



IRELAND'S

FOSSIL

HERITAGE

INTRODUCTION

What are fossils

How do they form

Where do we find them

Life on Earth



We share this planet with lots of different living things.

Ancient life



Fossil gastropod, Carboniferous Period, Ireland

Fossils show us what living things were on the planet before us.

Fossils are the remains of living things that are preserved in rock

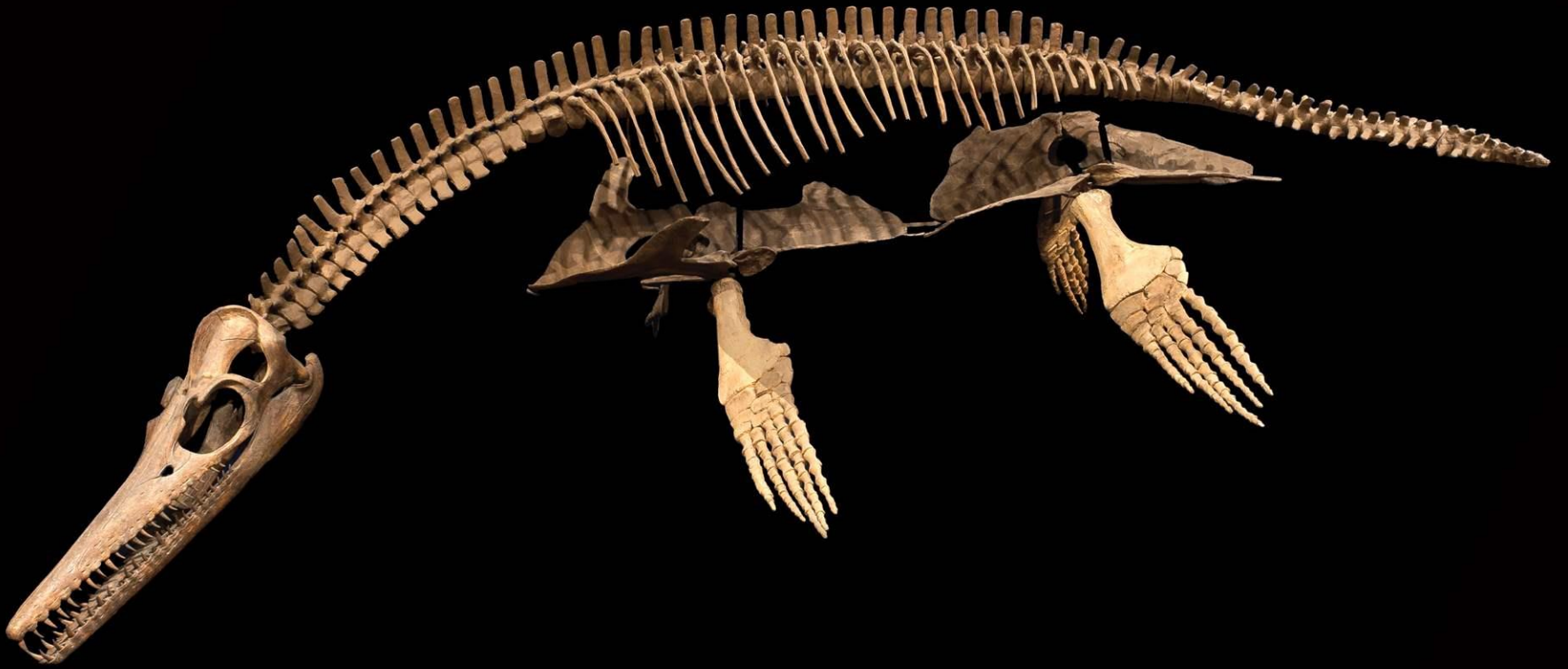
Ancient life



This is a common Irish fossil called a crinoid.

This animal lived in the sea over 300 million years ago during the Carboniferous period when Ireland was covered by water.

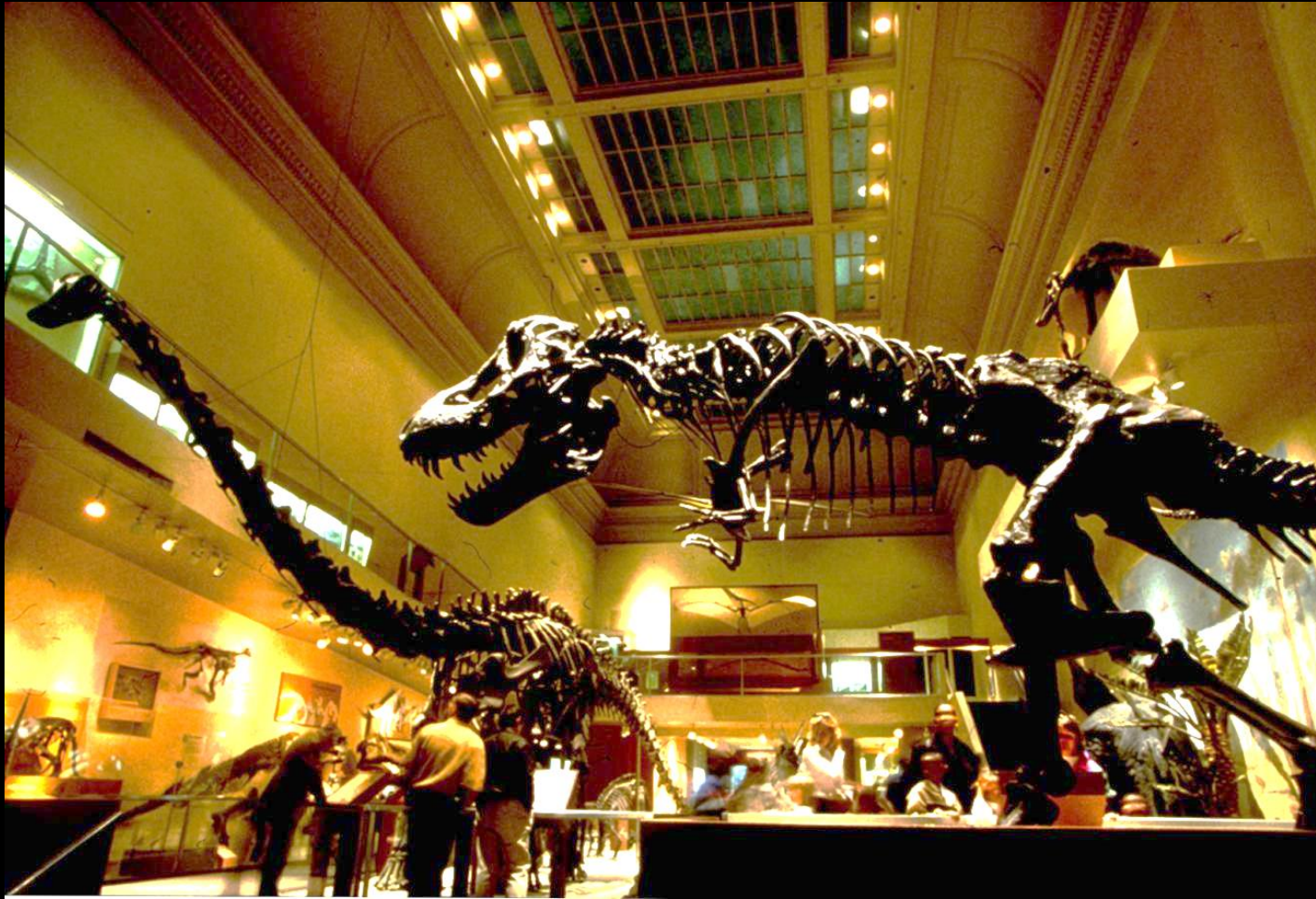
Ancient life



This is another famous fossil. Do you know what it is?

It is a Pliosaur – a type of ancient marine reptile that swam in the seas at the same time as the dinosaurs.

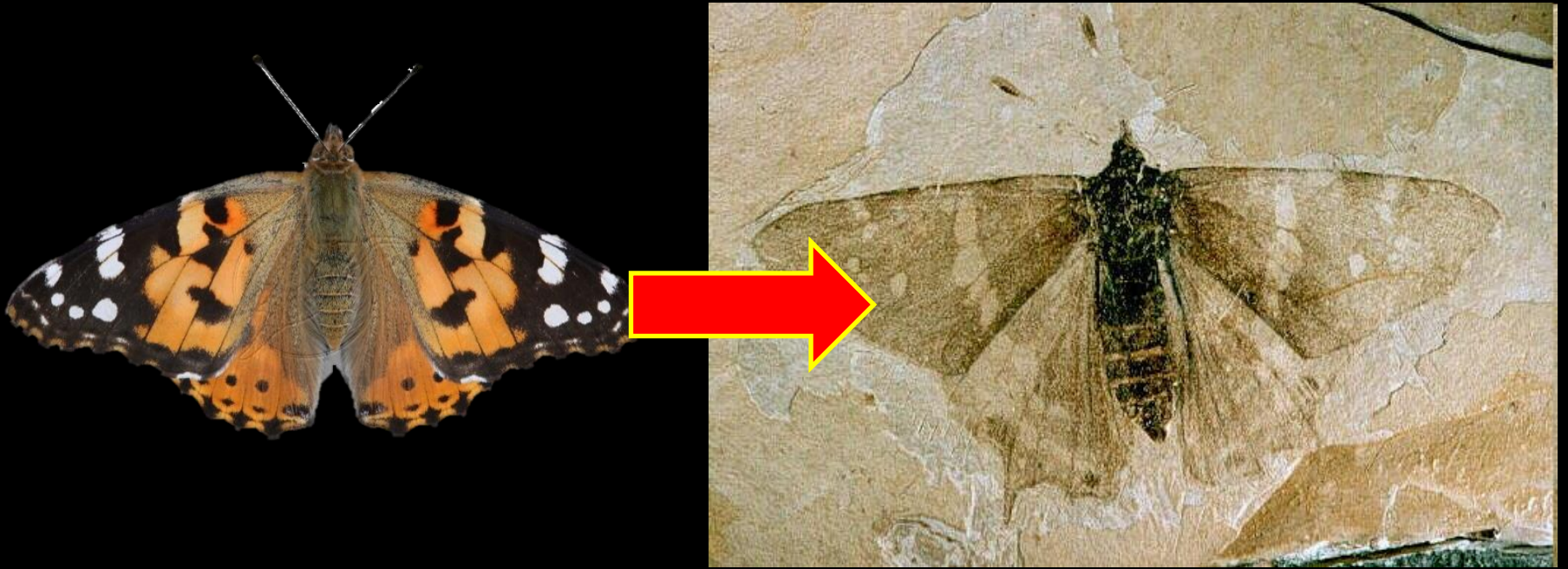
Ancient life



Here are some of the most famous fossils in the world – dinosaurs!

Here we can see a Brontosaurus and a T-Rex.

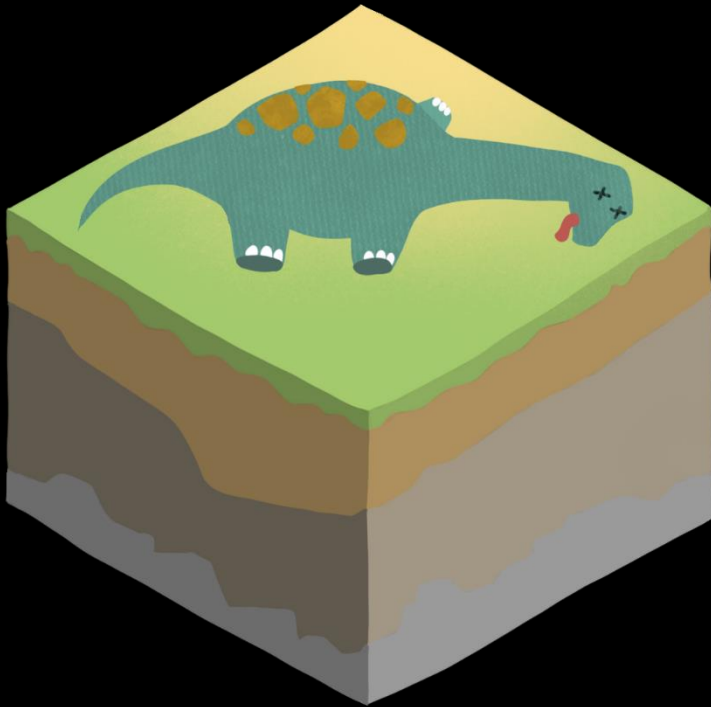
How do fossils form?



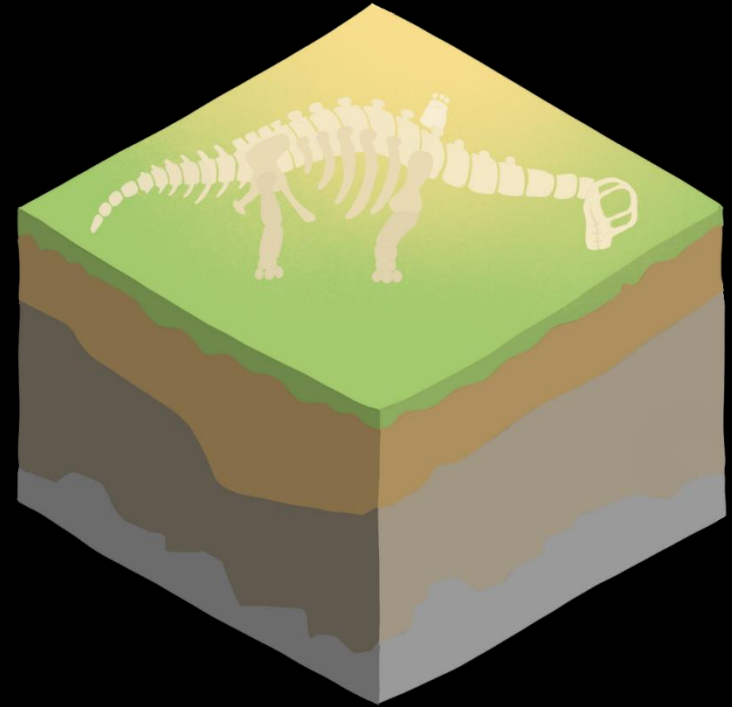
How does a living creature become a fossil preserved in rock?

How do fossils form?

Death



Decay



The first thing that happens is the creature dies.

Then the soft parts of its body, things like organs and muscles rot away or decay, leaving only the hard parts like bones behind.

Decay

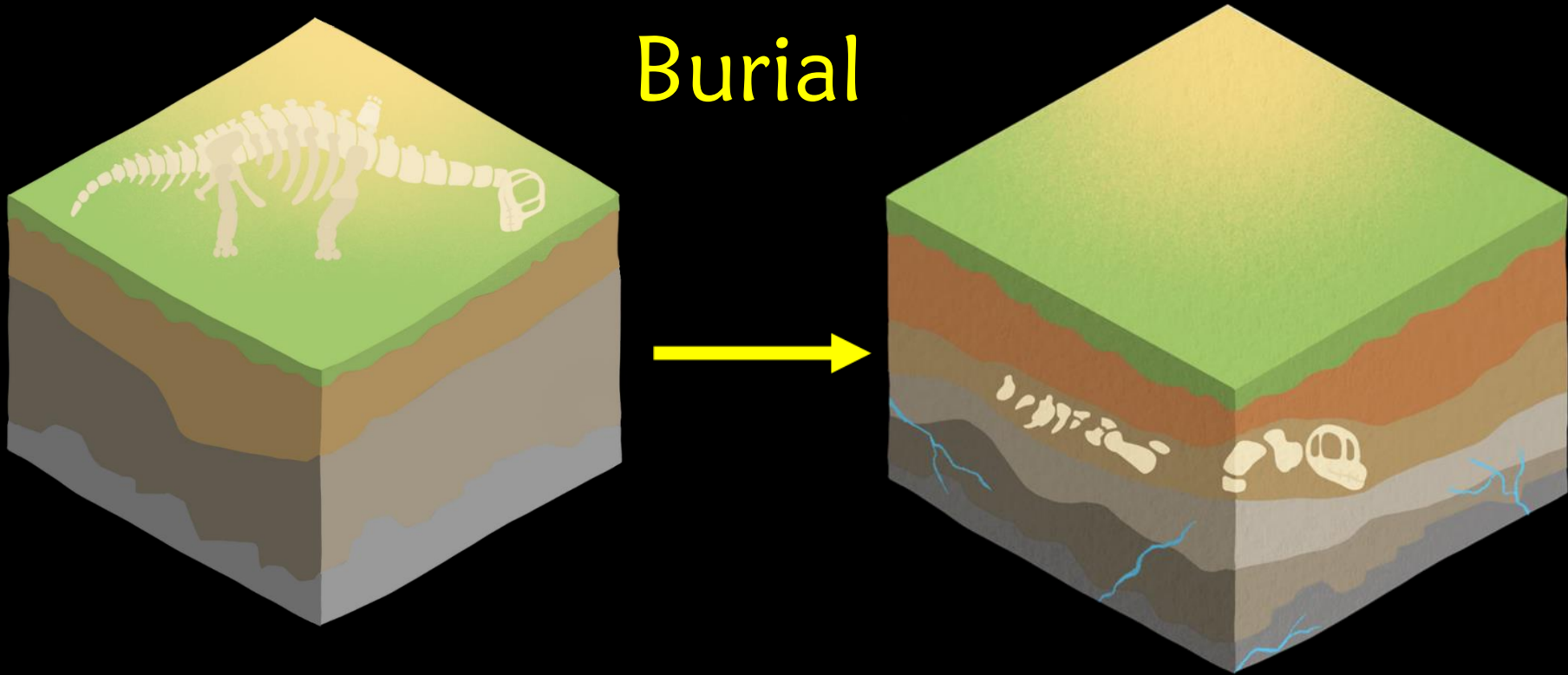


What parts of this frog have decayed?

What parts have been fossilised?



How do fossils form?



Next the parts of the body that haven't decayed become buried
– covered in layers of mud or sand.

How do fossils form?

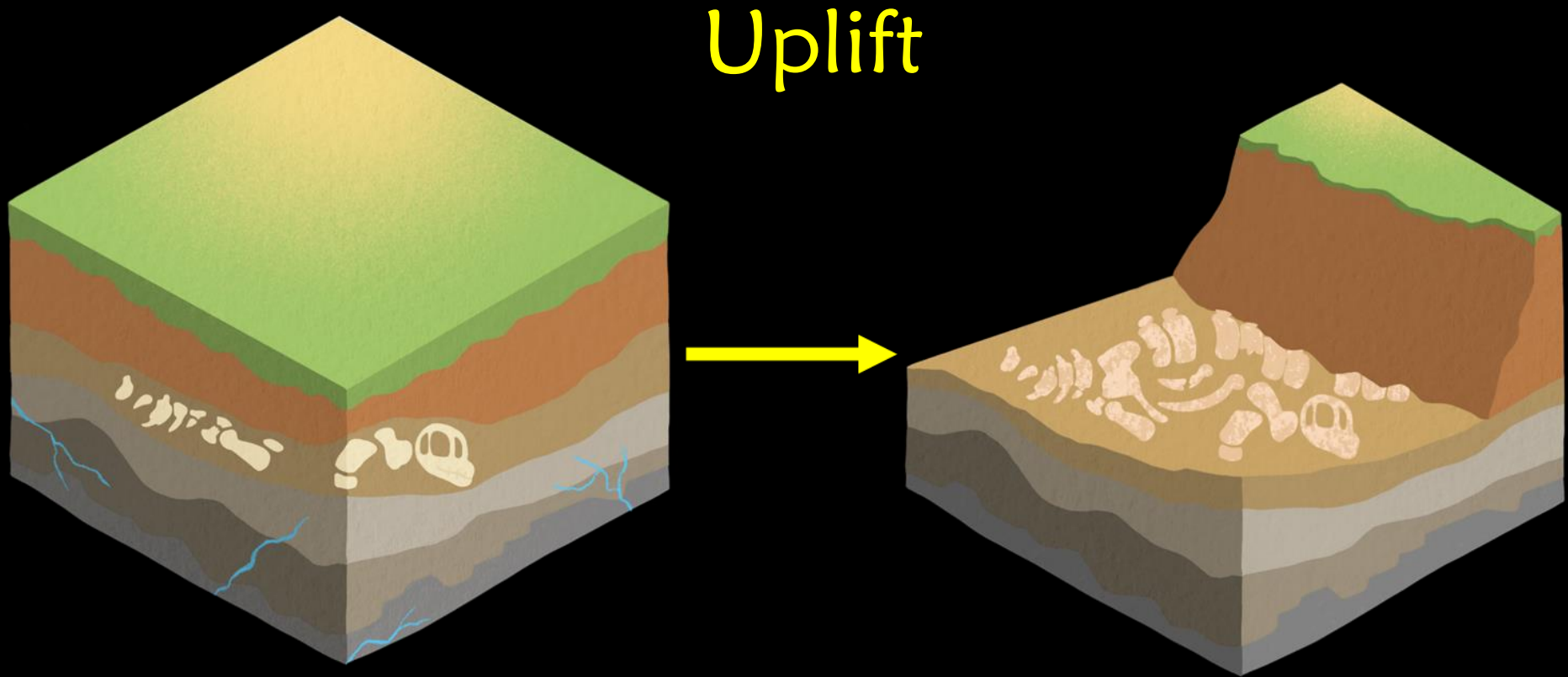


Plate tectonic movements cause rocks to be compressed and pushed back up to the Earth's surface, this allows us to find fossils.

Where do we find fossils?



What kinds of places are good for finding fossils?

Places where lots of rocks are exposed!

Beach



Fossil ammonite on a beach in the south of England

Mountains



Fossil trilobite found in the Canadian Rocky Mountains

Quarries



Fossil fish found in a quarry in Germany

Footpaths



Fossil brachiopods in a footpath in Cork city

Stone walls



Fossil crinoids in a stone wall in county Mayo

Museums



Lots of interesting fossils at the Whitby Museum in northern England

How old are fossils?



**QUEEN
ELIZABETH I
1600 AD**



**ROMANS
27 BC**



**NORMANS
1100 AD**



**EGYPTIANS
3100 BC**



**VIKINGS
800 AD**

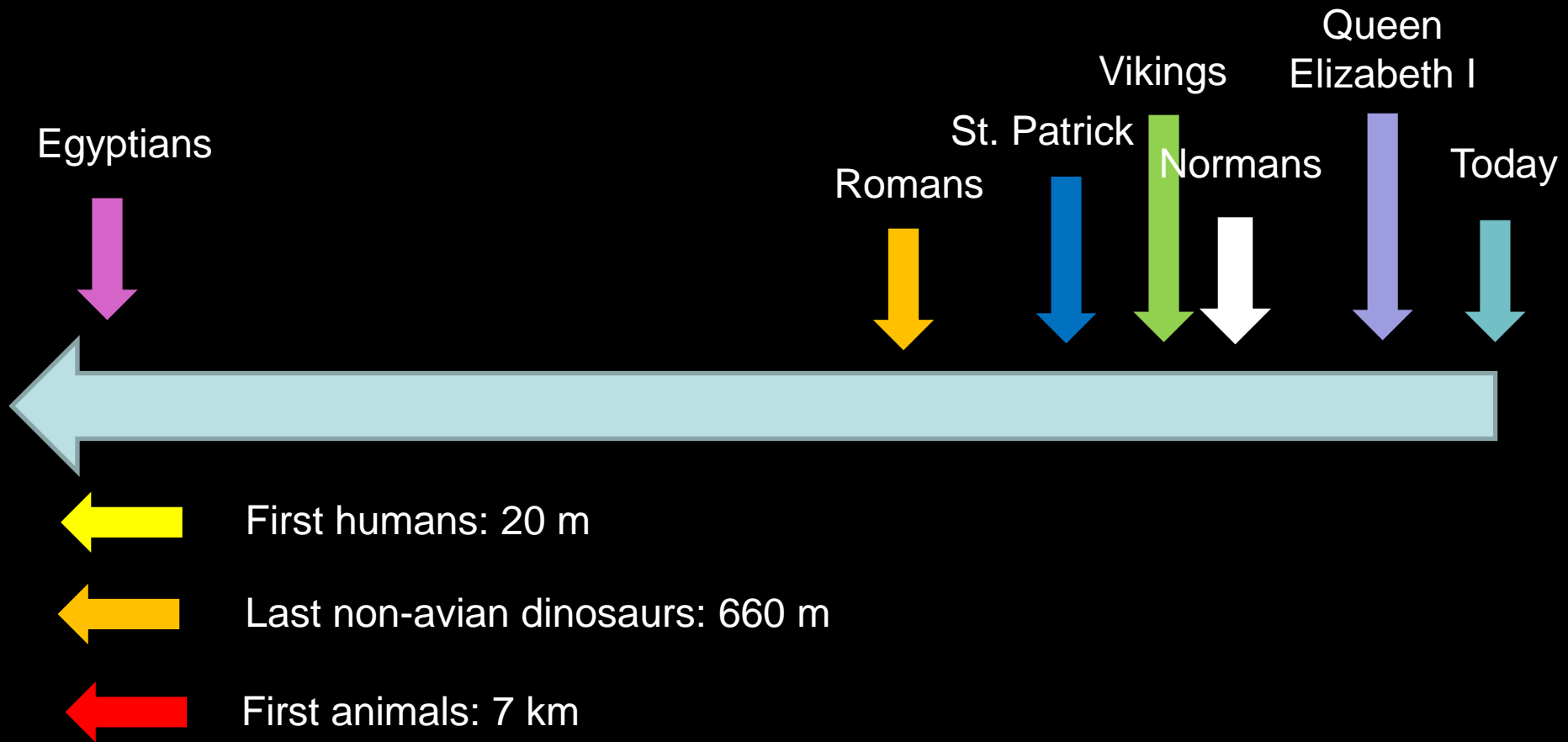


**ST PATRICK
500 AD**

Let's think about some famous historical people.

Do these people seem old?

Fossils are OLD



Let's put these historical people on a timescale.

If we extended this timescale how far back would we need to go to reach the first humans, the last non-flying dinosaurs or the first animals on earth?



Fossil Map of Ireland

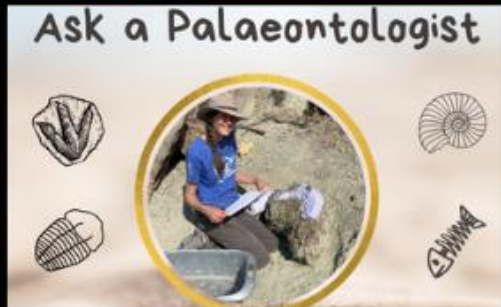
Ireland's Fossil Heritage has developed a fossil map showing you where you can find fossils yourself! The map also shows areas where fossils of special scientific importance have been found in Ireland.

The map also features a number of fossil walking trails set in ten major towns and cities in Ireland and showcases the wonderful fossils that you can find in the buildings and paving stones around us.

Filter by

Clear filters

- Public Sites**
See real fossils as they are in nature.
- Urban Sites**
Find fossils on the streets and in the buildings of Ireland's towns and cities.
- Discovery Sites**
Historic fossil finds of scientific importance.



WWW.UCC.IE/EN/FOSSIL-HERITAGE/

To find out more about Irish fossils check out our website.

We have lots of resources including a fossil map and fossil video game!