

Learning & Discovery in the National Park

Discover, explore, enjoy

learning.discovery@peakdistrict.gov.uk



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DISTRICT
NATIONAL
PARK**

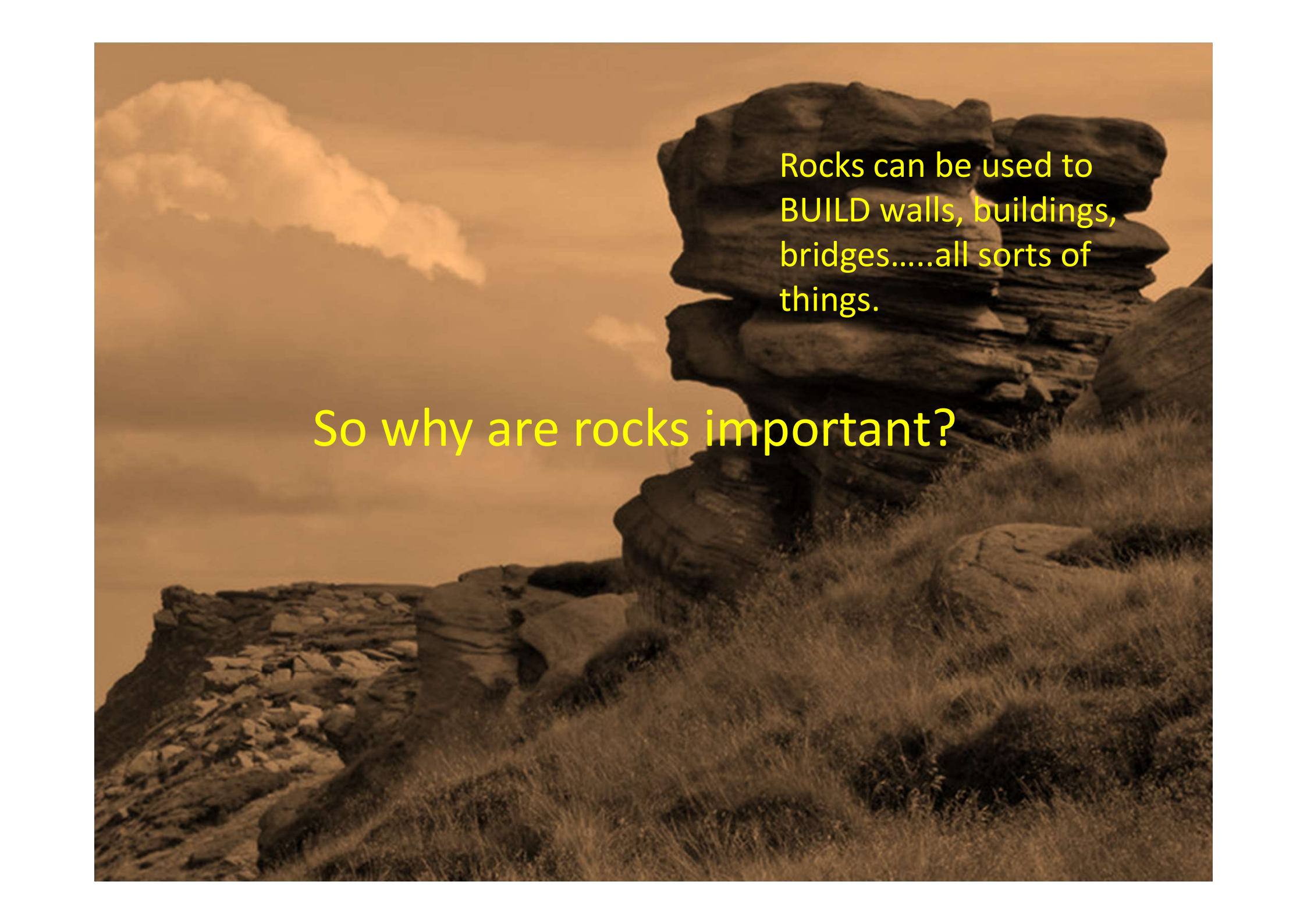


What's so special about rocks ??????





So why are rocks important?

A photograph of a rocky landscape. In the foreground, there is a grassy slope leading up to a large, prominent rock stack. The rock stack is composed of several layers of dark, layered rock. The sky is filled with large, white clouds, and the overall lighting is warm, suggesting a sunset or sunrise. The text is overlaid on the right side of the image.

Rocks can be used to
BUILD walls, buildings,
bridges.....all sorts of
things.

So why are rocks important?

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The type of **SOIL** on
the ground is
determined by the
rocks underneath it.

We use materials that come from rocks such as METALS.

Rocks can be used to BUILD walls, buildings, bridges.....all sorts of things.

So why are rocks important?

The type of SOIL on the ground is determined by the rocks underneath it.

The whole PLANET is made of rock. Without rock we wouldn't be standing on anything!!

A photograph of a rocky landscape. In the foreground, there is a grassy slope with some low-lying vegetation. In the middle ground, a prominent rock formation consists of several stacked, layered rock blocks, showing clear horizontal sedimentary layering. The background shows a hazy, overcast sky with some clouds. The overall color palette is muted, with earthy tones and a soft, diffused light.

How are rocks formed?

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Lava from beneath the Earth's **crust** reaches the surface and cools. These are called **igneous** rocks.





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Small rock particles or the hard shells of animals form layers. These are called **sedimentary** rocks.





Lava from beneath the Earth's crust reaches the surface and cools. These are called **igneous** rocks.



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Pressure and heat change the rocks. These are called **metamorphic** rocks.

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Both sedimentary
and metamorphic
rocks can be
pushed back into
the earth's mantle
so the rock cycle
can begin again.



A photograph of a rocky landscape. In the foreground, there is a grassy slope with some low-lying vegetation. In the middle ground, a prominent rock formation consists of several large, flat, layered rock blocks stacked on top of each other, creating a tall, narrow stack. The rocks have a dark, weathered appearance. In the background, there are more rocky outcrops and a hazy, overcast sky with some clouds. The overall color palette is muted, with earthy tones and a soft, diffused light.

Are all rocks the same?

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Time to get testing!

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Are all rocks the same?

Rocks can be all sorts of colours, depending on the minerals within them. Some, like **marble**, can be used to make attractive sculptures.

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Some rocks are **permeable** (water soaks into it) while some are **impermeable**. Other rocks are **porous** – they have holes where the water can flow through, like **limestone**.

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Are all rocks the same?

Rocks can be all sorts of colours, depending on the minerals within them.

Some, like **marble**, can be used to make attractive sculptures.

Some rocks are very hard, like **granite**. Others are very soft, like **talc**.

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Some rocks contain layers, grains or **crystals**. Some others may contain **fossils** or metals.

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A photograph of a rocky landscape, likely in the Peak District. The foreground is dominated by a large, prominent stack of layered rock formations, possibly sandstone, which are stacked horizontally. The rocks have a weathered, textured appearance. The background shows a hazy, overcast sky with soft, diffused light. The overall color palette is muted, with earthy tones of brown, grey, and a pale, hazy blue-grey. The text "What types of rocks will you see in the Peak District?" is overlaid in the center of the image in a bright yellow-green color.

What types of rocks will you see in the Peak District?