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Be a geological detective!

The colourful rocks of Penarth were formed over 200 million years ago. They tell a fascinating story of changes in climate and sea-level.

The cliffs are very unstable so it is important to keep well away from them, and not to hammer at them.

The early Jurassic, Blue Lias beds occur at the top of the cliff further along the beach, and are better seen at Lavernock urassic - Blue Lias These alternate Formation layers of blue/grey limestones and muds were formed in clear, warm, shallow seas. St Mary's Well Bay Formation Fossils include corals, ammonites, bivalves, sea-urchins, crinoids, and large marine reptiles such as ichthyosaurs. Pale mudstones laid -ormation down in shallow seas





Look for fossils in the loose

rocks and shingle on the beach.

Bivalve Gryphaea

Ammonite Schlotheimia

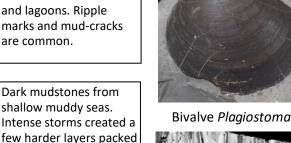
Ammonite Psiloceras



Bivalve Modiolus



Bivalve Liostrea

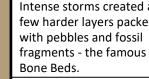




'Beef' - a type of fibrous calcite



Bivalve Chlamys



Westbury

Muds laid down in shallow water, first 'green' (brackish water), then grey (marine conditions). Look for three distinct pink/red mudstone bands.



Ichthyosaur tooth and vertebra



Bivalve Cardinia

Coprolite -



Brachiopods A fossilised dropping Calcirhynchia

Branscombe Mudtone Formation

Blue Anchor Formation

These red rocks, with pink and white gypsum, were formed round seasonal lakes in deserts. Apart from occasional dinosaur footprints, there are no fossils in these rocks.







Ripple marks

Mudcracks Gypsum