

Rocks and Fossils

Life Before Us

	Ammonite
	<p>Free-swimming extinct marine creature with varied shell styles. Commonly known as 'Snakestones'. Ammonites died out during the Cretaceous period approximately 70,000,000 years ago. They were closely related to the present-day Nautilus.</p> <p>Age: 70,000,000 – 225,000,000 years.</p>
	Trilobite
	<p>An extinct sea creature with flattened segmented body. So named from the three (tri) parts (lobes) of their body – head, thorax and pygidium.</p> <p>Age: 250,000,000 – 550,000,000 years.</p>
	Gastropod
	<p>Soft-bodied land or aquatic creature with hard and normally spirally-coiled shell. Common fossils in most Cenozoic rocks and clays.</p> <p>Age: Present day – 550,000,000 years</p>
	Echinoid
	<p>A bottom-living marine creature with shell made up from small plates covered with moveable spines. Fossil Echinoids are seldom found with spines still attached. The three main types are 'biscuit urchins', 'heart urchins' and 'regular sea urchins'.</p> <p>Age: Present day – 450,000,000 years.</p>

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	Graptolite
	<p>Extinct marine organism named from the Greek words <i>graptos</i> (painted) <i>lithos</i> (stone). They are common fossils in some Palaeozoic rocks.</p> <p>Age: 335,000,000 – 550,000,000 years.</p>
	Plant
	<p>Represented here by fern remains from the Carboniferous period. It is from these, and trees of the same age, that coal was formed some 300,000,000 years ago.</p> <p>Age: Present day – 400,000,000 years.</p>
	Brachiopod
	<p>A two-valved marine shell-fish of various shapes. Most Brachiopods were anchored onto rocks on the sea bed by the use of a fleshy stalk which protruded from the small hole in the larger (pedicle) valve.</p> <p>Age: Present day – 525,000,000 years.</p>
	Shark tooth
	<p>A common fossil in some Cenozoic rocks and clays. The largest are those of <i>Carcharodon</i> – a 15-metre long shark with jaws opening to almost 2 metres.</p> <p>Age: Present day – 400,000,000 years.</p>

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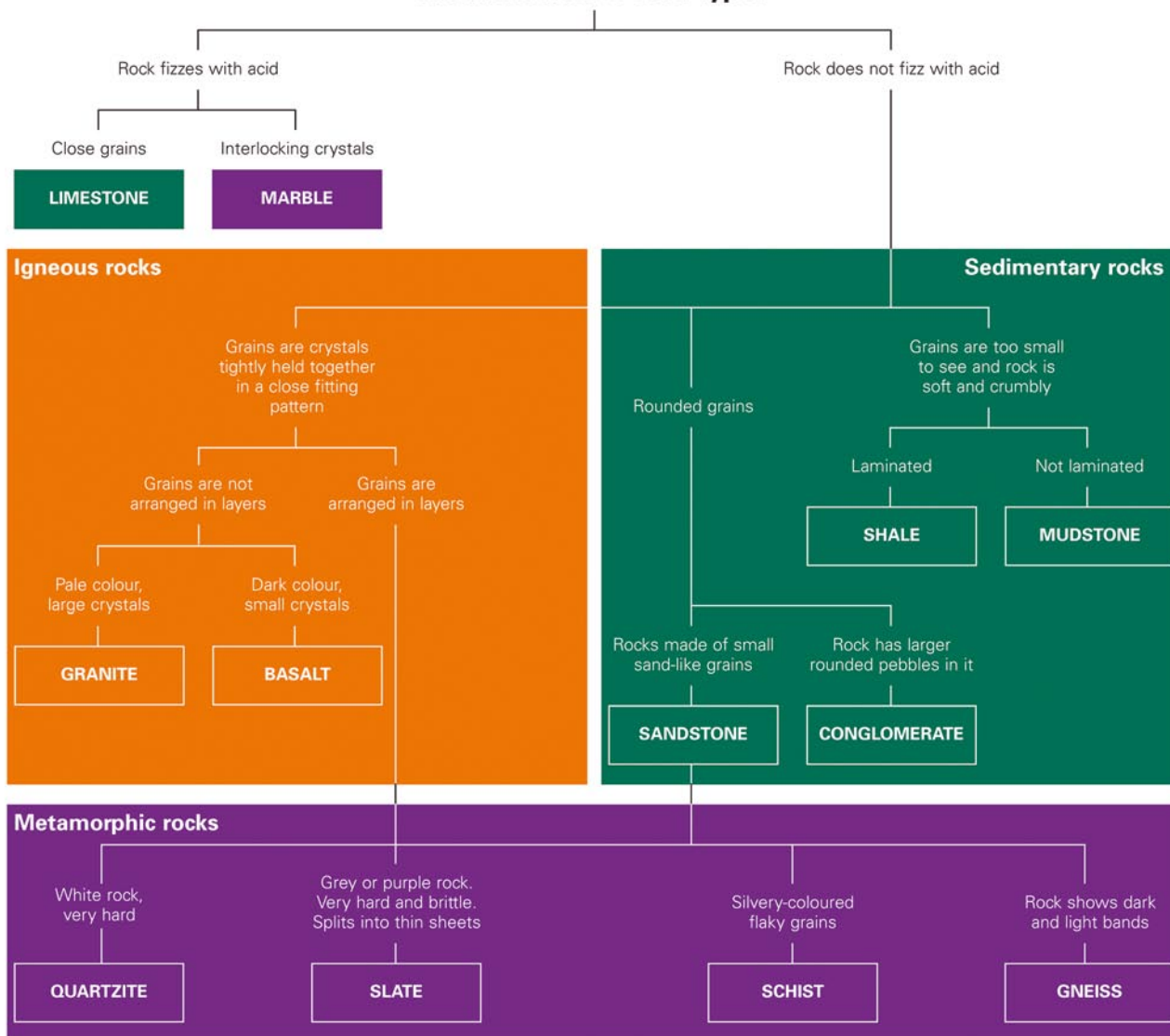
	Belemnite
	<p>Named from the Greek word belemnion, meaning dart or javelin. They were extremely common in the Jurassic and Cretaceous periods. The creature resembled our present-day cuttlefish.</p> <p>Age: 70,000,000 – 200,000,000 years.</p>
	Coral
	<p>Bottom-dwelling marine animal which secretes calcareous hard parts. Usually found as single 'horn-shaped' specimens or in colonies.</p> <p>Age: Present day – 450,000,000 years.</p>
	Crinoid
	<p>Often called 'Sea Lily', this is an animal not a plant. It consists of three main parts, calyx (a cup-like cavity), stem and root system. It is represented here by fragments from the stem.</p> <p>Age: Present day – 450,000,000 years.</p>
	Bivalve
	<p>A marine creature with hinged, two-valved shell enclosing its soft parts. Some are slow-moving, bottom-dwelling types, some (oysters) attach themselves to rocks and others (e.g. pectens) are free swimming.</p> <p>Age: Present day – 500,000,000 years.</p>
	Coral
	<p>A sectioned example showing the internal structure.</p> <p>Age: 330,000,000 years.</p>

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Rock Key

Identification of rock types



Other useful information

Sedimentary

- Often contains fossils
- Has great colour variety
- Has pores between pieces

Igneous

- Rarely has fossils

Metamorphic

- Rarely has fossils
- May have layers of visible crystals