

Elephants & Earthquakes

For Young **Explorers**



Let's explore some great scientific discoveries!

[No's] coincide with tracks on the tour

[2] The Age of the Earth, TCD Old Library So, how old do you think the world is?	
And how would you figure out how old it is?	
	The state of the s

How old am 1?



[3]	The	Museum	Building	

[5] The Museum Building
How many different things can you spot in the carvings on this
building?
Why do you think they are here?
List a few of the things you can see.

[4] The man who split the atom, Physics Department

An atom is small, very small.

But how small?

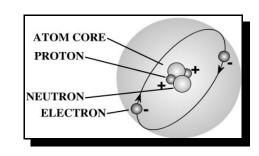
How many would fit in a full stop?.....

100? 1,000? A million?

A billion??.....

As many as there are people in the world?

...

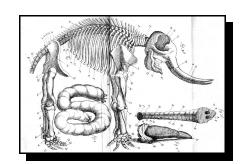


[5] Dublin elephants, Zoology department

Approximately, how many elephants live in Dublin?

.....

Sketch an elephant here. As a guide, this is the skeleton of one that died in Dublin in 1681!



[6] This is Charles Parsons's steam turbine.

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What do you think this machine does?

.....

Name three things in your room that are powered by electricity?

.....

In the 1890s steam turbine was used to power a boat.

Can you think of another way to power a boat?

[7] Earthquakes, TCD railings

Have you ever felt an earthquake?......

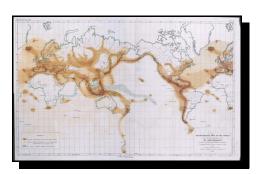
What do you think it would be like?

.....

.....

Can you find the name of the Irish scientist who started the science of earthquakes?

(Clue: check the railings!)



Robert Mallet's atlas of earthquake zones

[8] Ireland's first railway, Dargan statue, National Gallery

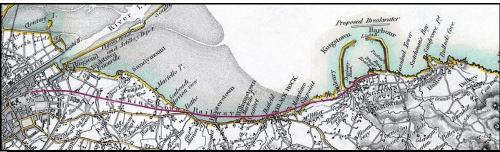
Can you think of somewhere you would like to travel to on a train?.....

This map shows Ireland's 1st railway. Where did it start and end?

.....

Do you recognize anywhere on the map?.....

.....



[9] Schrödingers Cat, No. 64 Merrion Sq.

Can a cat be asleep and awake at the same time? Why not?.....

How would you know if you can't see inside the box it is sleeping in?!

.....







Spot anything odd about this picture?!

[10] Landing on the Moon, Government Buildings

Who was the first man on the

.....

Moon?....

Did you know, he had distant Irish relations?!

What year did he land?.....

Did you know, Irish algebra helped to put a man on the Moon?!

[11] Dirty snowballs, No. 7 Ely Place

How can a snowball exist in space?

.....

What do you think a space snowball would look like from Earth?

Have you ever seen a comet?.....

Have you ever seen a shooting star?......



Nasa photo of Comet Hyakutake 1996.

[12] National Concert Hall, Earlsfort Terrace

This is a so-called <u>crystal palace</u>. It was built at the back of the concert hall in 1865 for great exhibition. It was a big building, made of metal and glass.

But what comes into your head when you hear the words "crystal palace"?

Describe what you imagine here:





Nasa night sky network

[13] Starry starry night, No. 16 Earlsfort Terrace

Did you see any stars last night, or was it cloudy?

Have you a favourite constellation?

A famous experiment took place in the back garden of No. 16, when scientists measured the light from stars and planets.

Draw what you think an Ingenious Irish scientist might look like!

My ingenious Irish scientist:

Why not give your scientist a name, like Professor Dara O'Brainey:)

Take a photo of your drawing and ask your parents to post it on facebook.com/lngeniousIreland.or email it to hello@ingeniousireland.ie and we'll post it for you. We look forward to seeing your pictures!

Congratulations! You have completed the trail. We hope you enjoyed exploring some ingenious Irish discoveries. **Check out our other free activity trails on our website**.

Dublin City of Science 2012

This activity trail was developed with support from Dublin City of Science 2012, which brings a celebration of science to Dublin, supporting over 160 events and activities across the worlds of art and culture to entertain the public and bring science to life. www.dublinscience2012.ie



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