

# Knowledge Organiser: What are the consequences of human endeavour?

## Geography

### Physical Geography

The Earth can be split into lines of latitude and longitude.

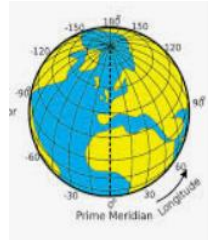
Rapa Nui (Easter Island) is in the Pacific Ocean and is surrounded by islands with lush, green flora. Rapa Nui is barren.

Darwin's journey – countries of South America.

### Human Geography

Human behaviour can change an environment:

- Rapa Nui (Easter Island)
- Yellowstone Park



## Art

**Marianne North** was a 19th century traveller and plant painter who painted the plants she found on her travels and founded a Gallery to house them at **Kew Gardens**. Her detailed drawings, provided great insight into the natural world from faraway lands.

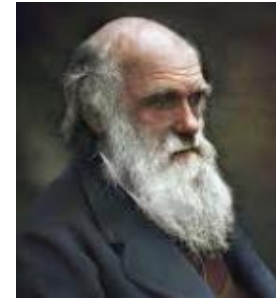
**Karl Blossfeldt** was a German photographer, sculptor and teacher; he is best known for his close-up photographs of plants and living things. Blossfeldt, had a passion for discovering the hidden details and forms within plants and seeds.

Media:

- Acrylic paint
- Clay
- Pencil
- Photography



## People



**Charles Darwin** – 1089-1882

British naturalist who travelled the globe for his research. Famous for his Theory of Evolution.

**Marianne North** – 1830 – 1890

Biologist and noted artist.

**Alfred Wallace**

British naturalist. Independently thought of a theory of evolution through natural selection causing some controversy.

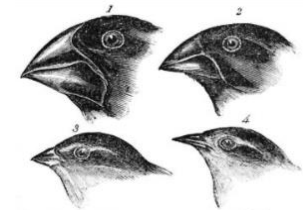
**David Attenborough** – Broadcaster and historian. Vocal about how humans impact the natural world.

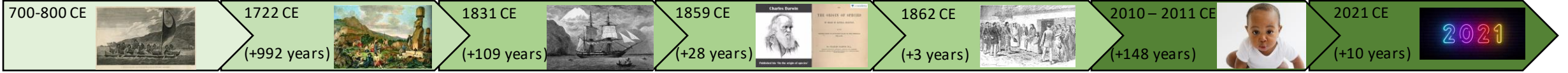
**Karl Blossfeldt** – German photographer most famous for his close-up photographs of living things.



## Science: Animals and their habitats

- Species can be **classified** in a variety of ways and they can be named using these classifications.
- There are **different habitats** and **biomes** around the globe and the animals that live in these habitats adapt to suit them.
- **Fossils** can be used to build a picture of what has previously happened in a location.
- **Offspring** will have **inherited traits** and **adaptive traits**. There will be **variation** in offspring.
- **Natural selection** is the process whereby living things that are better adapted to their environment tend to survive and produce more offspring. The theory of its action was first fully expounded by Charles Darwin, and it is now regarded as be the main process that brings about **evolution**.
- Darwin studied **finches** on the Galapagos Islands and when looking at diet and beak shape, along with more research, thought about natural selection.





Key Events	
<b>700-800 CE</b>	Early settlers arrive at Rapa Nui (Easter Island).
<b>1722 CE</b>	The first known European visitor to Rapa Nui was the Dutch explorer Jacob Roggeveen, who arrived in 1722. The Dutch named the island Paaseiland (Easter Island) to commemorate the day they arrived.
<b>1831 CE</b>	Darwin sets sail for the Galapagos Islands.
<b>1859 CE</b>	Charles Darwin publishes his <i>On the Origin of Species by Means of Natural Selection</i> .
<b>1862-1877 CE</b>	The established population on Rapa Nui is reduced from 2000 to 111, due to a major slave trade from Peru, followed by epidemics of smallpox.

Vocabulary	
<b>Adaptation</b>	Change in a living thing to fit its environment.
<b>Bio-diversity</b>	The variety of plant and animal life in the world/a particular habitat.
<b>Characteristics</b>	A special quality or appearance that makes an individual or group different from others.
<b>Eco-systems</b>	A biological community of interacting organisms and their physical environment.
<b>Environment</b>	The surroundings in which a living thing lives or operates.
<b>Erosion</b>	The process of being worn away by natural agents.
<b>Evolution</b>	The process by which different living organisms are believed to have developed from earlier forms.
<b>Expressionism</b>	A style of painting in which the artist or writer seeks to express the inner world of emotion rather than external reality.
<b>Extinction</b>	The process of a particular thing ceasing to exist.
<b>Food chain</b>	A series of organisms each dependent on the next as a source of food.

Vocabulary	
<b>Fossil</b>	Remains or impressions preserved in petrified form.
<b>Habitat</b>	The natural environment of an organism.
<b>Inheritance</b>	The genetic characters passed from parent to offspring.
<b>Latitude</b>	The angular distance of a place north or south of the earth's equator.
<b>Longitude</b>	The angular distance of a place east or west of the Greenwich meridian.
<b>Natural selection</b>	Organisms becoming better adapted to their environment tend to survive and produce more offspring. Now regarded as the main process that brings about evolution.
<b>Realism</b>	Accurate artistic representation without idealisation.

**RE: Creation vs Evolution**

- Different creation stories including Christianity (using the book of Genesis in the Bible).
- An in-depth look at if religion and Science must always be seen as polar views.
- Darwin's conflict between his faith and his scientific work.
- The Great Debate between Wilberforce and Huxley in 1860. What were the main points of view? What are your views?

**UN Convention of the Rights of the Child**

12 You have the right to give your opinion and for adults to take it seriously.

30 You have the right to practice your own culture, language and religion. Minority and indigenous groups need special protection of this right.

**Feeling Curious?**

- <https://www.botanicalartandartists.com/about-marianne-north.html>
- <https://www.michaelhoppengallery.com/artists/58-karl-blossfeldt/overview/>
- <http://darwin-online.org.uk/>
- <https://www.rmg.co.uk/discover/explore/hms-beagle>
- <https://www.smithsonianmag.com/travel/the-mystery-of-easter-island-151285298/>