

Animals including Humans

Significant Scientist

Dr. George Church



American geneticist and molecular engineer of Jewish descent. His research has provided valuable insights into human biology, including how our cells function and how genetic variations can affect our physical traits and health.

Enquiry Skills

Observing over time

Identifying and classifying

Fair testing

Pattern seeking

Research

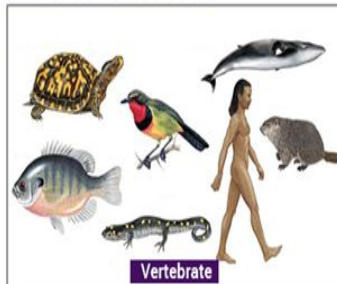
Working Scientifically Skills

Oral and written explanations, conclusion, predictions, classify, collect data and evidence, improve, use secondary sources.

Ask relevant questions.

Data – gather, record, classify, present.

Record – drawings, labelled diagrams, tables.



Key Knowledge

The skeleton protects our internal organs, keeps us supported and helps us to move.

Skeletons move because bones are attached to muscles. When a muscle contracts (bunches up), it gets shorter and pulls up the bone it is attached to. When a muscle relaxes, it goes back to its normal size.

To keep your body fit and healthy you need a balanced diet including all of the food groups:  
 Carbohydrates – Main source of energy for our bodies (rice, potatoes, pasta and bread).  
 Protein – Repairs and builds muscles, organs and immunity (fish, meat, eggs and cheese).  
 Sugar and Fats – Stored for energy and create a layer of fat to keep us warm. Should not have too much of these (chocolate, sweets, butter, oil, cream).  
 Vitamins and Minerals – Keep us growing and fighting infections (fruit and vegetables).

Key Vocabulary

<b>endoskeleton</b>	An internal support made of bone that gives the body shape, allows it to move and protects internal organs from damage.
<b>exoskeleton</b>	A hard covering that supports and protects the bodies of some types of animals. The word exoskeleton means 'outside skeleton'.
<b>vertebrate</b>	An animal with an internal backbone.
<b>invertebrate</b>	An animal without an internal backbone.
<b>muscle</b>	An organ of the body which allows for the body to move as it is attached to the skeleton.
<b>contract</b>	When muscles tense.
<b>relax</b>	When muscles are less tense and return to normal size.
<b>nutrition</b>	The study of food and how it works in the body.

