

Explore York Museum Gardens, to find this large map made of pebbles behind the ruined Abbey.

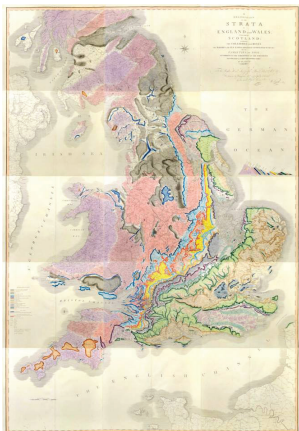
It was made by artist, Janette Ireland, to represent the Yorkshire part of a famous geological map, made in 1815 by a man called William Smith.



William wanted to show which rocks were just under the ground. He used different colours to show the different rocks, but Janette has used different pebbles.

You can walk on the map and see many interesting things.

Look inside for clues...



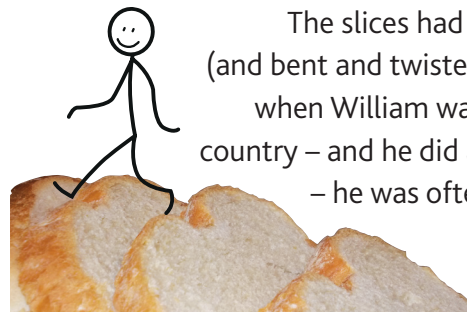
## Have you visited the museum?

There is a huge copy of the famous map in the Yorkshire Museum, as well as many interesting fossils.

Why not go in and see what you can find?

## The Story of the Map

Over 200 years ago, William Smith was working as a canal engineer. He realised that his work cutting through the earth had helped him to understand how the rocks had been formed. He could see they were made of different layers, or strata, a bit like slices of bread on a plate.



The slices had been tipped up (and bent and twisted a bit), so that when William walked across the country – and he did a lot of walking – he was often walking over the edges of the slices.

William knew that what he had found out meant he could tell people who owned land if they might have valuable rocks underneath – especially coal, which was very important then. He made the map to show all this.

### York Museum Gardens Visitor Information

#### Open Daily – FREE ADMISSION

Summer: 7.30am – 8pm

Winter: 7.30am – 6pm

Christmas Eve and New Year's Eve: 7.30am – 4pm

Christmas Day, Boxing Day and New Year's Day: Closed

[www.ypsYork.org](http://www.ypsYork.org)

[www.yorkmuseumstrust.org.uk](http://www.yorkmuseumstrust.org.uk)

York Museums Trust



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## York Museum Gardens

FREE and OPEN DAILY

## A Map You Can Walk On



York Museums Trust





## Find the "Hidden Treasures" in the map

**Look at the scales showing distances.** The black one shows a total length of 50 Km. You can put your foot against it, and see how far your foot represents on the map (it will probably be about 10km). You can use that to find the distances between towns.

**Can you find all the rivers?** Each is made of small grey stones. The names are spelled the old way – River Ure is spelled Yore. You can follow each one from its starting point to the sea. See how many of them join up to form the River Humber.

**How many towns can you see?** York has its own special symbol, showing the Minster. Have you seen this famous church? It is not far from here.

**You can find mini-millstones.** Large ones were made from the rocks here, and used to grind corn.

**The small black squares show where there were coal mines.** How many can you find?

**How can you tell which part is sea, and which is land?** (Look for the waves.)

**Look at the shape of Yorkshire** – the counties round it are shown in brown, because this map shows only Yorkshire rocks. Each type of rock has its own pebbles.



Round this part of the map, there is a diagram showing a **cross-section of Yorkshire**, so you can see how the rock layers are tipped up. Can you see the line showing sea-level?

**The Pointer.** The map is lined up so this points North on the map and on the ground as well. The line that the pointer takes across the map is called the Greenwich Meridian. You can find out about this on the internet.

**The artist has put fossils in the map.** Some are real ones, and others made of pebbles. This is because William Smith had learned that each layer had its own special fossils, and he used that to recognise which layer was which.

**There are also fossil patterns in each of the four corners** – fossil ferns, curly ammonites, crinoids and round sea-urchins. Can you work out which is which?

**The names William Smith called the rocks** are shown by labels set in a ring going round the map – made of the pebbles used to represent them.

There are **large pieces of real rocks** in the flower borders, next to strips of pebbles, so it is easy to see which pebbles represent which rocks. See if you can match them up with their names.