



Sand - Why does a beach have sand?

Fact

- A beach has sand because of erosion.
- Over hundreds or sometimes thousands of years the waves pounding into a cliff face will break away huge rocks and boulders
- The boulders get broken into smaller and smaller rocks by the waves and eventually the small rocks will be broken down into tiny bits of sand.
- The wind, sun, rain and cold of winter help with the erosion process.
- Some rock is softer than others and the softer stuff the cliff face is made of the faster it erodes.

Do you know

- Sand is made up mostly of quartz rock.
- You also find sand in a desert, on a riverbed, in soil and pretty much anywhere you get erosion.
- Waves create sand but they can also remove sand. During a big storm sand can be moved by the waves. Sometimes it's picked up and carried way out to sea and other times fresh sand is dumped on a beach making it look different than it did before the storm.

Experiments you can do

Next time you're at the beach build a sandcastle in the tidal zone, the area where the tide will reach it. What happens to the sandcastle when the tide comes in, does the tide erode it?

Build another one further up the beach but still in the tidal zone and use driftwood and other things lying on the beach to try and make the sandcastle stronger. Does this help stop the waves from breaking the sandcastle down?

Other Investigations

Why do West Coast beaches from Wanganui to Auckland have black sand instead of white sand? What does the black sand have in it that is attracted to magnets?

Jokes

What do you call a girl at the beach? Sandy!

Why is the sand wet? Because the sea weed.
From B Camplin