chalk soil: very light; contains lots of large chalk particles.

Peat soil: doesn't contain rock particles; is crumbly; contains lots of dead plants and animals; is rich in nutrients.

Key Skills: Working Scientifically

Ask Questions



Enquiry

Observe

Record/ Present

Conclusions

Evaluation

Communicate

Key Vocabulary

rock	A hard material found on the Earth's surface and under the ground.
permeable	Something that lets water pass through.
impermeable	Something that does not let water pass through.
igneous rock	Rock made when melted rock (lava or magma) cools and becomes solid.
sedimentary rock	Rock made from layers of small pieces pressed and stuck together.
metamorphic rock	Rock that has changed because of heat and pressure inside the Earth.
fossil	The remains of a plant or animal from long ago, turned to stone.
extinct	An animal or plant that no longer exists.
soil	A mix of tiny bits of rock, air, water, and remains of dead plants and animals.
drainage	How fast water moves through soil.