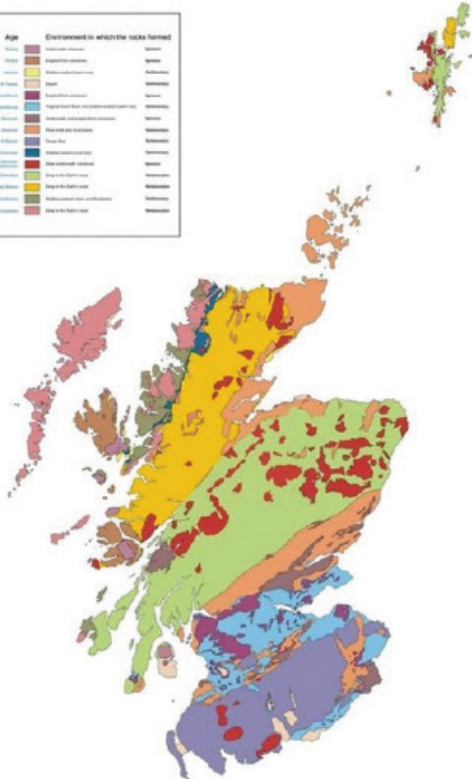




University of
St Andrews

Scotland's Climate

Age	Environment in which the rocks formed
Quaternary	Glacial till
Holocene	Beach sands
	Clay
Pleistocene	Clay
	Gravel
Devonian	Gravel
	Gravel
Carboniferous	Gravel
	Gravel
Permian	Gravel
	Gravel
Triassic	Gravel
	Gravel
Jurassic	Gravel
	Gravel
Cretaceous	Gravel
	Gravel
Tertiary	Gravel
	Gravel
Quaternary	Gravel
	Gravel



Name:

Class:

Date:

Scotland's Climate

Geologists use the rock record to piece together information about past natural environments, including climate.

By looking at the different rocks we find across Scotland, we can put together the evidence for the different climate environments that have existed over geological time.



Scotland's Climate

Sedimentary Rocks

If we look at environments present on Earth today, we can find characteristics in the modern sediment which is unique to each environment. If we find those same characteristics in sedimentary rocks, it allows us to interpret the environment of the past.

When sediment is transported and deposited, it leaves clues to the mode of transport and deposition. Grain size and the sorting of grains gives the resulting sediment texture. Thus, we can use the texture of the resulting deposits to give us clues to the past environment.

Fossils

A fossil is the remains or impressions of a once living organism which has been preserved in the rock.

Animals and plants rely on the the environment around them to survive and thus being able to identify what organism is present in the rock we are able to interpret the past environment.



Scotland's Climate

Describe the sedimentary rocks below and determine which environment they would have formed in.

Rock A

Colour:.....

Sediment Size/Shape:.....

Sorting:.....

Any other features:.....

.....

Interpretation:.....

.....

.....

Warm Swamp

Warm Ocean

Drought/Dessert

Lake

Scotland's Climate

Describe the sedimentary rocks below and determine which environment they would have formed in.

Rock B

Colour:.....

Sediment Size/Shape:.....

Sorting:.....

Any other features:.....

.....

Interpretation:.....

.....

.....

Warm Swamp

Warm Ocean

Drought/Dessert

Lake



Scotland's Climate

Sketch the fossil in the box below and identify it to determine which environment the organism would have lived in.

Fossil A

Interpretation:.....

.....

Warm Swamp

Warm Ocean

Drought/Dessert

Lake

Scotland's Climate

Sketch the fossil in the box below and identify it to determine which environment the organism would have lived in.

Fossil B

Interpretation:.....

.....

Warm Swamp

Warm Ocean

Drought/Dessert

Lake



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