

# Rock Identification - Lepe Country Park, Hampshire

The sands and gravels in the cliffs at Lepe Country Park consist of pebbles that have been transported by a river that used to flow along the course of the Solent seaway. Each pebble started life as part of a larger rock outcrop which was then eroded and transported to the cliffs at Lepe Country Park. If you identify the type of rocks these pebbles came from, then you can work out where the river flowed from. There are four main rock types in the pebbles in the cliffs at Lepe Country Park:

## ***Angular flint***

Flint is a smooth rock that ranges in colour from white through to dark grey. It is distinctive because when it breaks, the edges of the break are rounded. There is usually no internal structure in a flint pebble. Angular flint is angular in shape, rather than spherical.



## ***Rounded flint***

Rounded flints are much more spherical than angular flints. Where they are broken, it is possible to see the smooth central part of the rock described above. Commonly, they have an external 'rind' where the rock has been weathered as it has been shaped. This 'rind' is usually covered with 'chattermarks' – crescentic scars left as pebbles collide within a river or beach system.



## ***Quartzite***

Quartzite is a sandstone which has been subjected to significant pressure causing the individual sand grains to fuse together. It can be recognised by being slightly translucent and made from sand grains that are partially fused together. If a rock is translucent but no recognisable sand grains can be seen, it is probably quartz.



### ***Greensand chert***

Greensand chert is a sandstone containing fossils which has a pitted surface. Fossils can be recognised as strands wrapping around or in between the sand grains or as areas where there is no internal structure.

