

Peterborough Rocks

City Centre Geology Trail

Peterborough is chock-a-rock with interesting geology and fossils!

By taking part in this trail, you will be guided to where these rocks and fossils are hiding.

Make sure you are wearing weather appropriate clothing. A map is provided.

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Contents

This resource has the following sections:

- 1) Map for the Rock Trail
- 2 Rock Uses in the City Centre
- 3 Activity Trail Sheet (optional)
- 4 Additional Rock Information



Map \mathcal{O}

- Peterborough Museum & Art Gallery 1.
- Yorkshire House (Priestgate) 2.
- Wentworth Street 3.
- Town Hall 4.
- Cathedral Square HSBC 5.
- Cathedral Square Starbucks 6.
- Long Causeway bench 7.
- Queensgate floor 8.

On your trail, rocks are used in different ways:









brick

slab

tile

column





Limestone Peterborough Museum & Art Gallery

Limestone is made up of small, round grains called 'ooliths.' Ooliths are rolled around at the bottom of the sea by moving waves. The longer they roll, the larger they grow!

Why is limestone good to build with?

What type of rock do you think limestone is?





Limestone Yorkshire House (flats)

This building has roofing 'slates', but do not let the name fool you! These 'slates' are made from **limestone**.

2

This limestone is local. It has come from an area or 'formatio of rock called the Lincolnshire Limestone Formation. This formed 170 million years ago, during the Jurassic Period!



Welsh Slate Wentworth Street



Here we have another roof covered by stones. These thin 'slates' are made from **slate**.

Welsh Slate was made when a sedimentary rock,

mudstone, was 'folded' up when the earth shifted 400 years ago. It is now metamorphic rock.

Why might slate be a good material for a roof?



Sandstone Peterborough Town Hall



These pillars are made from a **sedimentary rock** called **sandstone**. Sandstone is formed by layers of sand, which over many thousands of years has become packed and stuck together.

Spot the dents and holes in these pillars. What has happened to the sandstone surface over time?





Which is which? Cathedral Square (Bank)

This building is made up of at least two different types of rocks. The top half is **sandstone** and the bottom half **granite**.

Can you remember what types of rock they both are?

Why might this building be made with 2 different types of stone?





Larvikite Cathedral Square Cafe



The dark coloured stone at the bottom of the building is called **larvikite**. It is an **igneous rock** named after Larvik in Norway where it can be found.

The larvikite has iridescent crystals. Move your head around slowly can you see them changing colour?

Look closely at the limestone upper half to find some shells.





Granite Long Causeway Bench



Granite is an igneous rock formed by molten magma. As the magma cools mineral crystals form, giving granite its speckled appearance. This bench has been polished to create a very smooth, shiny surface.

How many different coloured crystals can you see in this granite?



Fossils! Queensgate floor



Starting at the eastern entrance of Queensgate, pay close attention to the floor. You will be able to see spiral and bullet shapes in the polished limestone floors...

These are **belemnites** (bullets) and **ammonites** (spirals).

They are creatures that lived in the prehistoric seas that once covered Peterborough in the Jurassic, millions of years ago.

How many fossils can you spot?





Sandstone Cathedral Square/ Cumbergate Restaurant



This building has **sandstone** bricks in its walls. The stone blocks have been here for a long time. See if you can find the carved date above the doorway.

How do these bricks compare in shape to the other sandstone ones you have seen?





All The Rocks

Did you find any other rock types on your trail? What other ways were rocks used in the city?

Draw or photograph the new ones you find. You could even make a trail of your own!



My Trail Notes

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• Describe the colours and textures. Are the rocks smooth or rough?

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- What observations can you make when you look closely at the rocks?
- Are there tiny grains, sparkly crystals or maybe even fossils buried within!?

#	Colours	Texture	Observations
1			
2			
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3			
4			
5			
6			
7			
8			
9			

Rocky Reminders

Oolitic Limestone: A sedimentary rock with small rounded grains called 'oolites'. Limestone: A sedimentary rock made from the skeletons of ancient sea creatures. Slate: A metamorphic rock made when heat and pressure forced sedimentary rock to harden and change. Granite: An igneous rock made from molten magma, where crystals have formed as it cools. Sandstone: A sedimentary rock made from layers of sand that have compacted together. Marble: A metamorphic rock made when limestone is placed under heat and pressure. Larvikite: An igneous rock with a distinctive blue colour and sparkle. Fossil: the remains of a creature that lived millions of years ago Ammonites: A fossilised sea creature with a distinctive swirly shell. Belemnites: Squid-like creatures that inhabited the seas millions of years ago.