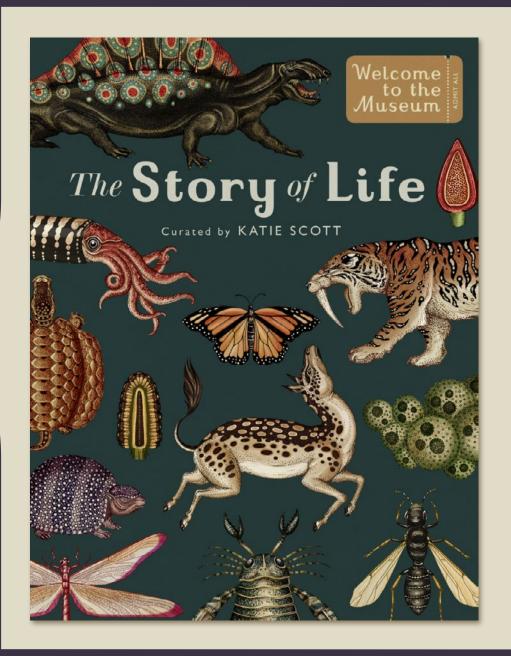
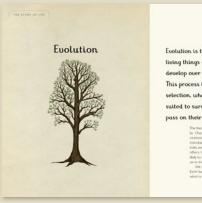
## The Story of Life: Evolution (Extended Edition)



## See evolution in action with this chronological compendium.

- This addition to the Welcome to the Museum series features all of Katie Scott's original artwork from the concertina Story of Life, plus lots of extra text and six new images.
- With detailed artwork by Animalium and Botanicum illustrator Katie Scott
- A comrehensive guide to evolution, from the first cells to modern man
- Beautifully packaged hardback book format
- Over 800,000 Welcome to the Museum copies now sold in 28 languages

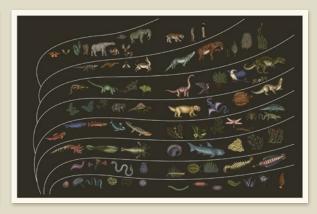
## The Story of Life: Evolution (Extended Edition)

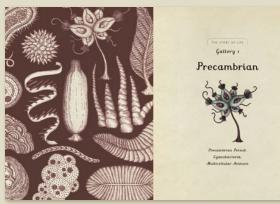


Evolution is the scientific theory of how tiving things gradually change and develop over time to form new species. This process is largely driven by natural selection, whereby the organisms best suited to survive in their environment pass on their traits to the next generation.

by Charles Danies and Africk Reset Walker in the endmentionals century it was based upon the observation that includuals within the same spoose shows a wide ranger of physicial trails, some of which are better valled to their environment than others. Individuals with a latter chance of survival are than the physician of the physician of the physician of their trails are studied on the physician of the physician of their trails are studied on the physician of the physician of their trails are studied on the physician of the physician of their trails.

We now know that the theory of evolution links all Earth back to a single common ancestor in a process of which is still taking place today ....





PRECAMBRIAN 4.6 bya – 541 mya

## Precambrian Period: First Life

The Precambrian is the name given to the first time period on Earth. During the billions of years of the Precambrian, the Earth formed and cooled. Volcanoes beliefed out gases, rods formed from volcanic lava and the oceans condensed from atmospheric vapour. It is thought that life first appeared in these mineral rich waters as simple chemicals spewed through vents in the Earth's crust under the oceans, and reacted with one another to form more complex compounds.

Some of these molecules then combined and developed the ability to copy themselves, using the complex chemicals DNA, RNA and proteins – the building blocks of life. The next step was the protection of these chemicals with a membrane to form the first simple organisms.

The very earliest of these were single-celled organisms called prokaryotes — cells that do not have a nucleus (control centre) or any other subunits. Instead, all of their component chemicals float together, protected by the cell wall. It is thought that all life on Earth evolved from one such single cell, referred to as the Last Universal Common Ancestor (LUCA). This probably lived around 3.8 billion years ago.

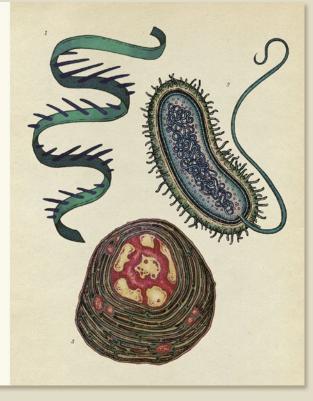
Key	to	plate	-

RNA (ribonucleic acid)
Length: Less than
0.001 micrometres
RNA is present in all living
cells and takes the form of chain of molecules.

2: Prokaryote
Length: 0.1 – 5.0
micrometres
The cell's tai-like
flagelium enables it to
move. The cell wall is
lined with frondlike pil

3: LUCA Last Universal Common Ancestor The cell that links all life on Earth

14



Pub Date	07/09/2017
Pub Price	£12.99
ISBN	9781783706822
$H \times W$	246 × 189mm
Binding	Hardback
Age Range	9-11 years
Author	Ruth Symons
Illustrator	Katie Scott
Extent	80pp
Word Count	7000 words
Rights Available	World