

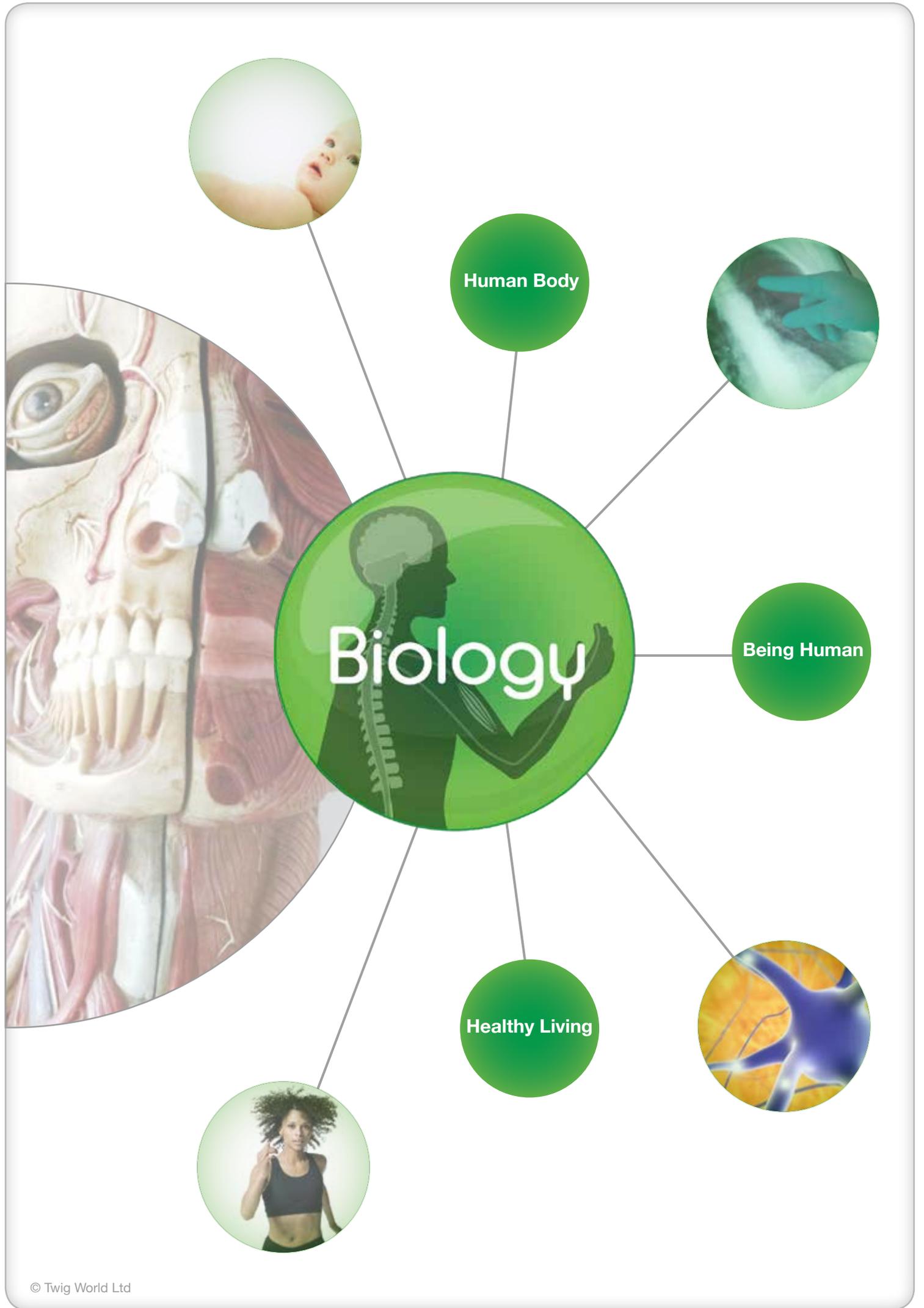


Film List

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Digestion

Introduction to Digestion	Follow the journey of food through your digestive system.
Stomach	The digestive journey – how does your stomach break down your food?
Small Intestine	The digestive journey – what happens to food in the small intestine?
Large Intestine	The digestive journey: what happens to food in the large intestine?
Beef Tapeworms: Part 1	Beef tapeworms can grow up to 12 metres inside our bodies – what do they do to us?
Beef Tapeworms: Part 2	Meet the biologist who volunteered to grow a tapeworm in his intestines.
Burps and Farts	Find out how air, gas and bacteria make us burp and fart.
Kidneys	Discover the lifesaving work of our kidneys.
FactPack: Digestion	Learn about the weird and wonderful world of the digestive organs.
FactPack: Teeth	Learn some fun facts about a human's 32 teeth.
FactPack: The Liver	Find out about the liver and its ability to regenerate.

Heart and Blood

Blood	What blood actually does and why we can't live without it.
Heart	What does the heart look like, and how does it work?
Blood Transfusion: Vietnam	What did the Vietnam War teach doctors about blood clotting?
Blood Transfusion: Falklands	What did the Falklands War teach doctors about blood clotting?
Healthy Heart	Find out why fatty foods harm your heart.
Why Is Blood Red?	Some animals have pink or blue blood. Why is ours red?
FactPack: Heart	How do human and animal hearts compare?



Lungs

Lungs	A journey through the lungs, the vital organs which allow you to breathe.
Big Breathers	Find out what happens when marine mammals hold their breath.
Little Breathers	Can we train ourselves to hold our breath for longer?
Terrible TB: Part 1	Is the terrible lung disease tuberculosis making a comeback?
Terrible TB: Part 2	Introducing the ethical debate surrounding the treatment of tuberculosis patients in the US.
The Dark Side of Oxygen	How oxygen is vital for life, but corrodes the human body.
Smoking: The Damage	Witness the effect smoking has on the lungs.
Factpack: Lungs	Discover the amazing inner workings of the lungs.

Muscles and Bones

Bones	Find out how bones develop with age.
Cardiac and Smooth Muscles	Find out how these involuntary muscles work and why you can't control them.
Skeletal Muscles	Find out how skeletal muscles help you control your body.
An Ancient Olympian	Discover how the remains of an ancient olympian athlete reveal his training techniques.
Clever Thumbs	Could opposable thumbs be the key to our intelligence?
Growing Pains	Explore how bones grow and change through puberty, and the impact this has on teenagers.
Joints	An introduction to the movements different types of joint can make.
What Happens When I Crack My Knuckles?	What happens between your joints to cause the cracking noise?



Brain

Introduction to the Brain	It controls our bodies, our thoughts, our dreams – but what do we know about how the brain works?
Neurons As Cells	Find out how 100 billion cells communicate to form the basis of all our thoughts.
Neurons As Networks	How neurons work and how they help us learn.
The Nervous System	How the various components of the nervous system interact.
Developing Brain: Baby Brain	Babies' brains are a work-in-progress. Find out how they are shaped by the world around them.
Developing Brain: That's Me!	The development of self-awareness: when are we able to recognise ourselves?
Developing Brain: Theory of Mind	Discover the theory behind our unique ability to understand the thoughts and feelings of others.
Developing Brain: Tantrums	Why do toddlers throw temper tantrums? The answer is in the brain.
Developing Brain: Teenage Brain	See how the teenage brain rewires for adulthood.
The First Brain Surgeon	An introduction to the work and legacy of Dr Harvey Cushing, the world's first brain surgeon.
The Curious Case of Phineas Gage	Discover how a freak accident allowed scientists to study the function of the brain.
The Lobotomist	The history of the 'ice-pick lobotomy'.
What Is a Memory?	How does the brain store memories?
Intuition	How does intuition save us from danger?
How We Learn	Discover the best way to learn a new skill.
Can We Control Pain?	If we expect pain, does this change what we feel?
FactPack: Reflex Arcs	What are reflex arcs and how do they work?
FactPack: The Spinal Cord	What is the spinal cord and what does it do?

**Pregnancy**

Fertilisation	Find out why the egg and sperm have to race against time to begin a new life.
Pregnancy: First Trimester	What happens in the first three months of pregnancy?
Pregnancy: Second Trimester	What happens between the third and the sixth month of pregnancy?
Pregnancy: Third Trimester	What happens in the last three months of pregnancy?
Birth	After nine months of pregnancy, how does the body prepare for and endure labour?
Sperm	Discover the trials sperm face getting to the egg.
Egg	What are human eggs and how are they released?
Placenta	What is the placenta and what does it do?
Medical Marvels: IVF	What is IVF and how does it work?
Medical Marvels: Ultrasound	What is ultrasound and how was it discovered?
War in the Womb	Witness the fight for nutrition between a mother and her unborn child.
Why Are We Born So Helpless?	Baby elephants can walk at birth – why can't we?
Contraception: History of the Pill	Learn how the pill has changed through time from invention to modern-day.
Chemical Contraception	Learn how chemical contraception, such as the pill or IUS, works.
Contraception: Barrier Methods	Learn how barrier methods, such as condoms and coils, work.
Factpack: Pregnancy Timeline	Find out what happens at every stage of pregnancy?

Puberty

Introduction to Puberty	Find out how hormones affect teenage bodies and minds.
Puberty in Girls	Which hormones are responsible for changing the female body during puberty?
Puberty in Boys	Which hormones are responsible for changing the male body during puberty?
Melatonin and Sleep	Does an imbalance of melatonin make teenagers moody?
FactPack: Why Do Teens Get Spots?	Discover the biology behind spots and boils.



Hormones

Introduction to Hormones	Find out how hormones affect the body and mind.
Winning and Losing	Discover how biology can dictate whether we win or lose.
Fight Or Flight	What happens to our bodies when we sense danger?
Melatonin and Sleep	Does an imbalance of melatonin make teenagers moody?
Cortisol and Chronic Stress	Explore how a hormone designed to help us cope with stress could damage our bodies.
FactPack: Why Do Teens Get Spots?	Discover the biology behind spots and boils.

Senses

How We See Part 1: Eyes	A look at the structure of the human eye.
How We See Part 2: Brain	A look at how the brain functions to create focused vision.
The Senses	An introduction to the five senses and how we use them.
How We Smell	An introduction to the structure of the nose and how we use it to smell.
How We Taste	An introduction to the structure of the tongue and how we use it to taste.
How We Touch	An introduction to how skin helps us feel pressure, pain, heat and cold.
How We Hear	An introduction to the structure of the ear and how we use it to hear.
How We Balance: Part 1	An introduction to how our ears help us balance.
How We Balance: Part 2	Find out how the brain, eyes, skin and muscles help us balance.
Looking into the Future	Sometimes we can see things before they have happened – is this down to instinct?
Animal Senses	Animals share many of our senses, but use them in very different ways – why?
Synaesthesia	Why do some people see smells and hear colours?
Test Your Vision	Can you pass the vision test?
Why Do I Get Travel Sick?	Learn how the brain and the senses detect motion.
What Are Goosebumps?	An introduction to the body's in-built thermostat system.



Fitness

Insulin and Diabetes	What is diabetes and how does it affect the body's insulin supply?
What Is Fitness?	Discover the three methods used to measure our levels of fitness.
Obesity	What is obesity and how can you tackle it?
Why Is Fat So Hard to Shift?	Why is it easier to put on weight than to lose it?

Nutrition

Balanced Diet	Which foods should form part of a healthy diet?
Healthy Beauty	How does your diet affect your appearance?
Malnutrition	Discover the biggest risk to health worldwide.
Life Cycle Nutrition	What key nutrients are required by our bodies at each stage in life?
Vitamin Deficiencies	The investigation which revealed the shocking impacts of a vitamin deficient diet.

Substance Misuse

Harmful Drugs	Find out why recreational drugs can be very harmful.
Alcohol and the Brain	In what ways can alcohol damage the brain, and who is likely to be affected?
Drugs and the Brain	How do psychoactive drugs affect brain function?
Harmful Drugs: Cannabis	What are the hidden dangers of cannabis?
Harmful Drugs: Cocaine	How does cocaine affect the mind and body, and why is it so dangerous?
Harmful Drugs: Heroin	Why is heroin considered the most harmful drug of all?
Harmful Drugs: LSD	What is LSD, and what does it do to our senses?
Harmful Drugs: Ecstasy	How does Ecstasy affect our bodies, and what are the implications?
Alcohol: The Poison	Alcohol is toxic to humans. How does this poison affect our bodies?
What's in a Cigarette?	Discover the effects of the 4000 chemicals contained in cigarettes.
Science of Addiction	Why do some people become addicted to drugs?



Health and Disease

Healthy Teeth	What causes tooth decay and how can you avoid it?
Germs and Hygiene	Germs are all around us – what are the risks and how can we protect ourselves?
Antibiotics	How do antibiotics protect us from harmful bacteria?
Sexually Transmitted Infections	Discover the dangers and symptoms of sexually transmitted infections.
Eradication of Polio	The story of how two men developed a vaccine that would save thousands of children’s lives worldwide.

“ Twig’s aimed at the teenage mind – short, sharp, high impact – it keeps them interested ”



- Teacher

Biology

Adaptation
and Evolution



Cells
and DNA



Ecosystems



Plants





Adaptation

Adaptation	Discover how organisms thrive in particular environments due to adaptation.
Variation	See how variation allows certain organisms to thrive in different environments, and makes each individual unique.
Life in the Freezer	Find out why in even the coldest places on the planet there is life.
Life in Hot Deserts	Find out why in even the hottest, driest places on the planet there is life.
Predators and Prey	The hunters and the hunted – explore the adaptations that help them survive.
Bizarre Adaptations	A look at the weird and wonderful adaptations species have developed in order to survive.
Sexual Selection	How do individuals ensure they attract the attention of the opposite sex?
FactPack: Classification	How and why do we group life forms into classifications?
FactPack: Deadliest Animals	What is the deadliest animal on Earth?
FactPack: Super Predators	Can you guess which predator is being described?
FactPack: Super Prey	Discover the surprising ways animals can protect themselves against predators.

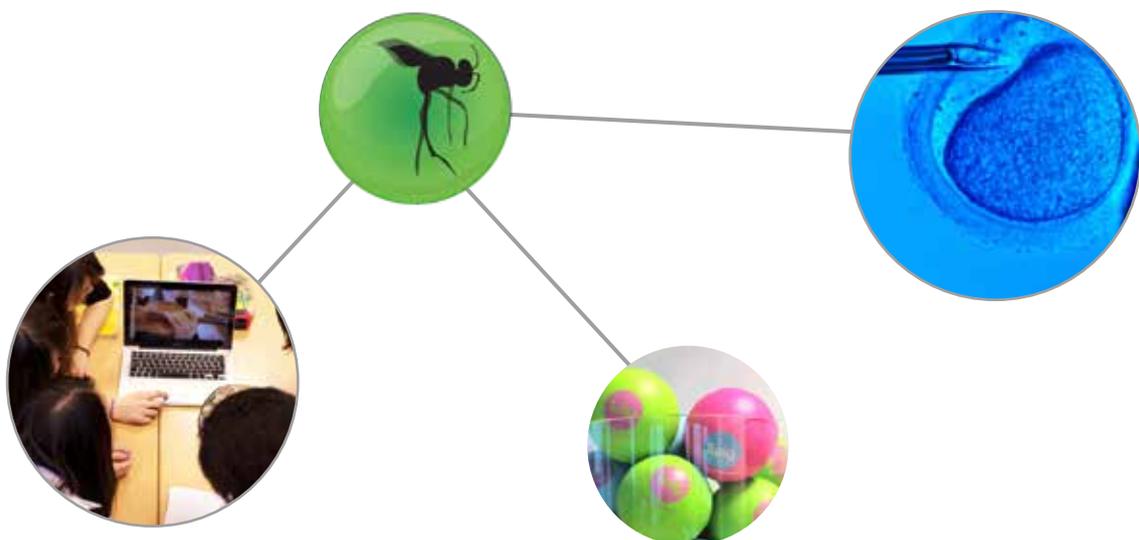
Extinction

Extinction	How does a species become extinct?
Fossil Evidence	How can evidence of evolution be found in stone?
Mass Extinction: Dinosaurs	What killed the dinosaurs?
A History of Mass Extinctions	There have been five mass extinctions on Earth – will humans cause the sixth?
Endangered Species	An astounding number of animal species are under threat of extinction.
Big Al	The story of one of the most complete dinosaur skeletons ever found.
FactPack: Endangered Species	Where in the world are there an estimated 12,000 captive tigers?



Evolutionary Theory

Natural Selection	An introduction to the Theory of Evolution.
Mechanisms of Evolution	Explore the processes which drive evolution: mutation, natural selection and genetic drift.
Chimps: Our Closest Relatives?	How similar are humans to chimps?
Evolution: The Evidence	Do fossils provide evidence of evolution?
Origin of Species	How are new species created?
Darwin's Dilemma	The story of Charles Darwin and The Origin of the Species.
Man's First Ancestors	Which species of apeman was the first to walk on two legs, and why?
Habilis and Boisei	Discover why two million years ago Africa became a crossroad in the Evolution of man.
Homo Ergaster	What was one of the most important discoveries in the evolution of man?
Homo Sapiens	Discover the great development in human evolution, which led Homo sapiens to triumph over Neanderthals.
Evolution of Man: The Evidence	Discover why studying the fossils of our ancestors is a crucial tool in detecting changes to the human brain.
Early Man and Agriculture	Discover why learning how to farm changed the course of human evolution forever.
FactPack: Primitive Species	Discover the species that have stopped evolving.
FactPack: Selective Breeding	Find out which vegetables have been selectively bred by man.





The Cell

What Is a Cell?	An introduction to the building blocks of life – cells.
Cell Division: Mitosis	Where do new cells come from?
Cell Division: Meiosis	How are sex cells formed?
What Is Cancer?	Find out why cancer causes more deaths worldwide than any other disease.
The Cell Membrane	How do cells protect themselves from the external environment and take the nutrients they need?
The History of the Microscope	How were microscopes invented?
The Very First Cell	How did life on Earth begin billions of years ago?
Different Types of Cell	How many types of cell are there, and what do they do?
FactPack: Enzymes	What are enzymes?

DNA

What Is DNA?	Find out how DNA makes us unique.
How Does DNA Make Protein?	The function of DNA – to carry genetic code that makes proteins.
DNA and Crime	Find out how DNA profiling helps solve crimes.
Discovery of DNA	Learn how the race to discover the structure of DNA was won.
FactPack: DNA	Find out why DNA is the blueprint for life.



Genetics

Inheritance: Part 1	The genes we inherit make us who we are – how does this happen?
Inheritance: Part 2	Discover the difference between dominant and recessive genes.
Dogs and Wolves: Nature Or Nurture?	Can wolf cubs be raised to behave like domestic dogs?
Breeding and Behaviour	Can Russian silver foxes be domesticated?
Mendel and Inheritance	Learn how an Austrian monk laid the foundations for modern genetic science.
Huntington's: The Disease	Discover the cause and symptoms of the degenerative neurological illness Huntington's disease.
Huntington's: The Dilemma	Would you want to know if you were at risk of developing Huntington's disease?
Cystic Fibrosis	How does a single genetic mutation cause the immune disease cystic fibrosis?
FactPack: Hybrid Animals	Ever heard of a zorse? Discover the breeds created by man, not nature.
FactPack: Fruit Flies	Discover why the fruit fly is used in scientific experiments.

Using Genetics

Genetic Modification	Should scientists manipulate the genetic information of cells?
Cloning	Discover the process of making identical genetic copies.
Stem Cells	What are stem cells and what makes them unique?
Therapeutic Stem Cells	An introduction to the science and controversy surrounding stem cell therapy.
The First Human Clone	When will we see the first human clone, and should we make one at all?
The Genius Sperm Bank: Part 1	Meet the American millionaire behind the Genius Sperm Bank.
The Genius Sperm Bank: Part 2	Meet the babies created by Robert Graham's Genius Sperm Bank.
Saviour Siblings	Should we create a new life in order to save an existing one?
Dolly the Sheep	Controversial birth of the world's first cloned animal.
FactPack: Twins	Learn why not all twins are identical.

**Immune Defence**

Immune Defence: Part 1	What is your immune system and how does it work?
Immune Defence: Part 2	What are antibodies?
HIV/AIDS: Immune Evaders	What makes HIV/AIDS such a deadly virus?
Smallpox: The First Vaccine	Introducing the science behind the eradication of one of the world's most lethal diseases.
Pandemic Viruses	How do viruses invade our bodies and spread through communities?
Pandemic Viruses: SARS	This contagious disease caused worldwide panic – but what is SARS?
Bee Stings	What happens in the human body after a bee sting?
Tumours: The Kill or Cure Virus	Can we use a virus as a cure? An extraordinary story of pioneering medical research.
FactPack: Bacteria	How can a single cell kill or cure?
FactPack: Viruses	Are viruses alive?

“It’s good watching Twig at home... you can watch again and again... and tell your Mum and Dad and they’re like ‘How did you know that?’”



- Pupil



Energy and Growth

Photosynthesis	How do plants convert sunlight into usable energy and form the basis of all food chains on Earth?
Plant Transport	From roots to leaves, discover the water and mineral transport systems in plants.
Parasitic Plants	Discover the plants that steal from other plants in the fight for survival.
Carnivorous Plants	The extraordinary meat-eating plants which consume animal prey.
Plants and Medicine	Discover how plants can be used to ease pain and treat disease.
Plants and Medicine: Aspirin	Discover the long history of the 'wonder drug' aspirin.
Tropisms and Hormones	Plants grow towards light or water – how?
What Plants Need to Grow	We know plants need water and sunlight, but what other nutrients are vital for survival?
FactPack: Non-Edible Crops	Find out which common plant crops are not destined for your plate.

Plant Structure

Parts of the Plant: Leaves	Discover the role leaves play in the life cycle of plants.
Parts of the Plant: Flowers	What role do flowers play in plant reproduction?
Defensive Plants	Plants cannot run away from predators – so how do they protect themselves?
Plants in Extreme Environments	Discover how some plants have adapted to live in the world's most extreme environments.
FactPack: Amazing Plants	What are the smallest, biggest and oldest plants in the world?
FactPack: Power of Plants	Discover the unlikely sources that provide medical cures.

Plant Life Cycles

Sexual Reproduction in Plants	How does pollen travel between flowers?
Asexual Reproduction in Plants	Discover the plants that can reproduce by themselves.
Plant and Animal Mutualism	Witness the unlikely relationships between plants and animals, and how it helps them survive.
Plant Mimics	The ingenious plant species that mimic other life forms in order to survive.
Oak Life Cycle	Witness 1000 years in the life of an oak tree.



Ecosystems

The Taiga Forest	What lives in the largest land ecosystem on Earth?
Redwoods	Discover some of the oldest and largest organisms on Earth.
Deciduous Forests	Discover the dramatic seasonal changes that occur in this habitat.
Tropical Rainforests	From forest floor to canopy, discover one of the world's most diverse ecosystems.

Changing Ecosystems

What Is an Ecosystem?	Learn about the interdependence of living and non-living things.
What Is Biodiversity?	Find out why biodiversity is vital to life on Earth.
Algae	Did you know algae are one of the most important plant species on Earth?
Lichen: Indicator Species	Discover why lichens can indicate the good or poor health of ecosystems.
Migration: Reproduction	Take the epic journey from the Pacific to Alaska with the Great Salmon Run.
Migration: Predation	Take the epic journey from the Antarctic to Africa with the Great Sardine Run.
Migration: Seasons	Follow the Great Wildebeest Migration across the Serengeti.
Biotic Factors in Ecosystems	What happens if you introduce a new species into an ecosystem?
Abiotic Factors in Ecosystems	What happens if you alter the non-living factors of an ecosystem?
Conservation	Why is conservation important?
Invading Plant Species	Discover the potential devastation caused by invading plants.
Invading Animals: The Cane Toad	Witness the impact the South American cane toad has on Australian life.
FactPack: Bird Migrations	Just how far do some birds fly?
FactPack: Amazing Migrations	Why do animals and insects migrate?



Land Biomes

Tundra	Discover what survives in Earth's coldest biome.
Temperate Grassland	Meet the herds that inhabit one of Earth's most diverse biomes.
Savannah	Learn about life in the extreme climates of the Savannah.
Tropical Rainforest	Discover how the world's most diverse ecosystems work, from canopy to forest floor.
The Taiga Forest	Find out what lives in the largest land biome on Earth.
Deciduous Forests	Witness how seasonal changes affect the trees and wildlife in this biome.
Deserts	Discover why deserts are so dry.

Ocean Biomes

Oceans: Sunlight Zone	Discover the abundance of life near the surface of the ocean.
Oceans: Coral Seas	Discover the largest living structures on our planet.
Oceans: The Deep Blue	What strange creatures live in the dark depths of the ocean?
Oceans: The Abyss	How does life exist in the most inhospitable habitat on Earth?
Oceans: The Intertidal Zone	Meet the plants and animals which live in the ever-changing intertidal zone.
Oceans: Frozen Seas	Meet the creatures living above and below the ice in our planet's polar seas.

Food Chains

What Is a Food Chain?	Journey through a food chain, from primary producers to consumers.
The Nitrogen Cycle	Learn how nitrogen is recycled between the atmosphere, the ground and living
Fungi	Neither plant nor animal discover why fungi are a separate classification of
Oceanic Food Chain	Explore the cycle of marine life, from the smallest animal to the biggest.
Bioaccumulation in Food Chains	Investigate the effects of industry on the food chain of the peregrine falcon.
Symbiosis: Mutualism	Find out how different species of animal depend on each other.
Symbiosis: Parasitism	Discover how lice and tapeworms use the human body.
FactPack: Mercury in Food Chains	How does mercury fit in the food chain?