Subject Overview For Grade 7/MYP 2 Grade 7 Science

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Unit title and Duration	**Key concept**	**Related concept(s)**	**Global context**	**Statement of inquiry**	**MYP subject group objectives**	**ATL skills**	**Knowledge, Skills and Content**	**Summative Assessment**
Unit 1: What do Scientists do? 6 weeks	Relationships	Evidence Patterns	Identities and Relationships Identity formation	To be a Scientist Means to Gather Evidence About Similarity and Difference in Nature to Understand How Things Are related	B, C	Communication Organisational	Students will: **Identify** similarities and differences between a science laboratory and other MYP classrooms **Suggest** and follow laboratory safety rules **Identify** famous scientists **Suggest** the features of becoming a scientist **Define** and use the key concepts needed to investigate relationships in science: evidence, variables, hypothesis, research questions etc **Outline** the scientific method (MYP experimental cycle) **Design** an experiment based on a research question of their own choosing, prompted by classroom observations that will test the relationship between two variables **Collect** evidence **Use** patterns in the evidence to outline the relationship between	Gummy Bears lab Report <u>Proposed idea:</u> B - design an experiment to gather evidence that will test the relationship between two variables

							your dependent and independent variables	
Unit 2: What Changes? (Chemistry) 6 weeks	Change	Form, Transformation	Fairness and Development Imagining a hopeful future	The structure and function of a component is related to its role in a system.	A, D	Thinking: Critical thinking Social: Collaboration Communication: Self-management: organisation and affective Research: Information literacy	Students will: **Identify** and outline the 3 states of matter, namely solids, liquids and gases including inter-particle forces, particle arrangement and particle motion. **State** the properties of solids liquids and gases and outline how this relates to particles. **Identify** and describe changes of state including what happens to inter-particle forces, particle arrangement and particle motion. **Outline** what a mixture is. **Outline** what a solution is. **Define** key words associated with solutions: solvent, solute, dissolve, saturated, soluble and insoluble **Describe** different ways in which mixtures can be separated and carry out separations **Differentiate** between melting and dissolving. **Design** and make a water filter **Investigate** a factor affecting the effectiveness of water filters made in class, and analyse and evaluate the results **State** whether current global access to clean drinking water is fair or **Discuss** whether the lifestraw is a successful solution to the problem of widening the availability of clean drinking water.	<u>Proposed Ideas:</u> A: Knowledge test C: Analyse and evaluate the results of an investigation into a factor affecting the effectiveness of water filters made in class D: Analysing current technologies that are being developed to bring clean water to all parts of the world; with reference to fair and equal access to drinking water (Podcast)
Unit 3 How do living things work?	Relationships	Form Function	Scientific and technical innovation	By Understanding the relationship between the	A, B, C	Collaboration Communication: Making contact	Students will: **Outline** the structure of a cell, including the function of	Create a Blog <u>Proposed Ideas:</u>

(Biology) 6 weeks				necessities of life and the specialised forms and functions of living things, we can make decisions and take actions for healthier and more sustainable lifestyles			organelles **View** cells under a microscope and describe this process **Compare** plant cells and animal cells **Outline** the characteristics of living things (MRS GREN) **Outline** how the form of specialised cells is adapted to their function. **State** the relationship between cells, tissues, organs and systems **Outline** photosynthesis and why it is needed for life **Outline** respiration and why it is needed for life **Apply** their knowledge of the seven life processes to determine if a substance is alive or not.	A: Knowledge test C: Investigation into whether a substance is alive
Unit 4 What makes change happen (Physics) 6 weeks	Change	Energy	Globalisation and Sustainability urban planning, strategy and infrastructure	The complex chemicals that enable life to exist are formed from only a few different types of atom.	A, B, C, D	Communication: Organising and depicting information logically	Students will: **Identify** the different types of energy and give examples. **Outline** simple energy transfers and transformations and give examples. **Investigate** simple energy changes. **Outline** conduction, convection, radiation and insulation **State** how insulation is used to make sustainable homes **Investigate** how controlling the heat energy transfer through insulation can impact the sustainability of our buildings. **Define** fuels **Define** the terms renewable and nonrenewable **Outline** how energy is transferred from the sun to different renewable and nonrenewable energy sources (fossil fuels, wind,	Writing a Newspaper Article <u>Proposed Ideas:</u> B: planning an investigation into how controlling the heat energy transfer through insulation can impact the sustainability of our buildings. D: write up of a debate into which energy source would be best to supply phuket's electricity needs

							water, geothermal and biomass) **Outline** the energy transfers that occur when when we use the different energy sources ((fossil fuels, wind, water, geothermal, biomass and nuclear) **Analyse** efficiency using Sankey diagrams **Outline** advantages and disadvantages of different energy sources, include suitability for different areas **Consider** the meaning of the term 'sustainability' in relation to different UN sustainability goals (not just the context of environmentalism) **Analyse** and evaluate the best future energy source for Phuket	
Unit 5: How can we study the living world? 6 weeks	Systems	Balance Interaction	Scientific and Technical Innovation (models)	Scientists have developed methods and tools to understand and maintain interactions that keep ecosystems in balance	A, B, D	Communication: Communicating numerical quantities	Students will: **Define** ecosystem, habitat, population, biodiversity, innovation, quadrat, transect, ecologist, mesocosm, species **Outline** different types of habitats/biomes and some adaptations of the plants and animals that live there **Recall** what plants and animals need to survive and different ways in which they compete for these resources **Outline** and investigate different methods for how we study and model the living world (including transects, quadrats, magpots) **Use** a scientific model (quadrat transect) to investigate how the distribution of grass changes as you move further from a tree and explain this in terms of the interactions between organisms in	Slideshow or video <u>Proposed Ideas:</u> C: How does the distribution of grass change as you move further from a tree (lab report)?

							a system. **Describe** interactions between organisms in an ecosystem using food chains and food webs to model this **Describe** the interdependence of organisms in an ecosystem (and how changing number of predators or prey affects this balance), including use of an online modelling tool **Interpret** and use the scientific model of graphing to show interdependence in an ecosystem **Analyse** the case of the cats in Borneo by drawing a food web and population graph **Evaluate** this innovation (the use of cats in Borneo) **Describe** factors that make an ecosystem balanced **Identify** factors making an ecosystem unbalanced. Example: invasive species, eutrophication, acid rain, overfishing/hunting, flooding, presence of different pollutants **Research** and evaluate	
Unit 6: Where do we Fit into the World? 6 weeks	Relationships	Evidence, Movement	Orientation in time and space	The study of our solar system and the wider universe can lead to a better understanding of our own planet	A, B, C, D	Communication	**Organise** objects in the Solar System as planets, natural satellites, comets, asteroids **Describe** the main regions of the Earth system: geosphere (and lithosphere), hydrosphere (and Cryosphere), atmosphere, biosphere (androsphere) **Identify** and **describe** the main regions of the Earth's interior: inner core, outer core, mantle, crust	Video or Slide Presentation

							Evaluate geological and paleontological evidence for the formation and development of the Earth **Identify** and **describe** the main regions of the atmosphere: Troposphere, Stratosphere, Mesosphere, Thermosphere, Exosphere **Identify** and **describe** the main regions and forms of water in the hydrosphere: oceans, atmospheric vapour, ice, underground water, and groundwater	

Subject Overview For Grade 8/MYP 3

Grade 8 Science:

All units taught are continuously being developed and improved to best meet the needs of the students at Digital Private School. Therefore the following overview is only a reflection of current plans for the course. Some changes to these course overviews may occur as a result of planning done throughout the academic year.

Unit title and Duration	**Key concept**	**Related concept(s)**	**Global context**	**Statement of inquiry**	**MYP subject group objectives**	**ATL skills and LP**	**Content**	**Summative Assessment and MYP Criteria Assessed**
Unit 1: What Should I Eat? (Diet and Health) 6 weeks	Development	Change Energy Transformation	Globalization and sustainability	We will need to change how we transform materials and energy to achieve sustainable production and equitable distribution of food in the 21st century.	A, D	Information Literacy: Present information in a variety of formats Media Literacy: Evaluating websites Communication: Interpreting discipline specific terms	Explain the meaning of the word Balanced Diet Describe what is a deficiency Disease Identify the constituents of a balanced diet and the functions of various nutrients. Understand the effects of nutritional deficiencies. Recognise the organs of the alimentary canal and know their functions Describe the role of enzymes in digestion Describe the journey of the food across the alimentary canal Identify the difference between mechanical and chemical digestion Describe the process of absorption	**Criterion D:** Poster/Booklet on Nutrients
Unit 2: How do we Map Matter ? (Elements, Compounds, Mixtures and	Change	Models, Patterns	Scientific and Technical Innovation	By Changing matter we can identify patterns in properties that help us to make models,and the models help us invent	A, B, C	Information Literacy Critical Thinking	Describe the main features of the periodic table Classify materials as elements, mixtures and molecules Identify the difference between homogenous and heterogenous	Periodic Table Oral Presentation Criterion B and C

the Periodic Table) 6 weeks				new kinds of material.			mixtures Identify metals and non metals in the periodic table	Reactive metals Investigation, Lab Report
Unit 3: Where are we Now and Where Might We Be Going? (Forces and Motion) 6 weeks	Relationships	Movement, Models	Orientation in time and space	Through making models of the world we have understood how place and time relate to motion and we have made the world seem a small place	A, B, C	Critical Thinking Information Literacy	Outline how a coordinate system is used to specify location **State** that distance is measured in metres **State** that distance is measured in metres State that speed is measured in ms_1 **State** that force is measured in newtons **Outline** that matter is kept together by electrostatic attraction and kept apart by electrostatic repulsion **Describe** force systems in terms of force arrows to show size and direction of forces **Explain** that unbalanced forces cause motion or deformation	**<u>Criterion D</u>** An Essay to research a method for reduction of motor vehicle pollution **The Invisible Cost of Mass Transportation**
Unit 4: How does our Planet Work? (The Earth) 6 weeks	Systems	Models, patterns	Globalisation and sustainability	Modelling interactions between earth's systems allows us to understand patterns that we can use to secure or improve human experiences	A	Organisational Critical Thinking	The ecospheres: biosphere, hydrosphere, geosphere, and atmosphere natural systems that maintain life on Earth climate data to create a climatograph patterns in climate and weather around the world climate data from different cities unique properties of water that have an influence on climate and weather	**<u>Proposed Idea:</u>** Criterion A Take Action, Finding a New Home Project, Creating a 3D Model

Unit 5: How do our Bodies Work? (Body Systems, Respiration and Circulation) 6 weeks	Systems	Pattern, representation, quantity	Personal and Cultural Expressions	By understanding how our body *systems function*, people can learn to *make decisions* for *balanced* and healthy lifestyles.	A, C	Communication Critical Thinking	Explain the basic structures and functions of neurons Define neurotransmitters List a few common neurotransmitters Identify the characteristics of bones Explain the different types of bones	**Proposed Idea:** Criterion D Take Action How to Make Healthy Choices, P.P presentation
Unit 6: What Does a Wave Tell us? (Waves) 6 weeks	Systems	Movement and Energy	Scientific and Technical Innovation	Innovative systems harness wave energy and movement to create sounds and communication.	B, C	Communication: Using subject-specific terminology Thinking in context: What happens to the Earth when you jump up in the air? Creative thinking Research	**General wave properties** Describe a simple model to represent energy transfer through waves (transverse and longitudinal) Describe a wave using wavelength, frequency, amplitude, period, and speed Calculate wave speed, frequency, and wavelength using $v = f \times \lambda$, including interpreting graphs. **Sound** Describe how sound transfers energy as a wave of compressions created by objects vibrating Describe how sound intensity in dB relates to energy transfer Describe how pitch relates to the frequency of sound waves Describe how loudness relates to the amplitude of sound waves. Interpret representations of sound waves on an oscilloscope to explain and quantify loudness and pitch Explain how sound waves from musical instruments are caused by vibration and standing waves Explain how to adjust the pitch of a string instrument with reference to string density, wavelength, and tension Explain using ideas about sound waves, why different musical instruments sound different even when playing the same **notes**	**Proposed Idea:** Criteria B: Designing an investigation on musical instruments and the different wavelengths produced, An Experiment

							Build a musical instrument and describe how it functions. **Phones** Describe the electromagnetic spectrum Investigate and describe the concepts of reflection, refraction and diffraction (including ray diagrams) -Students will describe how mobile phone use EM waves to send and receive signals Describe factors that affect mobile phone signal (including 3/4G and wifi), including the concepts of diffraction and line of sight. Evaluate the impacts of smartphone use on mental well being.	

Subject Overview For Grade 9/MYP 4 Grade 9 Combined Science:

All units taught are continuously being developed and improved to best meet the needs of the students at Digital Private School. Therefore the following overview is only a reflection of current plans for the course. Some changes to these course overviews may occur as a result of planning done throughout the academic year.

Unit title and Duration	**Key concept**	**Related concept(s)**	**Global context**	**Statement of inquiry**	**MYP subject group objectives**	**ATL skills and Learner Profile**	**Content**	**Summative Assessment and MYP Criteria Assessed**
Unit 1: How Does Scale Matter? 6 weeks	Relationships	Patterns, Models	Orientation in Space and Time	Changing the scale of things allows us to make connections and build models that help us understand how the world is structured	A, B, C, D	LP Open Minded Communication Social Research Thinking	Magnification, Scale, Cell organization and structure, Atoms, Electron shell Diagrams, Comparison of Forces, Types of Forces	Criterion A: Written Test/ Chemistry Building a Cell Model to show what a Cell needs to sustain itself
Unit 2: How do we organize the natural world? (Characteristics of living things. pg. 63-67) 6 weeks	Relationship	Patterns, Form	Scientific and technical innovation	We develop our understanding of the natural world by discovering patterns and identifying relationships, organizing our knowledge in new ways.	A, B, C, D	Communication Collaboration Information Literacy Critical Thinking Creative Thinking Transfer Media Literacy	The structure of the atom The structure of the periodic table to the structure of the structure of elements Similarities between different elements in the same groups in the periodic table. How are characteristics of living things used to classify them? How have technological advances affected our models of the world? Classify animals and plants Classification and Binomial Nomenclature	Criterion A: Knowing and Understanding Written Task given
Unit 3: What Makes a Material World? 6 weeks	Change	Form, Models	Scientific and Technical Innovation	In our quest for a better life, we use existing models to change and shape matter into new forms	A, B, C, D	Critical Thinking Communication Transfer	**Define** Ionic Bond **Explain** what metals and non-metals bond ionically **Define** anion and cation **Draw** dot and cross diagrams for simpler ionic compounds using	Are the Rings Pure Gold or Alloys of Gold? Write a Report Criterion D:Reflecting on the Impact of Science

							elements from Groups 1, 2 and 3 to 17 **Define** covalent bond **Explain** why non metals bond ionically **Define** molecule **Define** metallic bond **Explain** how a metallic bond is formed **Outline** how bonding can differ in elements and compounds	
Unit 4: How do we Obtain the Energy that we Need? 6 weeks	Change	Energy	Globalization and Sustainability	Nature provides the **energy** we need, and we should seek to use it by **changing** its form in ways that are **sustainable**.	A, B, C,D	Communication Critical Thinking Creative Thinking	**Classify** energy forms and types (potential and kinetic) **State** that the Joule is the unit of energy **Explain** energy change in terms of work done **Define** different types of chemical reaction and identify them **Define** the terms endothermic and exothermic **Outline** the importance of enzymes in metabolism **Explain** how enzymes work and their role in catalyzing chemical reaction **Discuss** how do enzymes in thermophilic organisms survive the high temperature **Discuss, evaluate** and **compare** which enzymes are needed by different cell types	Proposed Idea: ***Saving energy with biological laundry detergent*** Students will write a lab report investigating the lowest temperature in which their DIY biological detergents can work at.
Unit 5: How do we Make it Work 6 weeks	Change	Energy, Movement	Scientific and Technical Innovation	Machines have revolutionized life by making it easier to change from stored forms to movement and back again	A, B, C, D	Organizational Collaboration	**Recall** that energy is measured in joules	Proposed Idea: **Comparing Energy Consumption** Criterion D: An essay or report comparing energy

							Describe the use of energy as work in some machines **Describe** a range of observed processes such as combustion, temperature change, electricity generation and chemical reactions in terms of energy changes **Classify** phenomena in terms of the energy changes involved **Classify** kinds of energy as either potential or kinetic	consumption in different countries or Written Test Criterion A on Levers, Magnifiers, Moments calculations etc
Unit 6: How do we Put Magnetism and Electricity to Work 6 weeks	Relationships	Balance, Form Transformation	Orientation in space and time	Electrical and magnetic forces fill spaces as fields, understanding their form and relationships allows us to transform energy in useful ways	A,B,C,D	Information Literacy Creative Thinking	**Classify** observed forces in terms of electrical and magnetic interactions **Outline** the basic properties of magnetic fields: polarity, strength, variation **Outline** the interaction of the Earth's magnetic field with magnetic materials and charged particles **State** that negative electric charge is carried by electrons, positive electric charge is carried by protons **Explain** how a surplus or deficit of electrons leads to a static electric charge	Proposed Idea Criterion B: Investigating Conductors, Design an Investigation and formulate their own inquiry question

							Outline and compare the properties of electric and magnetic fields **Outline** how moving electric charge produces an electric current **Describe** how the flow of electrons is used to do work **State** that electric current is measured in amperes.	

Subject Overview For Grade 10/MYP 5 Grade 10 Combined Science:

All units taught are continuously being developed and improved to best meet the needs of the students at Digital Private School. Therefore the following overview is only a reflection of current plans for the course. Some changes to these course overviews may occur as a result of planning done throughout the academic year.

Unit title and Duration	**Key concept**	**Related concept(s)**	**Global context**	**Statement of inquiry**	**MYP subject group objectives**	**ATL skills and Learner Profile**	**Content**	**Summative Assessment and MYP Criteria Assessed**
Unit 1: How do Different Chemical processes work 6 weeks	Systems	Transformation; Energy	Scientific and technical innovation Exploration- Processes and solutions	The systems of life are supported by biochemical reactions and the transformations of energy that occur within cells. Innovations in science could lead to these reactions being utilised to meet growing energy and food needs	B: Planning and Designing C: Processing & Evaluating A: Knowing & Understanding D: Reflecting on the Impact of Science	***LP: Balanced*** Thinking: Critical Thinking Use brainstorming and visual diagrams to generate new ideas and inquiries Research: Information Literacy Process data and report results	**Define** an Arrhenius acid in terms of hydrogen ions and Arrhenius base in terms of hydroxide ions **Define** a Brønsted–Lowry acid and Brønsted–Lowry base in terms of proton donors and acceptors **State** the difference between an alkali and base **State** examples of acids and bases (names and formulae) **Describe** how to test for acids and bases **Explain** the difference between strong and weak, dilute and concentrated acids and bases **Predict** the products of reactions of acids with metals and bases (metal oxide, metal carbonate and alkalis Describe the pH map of the Human Body, Explain how Homeostasis maintains balance in the human body **Describe** the chemical	Lab Report: Investigating the best Ph for Salivary Amylase **Criterion D: Video Documentary: Use it But Don't Misuse it**

							composition of different nutrients that get passed to the bloodstream after digestion **Outline** the serendipity nature of discovering chemical digestion in the stomach **Outline** different digestive enzymes, their locations in the digestive system, their roles, which foods they act on and the optimum pH they work at. **Discuss** the roles of all organs of the digestive system and how they work together in the process of digestion Outline an experiment that shows the effect of Ph on Amylase Enzyme Activity Metabolism:	
<u>Unit 2:</u> How do Machines Make Our Lives Better? 6 weeks	Systems	Movement, Function	Scientific and Technical Innovations	The way that nature uses systems of force for movement inspires mankind to create machines and extend our abilities	A: Knowing and Understanding D: Reflecting on the Impact of Science	***LP: Thinkers*** Thinking: Creative Thinking Critical Thinking Research: Information Literacy Communication	**Analyse** the forces in simple machines: levers, gears **Identify** force-multiplying (types 1 and 2) and distance-multiplying (type 3) levers **Apply** understanding of levers to biological structures and ergonomic designs **Recall** that speed is displacement/time and is measured in m s^{-1} **Explain** the vector nature of velocity as displacement/time **Recall** that acceleration is change in velocity/time, where change in velocity	**Criterion D:** Can Robots replace Humans Essay on Replacing the Human Body

							results from change in speed and/or direction **Solve** problems using equations of linear motion **Analyse** linear and non-linear velocity–time graphs **Recall** the concept of inertia as resistance to a change in kinetic state in terms of Newton's law of motion **Recall** the different tissues in the body and which ones are responsible for movement **Explain** the parts of the human musculoskeletal system **Describe** the roles of different parts of joints **Outline** the muscles involved in muscle contraction **Inquire** about how arm muscle contract when the arm is at rest and when bent **Explain** how antagonistic muscles work in pairs to allow movement **Describe** how the length of muscles may or may not change when contracting	
<u>Unit 3:</u> Do you Feel Electric? 6 weeks	Systems	Interaction; Function	Personal and Cultural Expression	We are able to interact, communicate and survive because of natural and artificial systems of electrical current.	Criterion A Criterion B Criterion C Criterion D	***LP: Risk Takers*** Thinking: Critical Thinking Communication Transfer	**Recall** that negative electric charge is carried by electrons, positive electric charge by protons **Explain** static electrical charge in terms of a surplus or deficit of electrons **Describe** how moving	Written test: **Criterion A, Knowing and Understanding** The end-of-chapter problems are based on the IQs which are driven by the SOI, such as how does the circuitry of the human body enable us to perform and

							electric charge produces a current, measured in amperes. **Describe** how electric current generates work when it passes through resistance **Describe** how energy difference in a circuit is measured as potential difference (p.d.) in volts **Describe** electric current flow and p.d. in series and parallel circuits **Classify** materials as electrical conductors, semiconductors or insulators **Recall** that electrical resistance is measured in ohms (Ω) **Apply** Ohm's law $R = V/I$ to solve circuit problems **Define** redox in terms of oxygen gain and loss **Define** redox in terms of electron gain and loss **Formulate** half-equations for redox reactions **Outline** the processes of communication and coordination executed by the endocrine and nervous systems **Compare** the nervous system to other known electrical communication systems **Explain** the role of the nervous system and its interaction with sensory organs **Explain** the different stages of a reflex arc, **distinguish**	compete in everyday challenges

							between the different types of neurons involved	
Unit 4: How do we Pass on Our Inheritance? 6 weeks	Relations hips	Transformation	Identities and relationships	We are formed by what we inherit from our parents, transformed by our relationship with the environment	A, B, C and D	**LP: Reflective** Organisational Affective Reflective	**Recall** the difference in where DNA is stored between eukaryotes and prokaryotes **Comment** on the code in the genetic information **Explain** the structure of DNA and the importance of complementary base pairing **Draw** and **label** all parts of a nucleotide **Discuss** the link between the concepts of: genetics, cell division, reproduction and inheritance and **reflect** on this connection throughout the chapter **State** some examples of proteins to show how each protein is coded for by a gene	**Proposed Idea** **Criterion A:** End-of-chapter summative problems and Extension problems. Problems based around the IQs of the chapter to assess understanding. These problems require students to apply their understanding to solve calculated and conceptual problems, and to make scientifically supported judgments.
Unit 5: What is our Place in the Universe? 6 weeks	Systems	Interactions	Orientation In Space and Time	We understand how we fit in the universe through interactions with systems on Earth and in space	A, B, C and D	***LP: Caring*** Organisational Transfer	**Classify** extra-terrestrial bodies **Summarise** orders of magnitude and units of measurement for **c**osmology/astronomy (*cf. Chapter 2) **Summarise** the star cycle **Describe** methods for obtaining data in astronomy: telescopes (optical *et al.*), and spacecraft **Describe** the inverse squared relationship between force and distance for gravitational and electrical fields (* cf. Chapter 2)	**Proposed Idea** ***Criterion B: Inquiring and Designing*** *Activity: Plan and Investigation and Produce a Lab Report Investigating rates of reaction*

							Describe the relationship between distance and time in cosmological measurements **Summarise** evidence for the Big Bang theory Explain how our present day atmosphere was formed **Describe** experiments that can be used to deduce the percentage of oxygen in the atmosphere	
<u>Unit 6:</u> How do Humans Impact the Environment 6 weeks	Change	Environment, Consequences	Globalisation and Sustainability	In order to live a sustainable lives we need to learn from the consequences of our actions and change our relationship with the environment	A, B, C and D	***LP: Principled*** Information Literacy Critical Thinking Communication Transfer	**Outline** the relationships between biotic and abiotic factor within ecosystems **Explain** the concept of feeding relationships between living organisms (food webs) **Interpret** and **extract** individual food chains within complex food webs **Apply** scientific terminology to **describe** relationships between organisms **Distinguish** between different types of pyramids used in ecology **Reflect** on the impact of altering one member of the food chain on the other organisms **Explain** the concept of biodiversity and how if relates to the environment **Discuss** human impacts on the environment and our influences on natural biodiversity. **Investigate** changes in biodiversity in local areas	**Proposed Idea** **Written Test: Criterion A: Knowledge and Understanding** **Criteria B and C** ***Investigate the biodiversity in your area***. Design an experiment investigating the biodiversity in one chosen local area and analyse and evaluate their results

							with human impact effects **Design** an investigation following the Inquiry Cycle **Apply** ecological sampling methods to collect appropriate data	