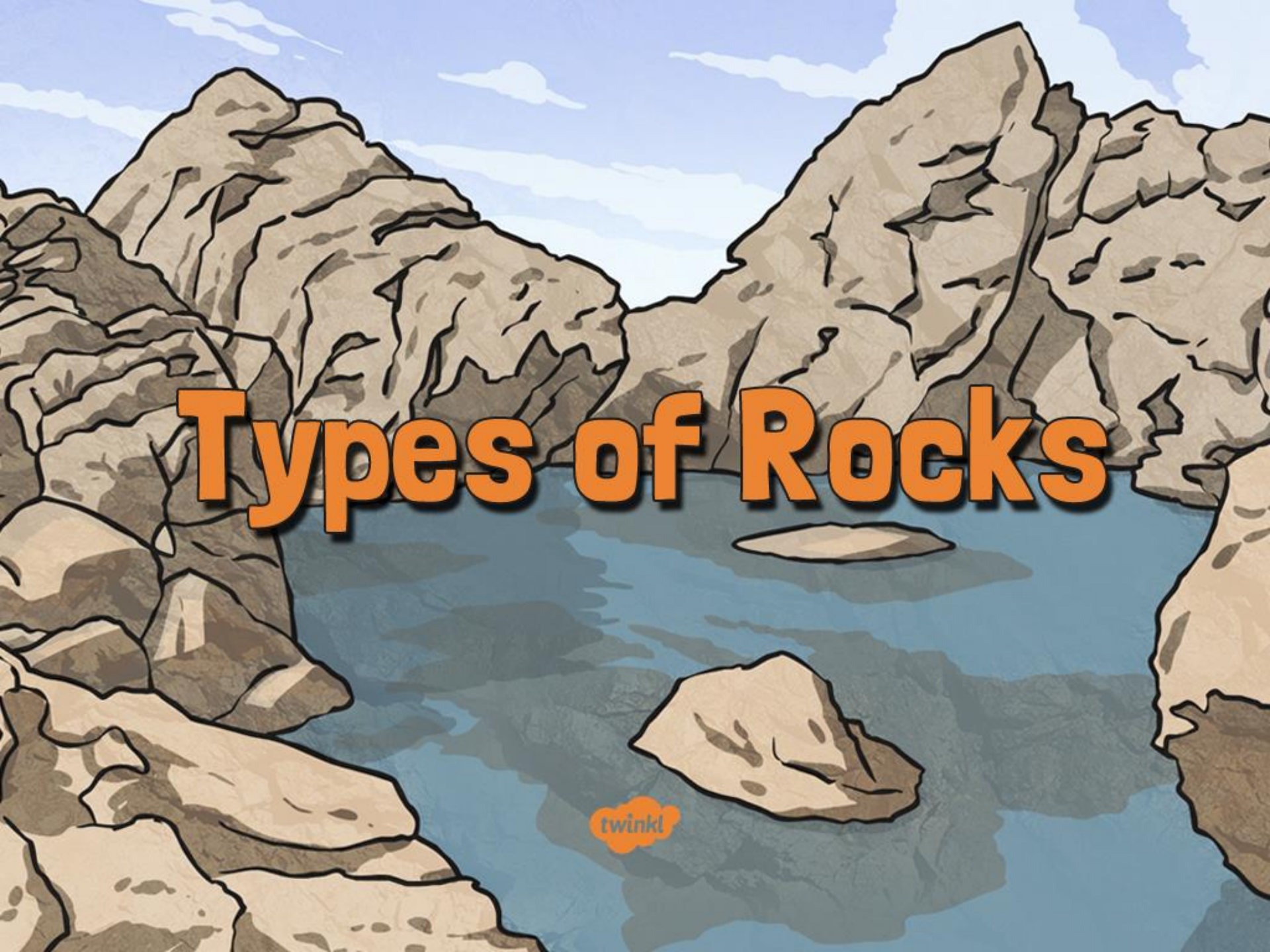
Science

Rocks


Types of Rocks
twinkl

Rocks

What are rocks?

What do you already know about rocks?

Are rocks alive? How do you know?

Why are there rocks everywhere?

How do rocks form?

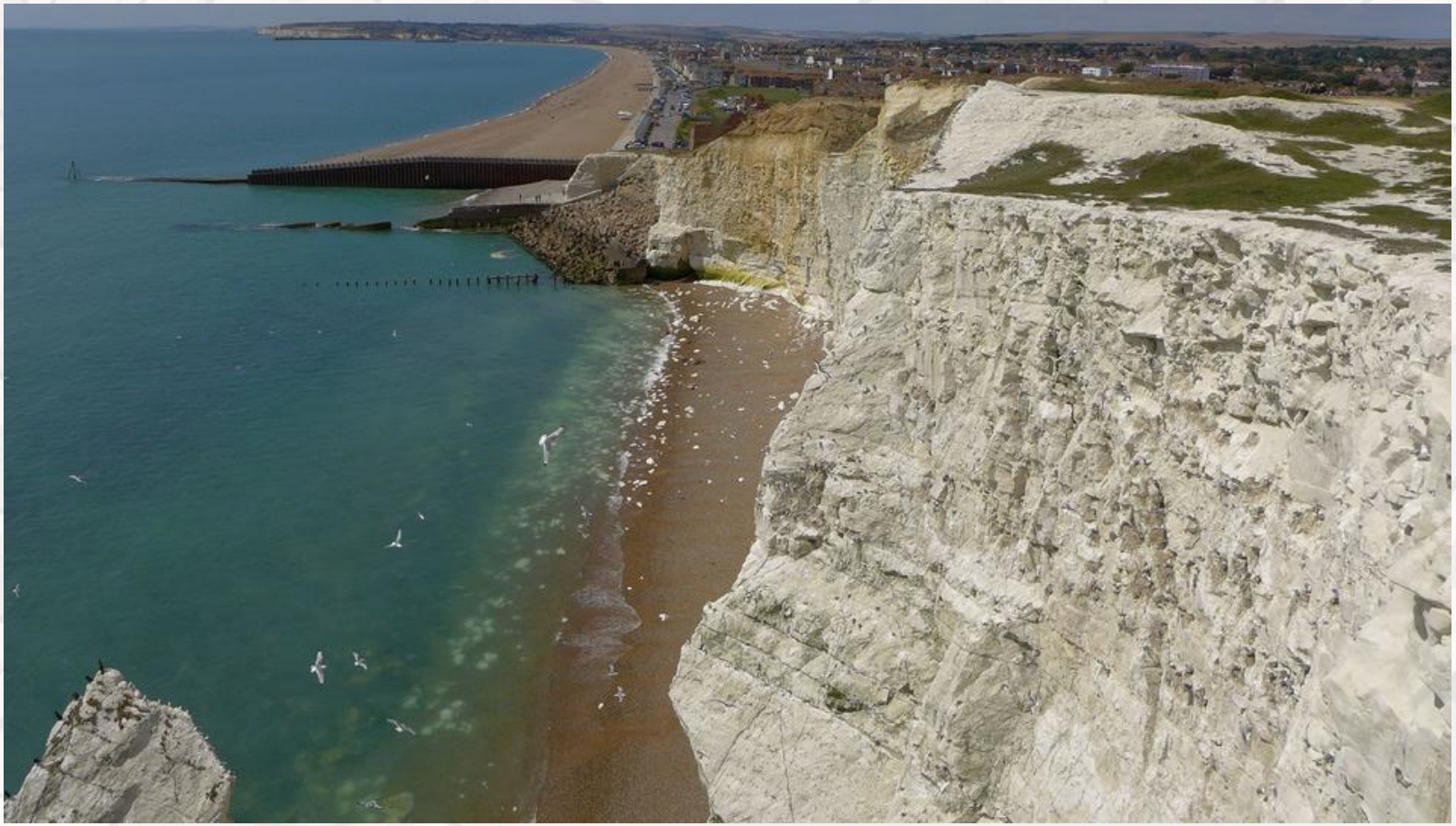
Look carefully at the photographs on following slides and spot the rocks.

Spot the Rocks

Countryside

Spot the Rocks

Chalk Cliffs



Spot the Rocks

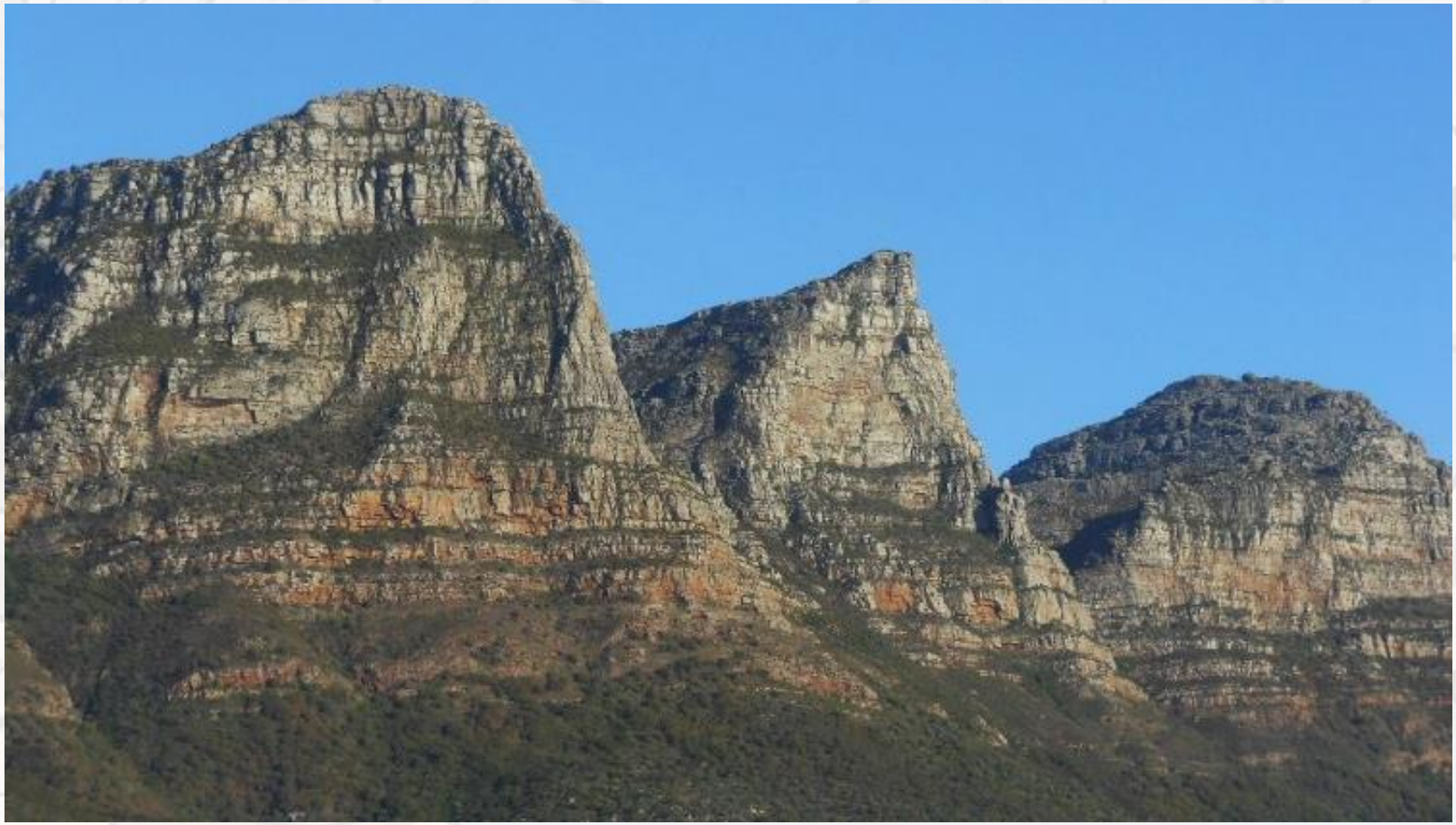
Muddy Fields

Spot the Rocks

Town Centre

Spot the Rocks

Granite Peak



Spot the Rocks

Volcano

Spot the Rocks

Mountain

Spot the Rocks

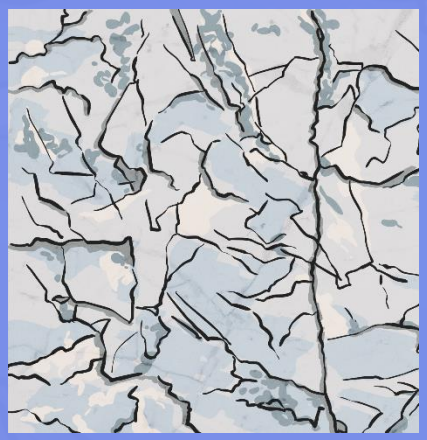
Pebble Beach

Natural Rocks

There are **three types** of naturally occurring rocks.

Igneous

Sedimentary



Metamorphic

Natural Rocks

Igneous Rock

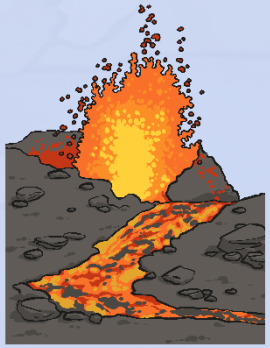
Far under the ground, the temperature is hot enough to melt the rock into a liquid. This is called molten rock. Igneous rocks are formed from this molten rock in two ways.

Intrusive Igneous Rocks:

Molten rock that remains underground is called magma. When magma cools and hardens it becomes a type of intrusive igneous rock.

(Intrusive = internal = inside)

Extrusive Igneous Rocks:



Molten rock that comes out of the ground is called lava. When lava cools and hardens it becomes a type of extrusive igneous rock.

(Extrusive = external = outside)

Natural Rocks

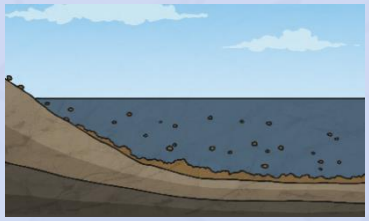
Sedimentary Rock

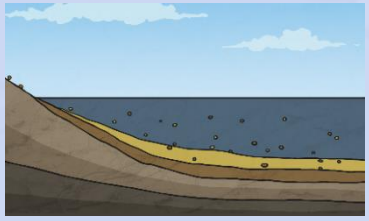
Sedimentary rock forms under the sea.
The following illustrates the process:

1) As a result of weathering and erosion, bits of rock end up in lakes and rivers. Rivers transport bits of rock and deposit them on the bottom of the sea. This process is called **sedimentation.**

2) With time, more layers (strata) pile up and press down on the lower layers of rock. This process is called **compaction.**

3) Over time, water is pushed out from these layers and the process of **cementation** occurs. This is when salt compounds glue or cement the bits of rock together so they form a solid layer.



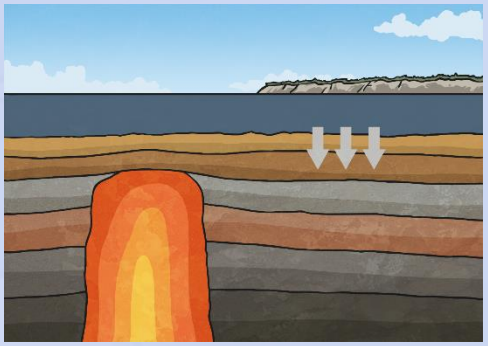


Natural Rocks

Metamorphic Rock

Metamorphic rocks don't just form from being near magma they can also be formed from Earth movements which can cause rocks to be deeply buried or squeezed. This means the rocks are heated and put under immense pressure which causes the minerals they contain to be changed chemically. Collision of tectonic plates can also result in the formation of metamorphic rock too.

This illustration shows how the igneous rock near magma is being heated and changed.



This illustration shows how the sedimentary rock near magma is being heated and changed.