

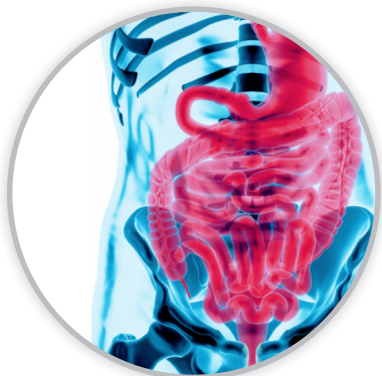


Film List for Form 2 Science Education (Unit 9~11)

Hong Kong's Science Curriculum-matched

twig-world.com

NOT FOR SALE






Film List for Form 2 Science Education (Unit 9~11)

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or



Common Acids and Alkalis

Common Acids and Alkalis



ACIDS AND ALKALIS: PART 1

What are acids and alkalis?
Explore the extremes of the pH
scale.



Measuring pH for Acids and Alkalis



ACIDS AND ALKALIS: PART 1

What are acids and alkalis?
Explore the extremes of the pH
scale.



FACTPACK: PH SCALE

Can you guess the acidity or
alkalinity of these solutions?



■ Neutralisation



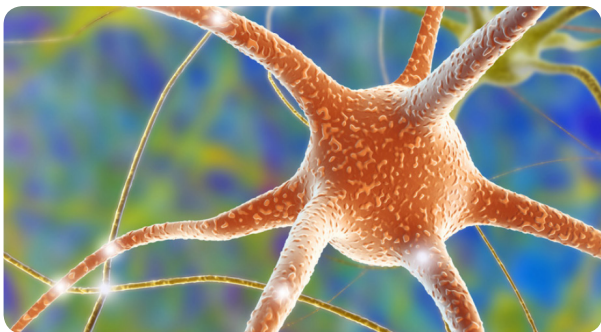
ACIDS AND ALKALIS: PART 2

Discover the importance and uses of neutralisation reactions.



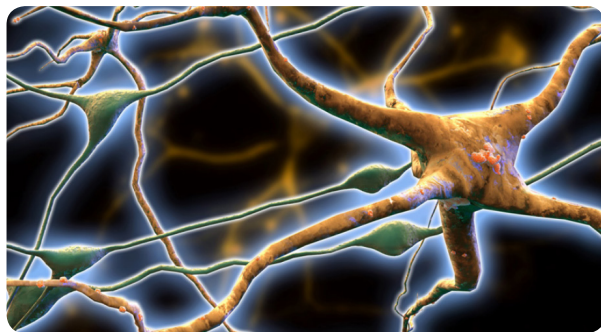
Sensing the Environment

Senses and Sense Organs



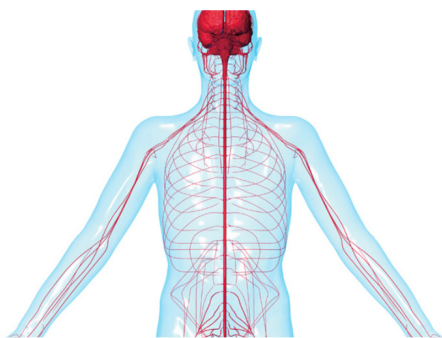
NEURONS AS CELLS

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.



THE SENSES

An introduction to the five senses and how we use them.



Sight



WHAT IS LIGHT?

Discover how light allows us to see the world and provides vital energy needed for life on Earth.



COLOUR

Red, green, yellow, blue - what makes colours different from each other?





**FACTPACK:
COLOUR-MIXING**

Revealing the different ways colour can be made.



TEST YOUR VISION

Can you pass the vision test?



**HOW WE SEE PART 1:
EYES**

A look at the structure of the human eye.



**HOW WE SEE PART 2:
BRAIN**

How the brain functions to create focused vision.



**FACTPACK: ANIMAL
VISION**

How do animals view the world differently?



WHY IS THE SKY BLUE?

From blue horizons to red sunsets, what creates the colour of the sky?

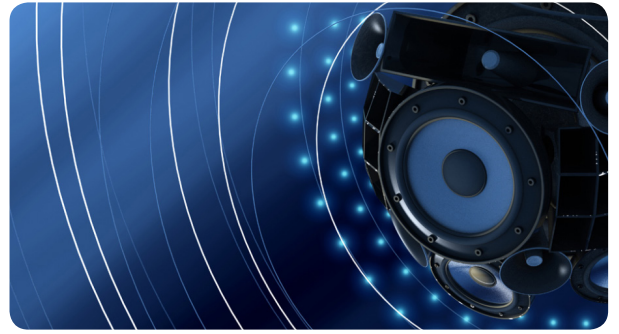


Hearing



HOW WE HEAR

The structure of the ear and how we use it to hear.



WHAT IS SOUND?

How and why do we hear different noises?



MUSICAL INSTRUMENTS

What distinguishes music from noise?



BEYOND HUMAN HEARING

What are the sounds we can't hear?



ECHOLOCATION: DOLPHINS

How do dolphins use sound to navigate?



Smell and Taste



HOW WE SMELL

The structure of the nose and how we use it to smell.



HOW WE TASTE

The structure of the tongue and how we use it to taste.



Other Senses



HOW WE TOUCH

How skin helps us feel pressure, pain, heat and cold.



HOW WE BALANCE: PART 1

How our ears help us balance.



HOW WE BALANCE: PART 2

How the brain, eyes, skin and muscles help us balance.

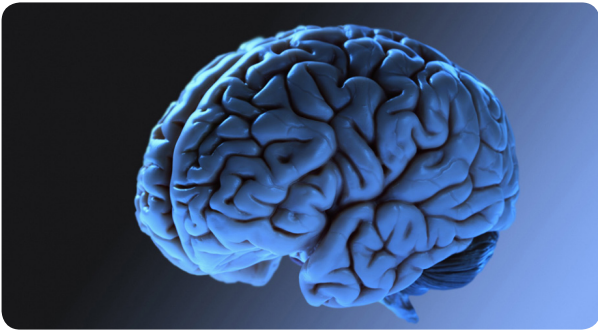


WHY DO I GET TRAVEL SICK?

How the brain and the senses detect motion.



■ The Brain and Our Senses



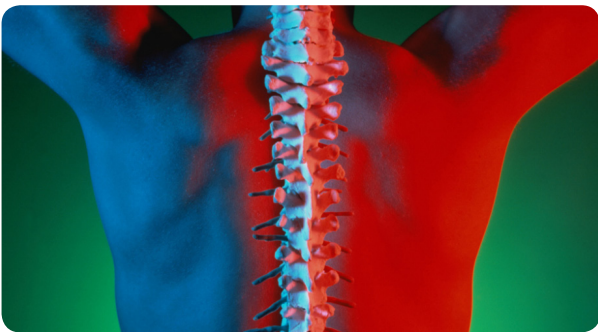
INTRODUCTION TO THE BRAIN

It controls our bodies, our thoughts our dreams – but what do we know about how the brain works?



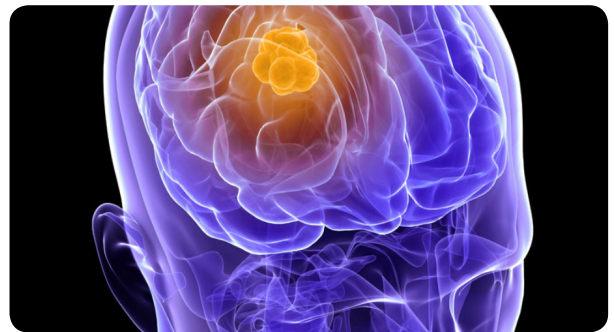
FACTPACK: REFLEX ARCS

How reflex arcs work and some common examples.



FACTPACK: THE SPINAL CORD

The structure and function of the spinal cord.



SCIENCE OF ADDICTION

Why do some people become addicted to drugs?



WHAT'S IN A CIGARETTE

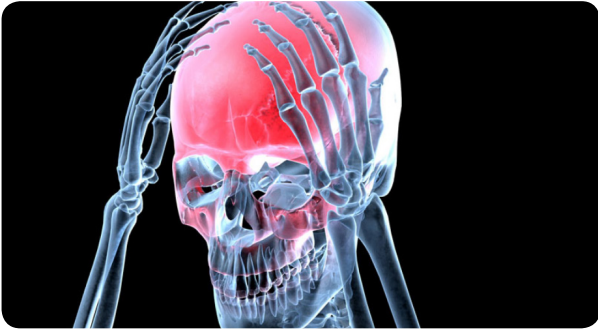
Discover the effects of the 4000 chemicals contained in cigarettes.



ALCOHOL: THE POISON

Alcohol is toxic to humans. How does this poison affect our bodies?





ALCOHOL AND THE BRAIN

The ways alcohol can damage the brain and who is likely to be most affected..



DRUGS AND THE BRAIN

How do psychoactive drugs affect brain function?



HARMFUL DRUGS

Find out why recreational drug use can be very harmful to health.



HARMFUL DRUGS: COCAINE

The effects of cocaine on the mind and body and why it is so dangerous.



HARMFUL DRUGS: HEROIN

Why heroin is considered the most harmful drug of all.



HARMFUL DRUGS: LSD

LSD and its effects on the senses.





**HARMFUL DRUGS:
ECSTASY**

The effect of ecstasy on the body and its implications.



**HARMFUL DRUGS:
CANNABIS**

The hidden dangers of cannabis.



SYNAESTHESIA

Learn about a condition that leads people to “see” smells or “hear” colours.



Unit 11

Force and Motion

Motion



SPEED, VELOCITY, ACCELERATION

What is the difference between speed, velocity and acceleration?



TERMINAL VELOCITY

What happens when you accelerate in freefall?



FACTPACK: ACCELERATION

Which can accelerate faster: man-made objects or living organisms?



Force



FRICTION

Too little and we fall over; too much and we struggle to move. Learn all about friction.



FACTPACK: EXPERIENCE FRICTION

Play along and experience friction first hand.





HOT AIR BALLOONS

How is flight made possible with little more than hot air?



BODY CRASH

Discover how airbags and seatbelts can save your life.



NEWTON'S LAWS OF MOTION

Discover the physical rules which dictate how objects move.



TERMINAL VELOCITY

What happens when you accelerate in freefall?



ROLLERCOASTERS

How do forces combine to create a thrill-packed ride?



FACTPACK: G-FORCE

How much G-force can a human stand?





**FIGHTER PILOTS:
G-FORCE**

Learn why fighter pilots must undergo special training to cope with acceleration.



HOW DO ANIMALS FLY?

Discover why some animals are able to fly.



HOW DO PLANES FLY?

Discover how planes are engineered to stay in the air.



Gravity



NEWTON'S LAWS OF MOTION

Discover the physical rules which dictate how objects move.



THE MOON AND SPRING TIDES

The effect of the Moon on daily and extreme tides.





FACTPACK: G-FORCE

How much G-force can a human stand?



FIGHTER PILOTS: G-FORCE

Learn why fighter pilots must undergo special training to cope with acceleration.



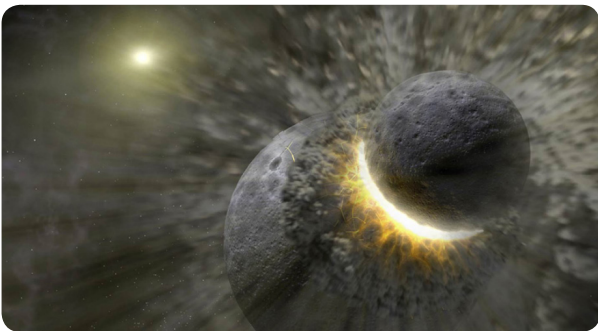
HOW DO ANIMALS FLY?

Discover why some animals are able to fly.



HOW DO PLANES FLY?

Discover how planes are engineered to stay in the air.



EARTH'S TWIN

Why did colliding with its twin prepare our planet for life?



Friction and Air Resistance



FRICITION

Too little and we fall over; too much and we struggle to move. Learn all about friction.



FRICITION IN CURLING

Discover the ingenious ways curlers use friction in their sport.



FACTPACK: EXPERIENCE FRICTION

Play along and experience friction first hand.



NEWTON'S LAWS OF MOTION

Discover the physical rules which dictate how objects move.



RED HOT: EMERGENCY STOP

The everyday process of braking uses extraordinary energy conversion.



MAGLEV TRAINS

Discover the train that defies gravity.





STREAMLINED: DOLPHINS VS PEOPLE

Discover how streamlining affects animals' ability to swim efficiently.



AERODYNAMICS IN CYCLING

Discover how cyclists can manipulate forces to help them win a race.



TERMINAL VELOCITY

What happens when you accelerate in freefall?



Action and Reaction



NEWTON'S LAWS OF MOTION

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