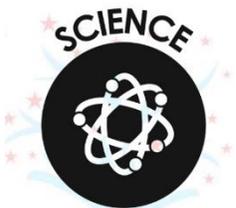


Hill Top Academy

Year 6 Summer Scheme of Learning





Light - Pupils will learn about light, how we see, shadows, reflection and refraction. The pupils will learn how light travels and how this enables us to see objects. The pupils will learn about the angles of reflection and incidence. They will work scientifically and collaboratively to investigate light and how it travels and explore how light creates the colours we see. They will learn about Isaac Newton and his theory of light and colour, investigating into shadows to explore his discoveries and ideas.

Animals including Humans – Pupils learning will be based around the enquiry question: How do our body systems work to keep us alive and how is this connected to Science. Pupils will learn about the body system, circulatory system, blood, muscular system, digestive system, Transporting Water, Healthy Life style – including drugs and alcohol and the impacts of this on the body. Pupils will build on their investigative skills throughout the unit exploring the different topics.

National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary
<p>Light</p> <ul style="list-style-type: none"> ➤ recognise that light appears to travel in straight lines ➤ use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. ➤ explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. ➤ use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. 	<p>Year 3 Light</p> <ul style="list-style-type: none"> • Know that light is a form of energy • Know that energy comes in different forms and can be neither created nor destroyed, only changed from one form to another • Know that we need light to see things and that darkness is the absence of light • Know that light travels in straight lines • Know that light is reflected when it travels from a light source and then ‘bounces’ off an object • Know that everything that we can see is either a light source or something that is reflecting light from a light source into our eyes • Know that the Sun is a light source, but that the Moon is not and is merely reflecting light from the Sun • Know that many light sources give off light and heat • Know that opaque objects block light creating shadows and that light passes easily through transparent objects • Know that as objects move towards a light source, the size of the shadow increases • Know how to show the changing of shadow size by drawing a diagram with straight lines representing light <p>Year 4 – Animals including humans</p>	<p>Electricity</p> <p>circuit, component, conductor, energy, insulator, particle, property, material, appliance, charge, electron, battery, cell, bulb, buzzer, switch, wire, current electricity, static electricity, negative terminal, positive terminal, voltage, chemical reaction, emit</p> <p>Light</p> <p>absorption, energy, particle, property, reflection, wave, mirror, incident ray, image, beam, solid, opaque, transparent, object, source, vibration, frequency</p>

Animals including Humans

- identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
- describe the ways in which nutrients and water are transported within animals, including humans

- Know that proteins are good for growth, carbohydrates for energy and fruit and vegetables provide vitamins and minerals which help keep us healthy (e.g. calcium for healthy bones and teeth)
- Know that a food group can cause ill health, such as tooth decay due to excess sugar
- Know that living things move, grow, consume nutrients and reproduce
- Know that food passes through the body with the nutrients being extracted and the waste products excreted, and that this process is called digestion
- Know that the process of digestion involves breaking complex foodstuffs into simpler building blocks that can be absorbed by the body
- Know that the process of digestion begins with food being chewed in the mouth by the teeth and saliva added
- Know that food is squeezed down the oesophagus towards the stomach in a wave-like action called peristalsis (see diagram below)
- Know that the stomach releases acid and enzymes to continue breaking down the food; the stomach is an organ; an organ is a part of living thing that is self-contained and has a specific important job
- Know that further enzymes and bile break down the food further as it moves through the duodenum towards the small intestine
- Know that the small intestine adds more enzymes and then absorbs the nutrients
- Know that the large intestine absorbs water from the undigested food
- Know that undigested food is stored in the rectum before being excreted through a muscle called the anus

Knowledge Components

Light

- Know that science is a way to understand our world by carefully thinking about it and testing our guesses with observations and experiments.
- Know that we need light to see things and that darkness is the absence of light
- Know that light travels in straight lines and is reflected when it travels from a light source and then ‘bounces’ off an object
- Know that everything that we can see is either a light source or something that is reflecting light from a light source into our eyes
- Know that the Sun is a light source, but that the Moon is not and is merely reflecting light from the Sun
- Know that opaque objects block light creating shadows and light passes easily through transparent objects

New Vocabulary

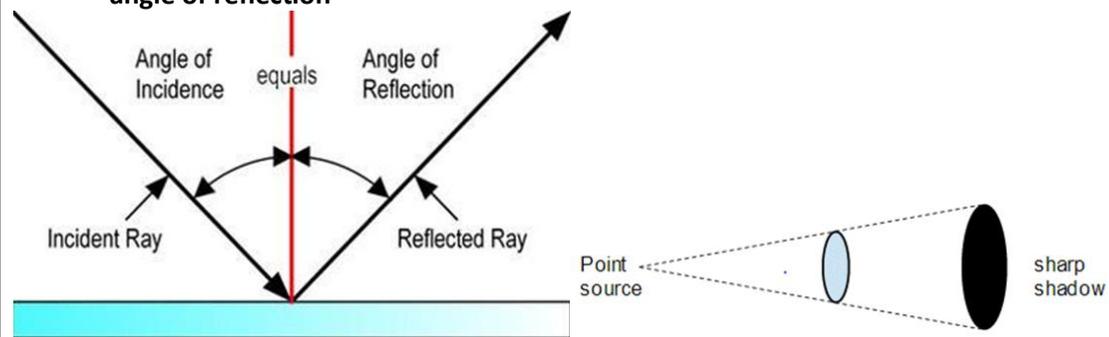
Electricity

series circuit, parallel circuit, resistance, voltage, renewable, non-renewable

Light

angle of incidence, angle of reflection, refraction, spectrum, translucent, periscope, photons, medium

- Know that opacity/transparency and reflectiveness are properties of a material
- Know that as objects move towards a light source, the size of the shadow increases
- Know that the changing of shadow size can be shown by drawing a diagram with straight lines representing light
- Know that translucent objects allow some light to pass through, but some of the light changes direction as it passes through the object; this means that an something seen through a translucent object is not clearly defined
- Know that when light passes from one medium to another (e.g. from air to water), it changes direction; this is called refraction; this happens because light travels at different speeds in different media
- Know that white light comprises all the colours of light
- Know that white light refracted by two surfaces in a prism will spread out so that all of its constituent colours can be seen; this array of colours is called a spectrum; it happens because the different colours that constitute white light travel at different speeds
- Know that when light reflects off an object, the angle of incidence is equal to the angle of reflection



Animals including Humans

- Know that science is a way to understand our world by carefully thinking about it and testing our guesses with observations and experiments
- Know that living things move, grow, consume nutrients and reproduce; that dead things use to do these things, but no longer do; and that things that never lived have never done these things
- Know that animals, including humans, need food, water and air to survive
- Know that people need to exercise often to help their body stay strong and fit
- Know that there are food groups: fruit and vegetables, carbohydrates, protein, dairy, fat and sugary foods
- Know that more than half of our diet should be made up of carbohydrates, fruit and vegetables
- Know that fats and sugary foods should be eaten rarely and in small amounts

- **Know that getting the right amount of each food group (including over half of the diet made up of fruit, vegetables and carbohydrates) is called a balanced diet**
- **Food passes through the body with the nutrients being extracted and the waste products excreted, and this process is called digestion and that the process of digestion involves breaking complex foodstuffs into simpler building blocks that can be absorbed by the body**
- Know that the process of digestion begins with food being chewed in the mouth by the teeth and saliva added
- Know that food is squeezed down the oesophagus towards the stomach in a wave-like action called peristalsis (see diagram below)
- Know that the stomach releases acid and enzymes to continue breaking down the food; the stomach is an organ; an organ is a part of living thing that is self-contained and has a specific important job
- Know that further enzymes and bile break down the food further as it moves through the duodenum towards the small intestine
- Know that the small intestine adds more enzymes and then absorbs the nutrients and that the large intestine absorbs water from the undigested food
- Know that undigested food is stored in the rectum before being excreted through a muscle called the anus
- **Know that skeletons provide support for muscles and protect the body; for example, the rib cage protects the vital organs in the human body**
- Know the names of key bones in the body, including the rib cage, cranium, mandible, sternum, vertebrae, femur, tibia, fibula, patella, humerus, radius and ulna; know how to label these on a diagram of the human body
- Know that an adult human body has 206 bones, the longest of which is the femur
- **Know that the heart and lungs are organs protected by the ribcage and understand this as a part of the skeleton**



- **Know that the heart beats, pumping blood around the body and that blood vessels carry the blood; arteries carry blood away from the heart; veins carry blood towards the heart; capillaries are tiny blood vessels that connect arteries and veins**
- Know that the heart is composed of four chambers: two atria and two ventricles; the aorta is the largest artery in the body and most major arteries branch off from it (see diagram below)
- **Know that blood travels around the body transporting nutrients that have been absorbed into the bloodstream from digestion; blood also absorbs oxygen from the lungs and carries it around the body which is used to power the body; this use of oxygen to create energy is called respiration**
- **Know that when we exercise, our heart beats more frequently so that the oxygen that is used around the body can be replenished; it returns to a resting heart rate afterwards; fitter people tend to have lower resting heart rates**
- **Know that drugs are chemicals that have an impact on the natural chemicals in a person's body; know that drugs can be harmful or helpful, depending on what they are and how they are used; know that all drugs can be harmful if overused**
- **Know that paracetamol and aspirin are examples of drugs that can be helpful as a painkiller**
- **Know that cannabis and cocaine are examples of illegal drugs that can have serious negative effects**
- **Know that alcohol and tobacco are examples of drugs that are legal to adults but that can have serious negative effects, such as liver disease and lung disease, respectively**
- Know that there are many kinds of jobs as a scientist that fall into these categories: communicator scientist, developer scientist, entrepreneur scientist, explorer scientist, investigator scientist, regulator scientist, teacher scientist, technician scientist, policy scientist and business scientist

<https://sciencecouncil.org/about-science/10-types-of-scientist/>

- Know that policy scientists use their science and technical knowledge, as well as their understanding of government and policy making, to ensure that legislation and policy have a sound evidence base. Some policy scientists describe themselves as 75% scientist and 25% politician.
- Know that a business scientist helps businesses to make evidence-informed decisions



Deforestation – through this unit of learning pupils understand geographical skills such as

National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary
<p><u>Locational knowledge</u></p> <ul style="list-style-type: none"> ➤ locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities ➤ identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, 	<p><u>Knowledge Components</u></p> <p><u>Locational Knowledge</u></p> <ul style="list-style-type: none"> • I know that lines of latitude divide the Earth into four different climate zones polar, temperate, subtropical and tropical. • I know that a biome is a community of plants and/or animals that share characteristics based on the environment in which they live. • I know that main biomes: tropical rainforest, desert, temperate forest (deciduous), grassland (temperate), savannah (tropical grassland), taiga forest (coniferous), tundra, marine and freshwater. • I know where many of the world’s rainforests are. • I know that 6% of the Earth’s land surface is rainforest – but about half of all animal and plant species live there. • I know that the Amazon rainforest in South America is so big that if it were a country, it would be the ninth biggest in the world. <p><u>Physical Features</u></p>	<p><u>New Vocabulary</u></p> <p>Rainforest, Biomes, Canopy, Emergent Layer, Hemisphere</p>

Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

Place knowledge

- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region in North or South America

Human and physical geography

describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- I know the main features of a rainforest including biome, emergent layer, canopy, understory and forest layer.
- I know it can take ten minutes for a falling raindrop to travel from a rainforest's thick canopy to the floor.
- I know the canopy, which may be over 30m above the ground, is made up of the overlapping branches and leaves of rainforest tree.
- I know the emergent layer is the name given to the tops of trees that poke up above the rainforest canopy.
- I know the understory layer is a tangle of shrubs, young trees, saplings, palms and vines. It is hot and damp here and the air is very still.
- I know temperate is a world relating to or denoting a region or climate characterised by mild temperatures.
- I know a rainforest experiences a large amount of rainfall.
- I know the Amazon River is the second longest river in the world but carries the largest volume of water to the sea.
- I know the source of the river is located in Peru, in the Andes mountains
- I know the water in a river comes from rainfall, snow, melting ice and from water inside the Earth.
- I know each river has a source, usually found in mountainous areas, where different streams flow downhill and join together to form a river.
- I know a small stream or smaller river which flows into the main river is called a tributary. This is the upper course of the river.
- I know the river has a middle course, where the channel of the river is wider and it flows across land and through valleys.
- I know the river here meanders because the flow of the river causes erosion of the land. Sometimes meanders form oxbow lakes which are cut off from the river.
- I know the lower course of the river flows much more slowly as it reaches the sea. It widens out into a broad estuary or delta and where it meets the sea is known as the mouth.

Place Knowledge

- I know the Amazon river and amazon rainforest are located in South America.
- I know that the Amazon rainforest is located in the Southern hemisphere.

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies

- I know that the Andes mountain range runs down the western side of South America.
- I know the Amazon rainforest is located in the North of the continent.
- I know the Amazon river flows from the west to the east of the continent.
- I know the rainforest is mostly located in Brazil but also in parts of Peru, Equador and Bolivia.
- I know there only a small number of settlements within the amazon rainforest.
- I know the Brazil is the largest country in South America.
- I know the capital city of Brazil is Brasilia.
- I know the main language spoken in Brazil is Portuguese.

Human Features

- I know deforestation is when forest is cut down and the area is permanently cleared for another use.
- I know that the timber industry results in the deforestation of the amazon rainforest.
- I know that the farming of cattle results in the deforestations of the amazon rainforest.
- I know the use and destruction of the amazon rainforest for profit has been a global concern for decades.
- I know that destructive methods including slashing and burning are used to create agricultural opportunities.
- I know that crops that are re-planted use monoculture farming methods, thus negatively impacting the people who live there.
- I know that deforestation creates gaps in the humid canopy of the forest, which in turn dries out the surrounding environment.
- I know this leaves areas prone to damaging wildfires.
- I know that in 2019, there were over 40,000 wildfires in the amazon rainforest, these burned over 2,240,000 acres of forest and killed over 2.3 million animals.

Physical Features

- I know the main features of a rainforest including biome, emergent layer, canopy, understory and forest layer.
- I know it can take ten minutes for a falling raindrop to travel from a rainforest's thick canopy to the floor.
- I know the canopy, which may be over 30m above the ground, is made up of the overlapping branches and leaves of rainforest tree.
- I know the emergent layer is the name given to the tops of trees that poke up above the rainforest canopy.

- I know the understory layer is a tangle of shrubs, young trees, saplings, palms and vines. It is hot and damp here and the air is very still.
- I know temperate is a world relating to or denoting a region or climate characterised by mild temperatures.
- I know a rainforest experiences a large amount of rainfall.
- I know the Amazon River is the second longest river in the world but carries the largest volume of water to the sea.
- I know the source of the river is located in Peru, in the Andes mountains
- I know the water in a river comes from rainfall, snow, melting ice and from water inside the Earth.
- I know each river has a source, usually found in mountainous areas, where different streams flow downhill and join together to form a river.
- I know a small stream or smaller river which flows into the main river is called a tributary. This is the upper course of the river.
- I know the river has a middle course, where the channel of the river is wider and it flows across land and through valleys.
- I know the river here meanders because the flow of the river causes erosion of the land. Sometimes meanders form oxbow lakes which are cut off from the river.
- I know the lower course of the river flows much more slowly as it reaches the sea. It widens out into a broad estuary or delta and where it meets the sea is known as the mouth.

Mapping Skills

- I know how to locate the amazon rainforest, amazon river, the andes mountain range and country of Brazil on a map of South America.
- know how to use a map overlay to represent the worlds rainforest on a world map.
- I know how to use satellite images of the amazon rainforest to produce a sketch map.
- I can draw sketch maps to compare changes in landscape over time.

Human impact on the environment

- I know that biomes are valuable to humans and that they are worth protecting in their own right. E.g. regardless of their use to humans.
- I know that human consumption of the natural world
- I know that when trees are cut down, burned or allowed to rot their stored carbon is released into the air as carbon dioxide.
- I know that deforestation contributes significantly to global warming.

- I know that 10% of the world's biodiversity would be lost without the Amazon rainforest.
- I know that biodiversity is important because many microorganisms, plants and animals interact with each other.



World War 2 – 3D art form

How can war be represented visually?

In this unit of learning, pupils will Explore the work of a range of great artists, architects and designers and understand the historical and cultural development of their art forms.

Evaluate and analyse creative works using the language of art, craft and design.

Use a sketch book to collect and develop ideas

National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary
<p>Pupils should be taught:</p> <ul style="list-style-type: none"> ➤ to create sketch books to record their observations and use them to review and revisit ideas 	<ul style="list-style-type: none"> • Investigate a range of starting points for their work, and choose which idea to develop further. • Record their thoughts and experiences in a sketch book / 'ideas journal', and annotate these in order to aid the development of their ideas. • Explain how they are developing their ideas as they work, and use language appropriate to the chosen art form. • Use creative thinking to adapt an initial idea, e.g. experiment with alternative colour palette. • Use appropriate language when comparing ideas, methods and approaches in their own and others' work. • Describe what they think and feel about their own and others' work and how this might influence their designs. 	<p>Comparison, contrast, media, study, experiences, imagination, properties, reflecting, distance, symbolic, subtle, complex, complimentary, contracting</p> <p>Dry media, wet media, mixed media, form</p>

➤ to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]

about great artists, architects and designers in history.

- Use sketch book /‘ideas journal’ to evaluate and adapt their work as their ideas develop; make annotations in their books to show their ongoing evaluations and how they might develop their work further.
- Work in a sustained and independent way to create a detailed drawing.
- Develop a key element of their work: line, tone, pattern, texture.
- Use different techniques for different purposes i.e. shading, hatching within their own work.
- Start to develop their own style using tonal contrast and mixed media.
- Have opportunities to develop further simple perspective in their work using a single focal point and horizon.
- Begin to develop an awareness of composition, scale and proportion in their paintings.
- Use drawing techniques to work from a variety of sources including observation, photographs and digital images.
- Develop close observation skills using a variety of view finders.
- Recognise the art of key artists and begin to place them in key movements or historical events.
- Discuss and review own and others work, expressing thoughts and feelings, and identify modifications/ changes and see how they can be developed further.
- Identify artists who have worked in a similar way to their own work.
- Explore a range of great artists, architects and designers in history.
- Compare the style of different styles and approaches.

Knowledge Components

Knowledge of artists and designers

- I know how to critically analyse the styles of a range of artists, craft makers or designers and use this to inform my own work.
- I know how to explain how a chosen artist or art form has contributed to the culture and /or history of a specific nation.

Exploring and Developing ideas

- I know to independently investigate a range of starting points for my work, and confidently develop my ideas further.
- I know how to record my thoughts and experiences in a sketch book / ‘ideas journal’, and review and revisit these ideas as my work develops.
- I know how to be confident to work creatively, adapting ideas, and taking risks when choosing tools, materials and media.
- I know how to confidently use language appropriate to the chosen art form, to help me to explain my ideas.

New Vocabulary

Purpose, manipulate, dry media, wet media, digital media, representation, consistent, inconsistent, flowing, vibrant, atmosphere

Evaluating and developing work

- I know how to use language specific to a range of techniques to identify effective and ineffective features and use this to inform and evaluate my own work.
- I know how to use a sketch book / 'ideas journal' to adapt and critically evaluate my work as my ideas develop. Annotations reflect my critical evaluations and development of ideas.
- I know how to reflect on the ways in which my imaginative work has developed from a range of starting points.

Drawing

- I know how to work in a sustained and independent way to develop my own style of drawing. This style may be through the development of: line, tone, pattern, texture.
- I know how to draw for a sustained period of time over a number of sessions working on one piece.
- I know how to use different techniques for different purposes i.e. shading, hatching within my own work, understanding which works well in my work and why.
- I know how to develop my own style using tonal contrast and mixed media.
- I know how to use opportunities to develop further simple perspective in my work using a single focal point and horizon.
- I know how to develop an awareness of composition, scale and proportion in my paintings.

Possible artists – Henry Moore and Paul Nash

3D Form

- I know how to work in a safe, organised way, caring for equipment and secure work to continue at a later date.
- I know how to work around armatures or over constructed foundations.
- I know how to demonstrate experience in the understanding of different ways of finishing work: glaze, paint, polish and can demonstrate experience in relief and freestanding work using a range of media
- I know how to recognise sculptural forms in the environment: Furniture, buildings.
- I know how to confidently carve a simple form.
- I know how to solve problems as they occur.
- I know how to use language appropriate to skill and technique.

Consolidate all vocabulary

mould, plaster

Responding to art

- I know how to discuss and review my own and others work, expressing thoughts and feelings explaining my views.
- I know how to identify artists who have worked in a similar way to my own work and can explore a range of great Artists, architects and designers in history.



Food – Design and Make a healthy meal for an athlete
Textiles/Workshop - Design and Make an outfit to protect Imara/Bobo from the weather conditions in the rainforest

National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary
<p>Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making.</p> <p>Design</p> <ul style="list-style-type: none"> ➤ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups 	<p>Year 5 - Cooking and Nutrition</p> <ul style="list-style-type: none"> • I know how to be both hygienic and safe? • I know how to present my product well? <p>Year 5 – Textiles</p> <ul style="list-style-type: none"> • I know what the user would want when choosing textiles • I know how to make my product attractive and strong • I know how to design a prototype first <p>Year 5 - Workshop</p> <ul style="list-style-type: none"> • I know how to make my measurements accurate enough to ensure precision • I know how to demonstrate that my product is strong and fit for purpose • I know how to remain motivated enough to refine and further improve my product using mouldable materials 	<p>Textiles</p> <p>fabric, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance, user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces</p> <p>Cooking and Nutrition</p> <p>utensils, ingredients, texture, taste, sweet, sour, hot, spicy,</p>

<ul style="list-style-type: none"> ➤ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 		<p>appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet, planning, design criteria, purpose, user, annotated sketch, sensory evaluations</p>
<p>Make</p>	<p>Knowledge Components</p>	<p>New Vocabulary</p>
<ul style="list-style-type: none"> ➤ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ➤ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities 	<p><u>Textiles</u></p> <ul style="list-style-type: none"> • I know which audience and product to consider when choosing the appropriate textiles, I know how to make up a prototype first • I know how to use a range of joining techniques <p><u>Cooking and Nutrition</u></p> <ul style="list-style-type: none"> • I know how to explain Can they explain how their product should be stored with reasons? • I know how to source my own products with a view to making a meal, taking account of time required to grow different foods? 	<p><u>Textiles</u></p> <p>seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper, design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype</p>
<p>Evaluate</p> <ul style="list-style-type: none"> ➤ investigate and analyse a range of existing products ➤ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work ➤ understand how key events and individuals in design and technology have helped shape the world 	<p><u>Design</u></p> <ul style="list-style-type: none"> • I know how to use a range of information to inform my design • I know how to communicate my ideas through detailed labelled drawings • I know how to use market research to inform my plans • I know how to work within constraints (Plan the order of my work, choosing appropriate materials, tools and techniques) • I know how to follow and refine my plan if necessary • I know how to justify my plan to someone else • I know how to consider culture and society in my designs • I know how to consider the use of the product when selecting materials • I know how my product could be marketed through packaging and advertising? 	<p><u>Cooking and Nutrition</u></p> <p>Ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs, fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality, utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble, design specification, innovative, research, evaluate, design brief</p>
<p>Technical knowledge</p>	<p><u>Make</u></p> <ul style="list-style-type: none"> • I know how to choose the appropriate tools and materials to ensure that the final product will appeal to my audience 	

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products

Cooking and Nutrition

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ☑ understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

- I know how to use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters

Evaluate

- I know how to test and evaluate my final product - identifying strengths and areas for development
- I know how to test if my product is fit for purpose
- I know what would improve it
- I know which different resources would have improved my product
- I know how to test whether my product meets all design criteria
- I know how to record my evaluations using drawings with labels



Musical Instrument – Recorder Pupils will progress skills learnt in Year 5. This will enable pupils to compose and perform music using 5 or more notes.

National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary
<p>Musical Instrument</p> <ul style="list-style-type: none"> ➤ play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression ➤ improvise and compose music for a range of purposes using the inter-related dimensions of music ➤ listen with attention to detail and recall sounds with increasing aural memory use and understand staff and other musical notation 	<p>I know how to compose and perform melodies using five or more notes?</p> <p>I know how to use ICT to organise musical ideas (where appropriate), combine all musical dimensions</p> <p>I know how to create simple rhythmic patterns with an awareness of timbre (quality of sound) and duration (length of notes and intervals)</p> <p>I know how to maintain own part in a performance with confidence, accuracy and an awareness of what others are playing</p> <p>I know how to perform from simple notation on tuned/untuned instruments</p> <p>I know how to read/ work out the musical stave (notes as Year 4)</p> <p>I know how pulse, rhythm and pitch fit together, improvising rhythm patterns</p>	<p>Notes, sequence, pulse, rhythm, pitch</p>
	<p>Knowledge Components</p> <ul style="list-style-type: none"> • I know how to make a sequence of long and short sounds with help (duration) • I know how to clap longer rhythms with help • I know how to different sounds (high and low– pitch; loud and quiet– dynamics; fast and slow-tempo; quality of the sound- smooth, crisp, scratchy, rattling, tinkling etc.– timbre) 	<p>New Vocabulary</p> <p>Timbre, pentatonic scale, compose, quavers</p>

- | | | |
|--|--|--|
| | <ul style="list-style-type: none">• I know how to create complex rhythmic patterns using a variety of instrumentation with an awareness of timbre (quality of sound) and duration (length of notes and intervals)• I know how to use standard musical notation to perform and record own music (adding dotted quavers)• I know how to play more complex instrumental parts• I know how to improvise using 5 notes of the pentatonic scale• I know how to improvise using 5 or more notes to compose and perform melodies <p>I know how to perform an independent part keeping to a steady beat</p> | |
|--|--|--|



This Is France

Unit Summary:

In this unit, the class will learn specific vocabulary to describe France's neighbours and positions/distances of a variety of cities. They will learn the French names for famous French landmarks and how to describe what people do when they visit Paris. Also, one lesson focuses on famous French people and children will learn the French names for the areas that they were/are famous for

National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary
<ul style="list-style-type: none"> ➤ Listen attentively to spoken language and show understanding by joining in and responding ➤ Explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words ➤ Engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help* ➤ Speak in sentences, using familiar vocabulary, phrases and basic language structures 	<ul style="list-style-type: none"> • I can listen and respond to topic vocabulary. • I can answer questions using topic vocabulary. • I can take part in role play as a shopkeeper/shopper speaking in French. • I can greet and respond. • I can choose the correct form when changing le to du: la to de la and les to des. • I can use adjectives (colours) and place them after the noun. • I can change adjectives to feminine when needed. • I can use appropriate form for 'at' (au or a la) 	
	Knowledge Components	New Vocabulary
	<ul style="list-style-type: none"> • I can listen and respond to topic vocabulary; • I can answer questions orally using the topic vocabulary • I can write an answer to a sentence using the topic vocabulary • I can create sentences independently, using a model sentence • I can write numbers in words which are multiples of ten • I can describe position up to 4 compass points • I can write numbers in words up to 999 • I can describe position up to 8 compass points 	

<ul style="list-style-type: none">➤ Develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases*➤ Read carefully and show understanding of words, phrases and simple writing➤ Appreciate stories, songs, poems and rhymes in the language	<ul style="list-style-type: none">• I can choose the correct tense of the verb être (Present or imperfect);• I can choose the correct form of an adjective describing nationalities• I can write numbers in words up to 1200• I can create sentences independently, using online translators/dictionaries to help	
<ul style="list-style-type: none">➤ Describe people, places, things and actions orally* and in writing		

Year 6 – RE - Summer Term

Strand:	Expressing
Theme:	Prayer and Worship
Religion:	Islam
Key Question/s:	Does belief in Akhirah (Life after death) help Muslims lead good lives? Is it better to express your beliefs in arts and architecture or in charity and generosity?



National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary					
*	Knowledge Components	New Vocabulary					
	<p>Working Towards</p> <table border="1" style="width: 100%;"> <tr> <td style="color: red;">I can describe some of the ways that Muslims try to lead lives respectful to God and start to say why this is important to them.</td> </tr> <tr> <td style="color: red;">I can explain how sometimes people see/interpret things in different ways.</td> </tr> <tr> <td style="color: red;">I can explain how knowing that my actions have consequences makes a difference to the choices I make.</td> </tr> <tr> <td style="color: red;">I can identify why leading a good life might be a good idea and why people think this.</td> </tr> </table> <p>Working AT:</p> <table border="1" style="width: 100%;"> <tr> <td style="color: green;">I can explain how believing in Akhirah influences Muslims to do their best to lead good lives.</td> </tr> <tr> <td style="color: green;">I can give examples of times my choices have been influenced and may have changed when I considered the consequences that might follow.</td> </tr> </table>	I can describe some of the ways that Muslims try to lead lives respectful to God and start to say why this is important to them.	I can explain how sometimes people see/interpret things in different ways.	I can explain how knowing that my actions have consequences makes a difference to the choices I make.	I can identify why leading a good life might be a good idea and why people think this.	I can explain how believing in Akhirah influences Muslims to do their best to lead good lives.	I can give examples of times my choices have been influenced and may have changed when I considered the consequences that might follow.
I can describe some of the ways that Muslims try to lead lives respectful to God and start to say why this is important to them.							
I can explain how sometimes people see/interpret things in different ways.							
I can explain how knowing that my actions have consequences makes a difference to the choices I make.							
I can identify why leading a good life might be a good idea and why people think this.							
I can explain how believing in Akhirah influences Muslims to do their best to lead good lives.							
I can give examples of times my choices have been influenced and may have changed when I considered the consequences that might follow.							

I can give examples of times when I misinterpreted something.
I can recognise what motivates or influences me to lead a good life and compare it with what motivates and influences Muslims.
Working at GDS:
I can explain how the belief in Akhirah influences Muslim decisions and choices as to how to behave towards God and other people.
I can start to explain how my beliefs about right and wrong, actions and consequences make a difference to the choices I make.
I can ask questions about life after death and explore how what I believe about this might influence my life.

Akhirah – Life after death
 Jahid – struggle or effort
 Greater Jihad - Personal individual struggle against evil.
 Lesser Jihad - A struggle or fight against the enemies of Islam.



Digital Architects – using the CAD program sketch up to design their perfect house.

My safety on-line – throughout this unit pupils will develop an understanding of e-safety, how to use databases to create a website and what information is safe and appropriate to share online

National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary	
<ul style="list-style-type: none"> ➤ select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information ➤ use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content ➤ Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<ul style="list-style-type: none"> • 	Algorithm, output, input, logical reasoning, data	
	Knowledge Components		New Vocabulary
	<p>Digital Architects</p> <ul style="list-style-type: none"> • I can make judgements about digital content when evaluating and repurposing it for a given audience. • I know the audience when I am designing and creating digital content. • I can use criteria to evaluate the quality of solutions and can identify improvements making some refinements to the solution, and future solutions. <p>My Safety online</p> <ul style="list-style-type: none"> • I can show use of computers safely and responsibly, knowing a range of ways to report unacceptable content and contact when online. • I know different types of data: text, number. • I know that data can be structured in tables to make it useful. • I know the difference between data and information. • I know why sorting data in a flat file can improve searching for information. • I can use filters or can perform single criteria searches for information. • I can perform more complex searches for information e.g. using Boolean and relational operators. 		

- | | | |
|--|---|--|
| | <ul style="list-style-type: none">• Analyses and evaluates data and information, and I know that poor quality data leads to unreliable results, and inaccurate conclusions. | |
|--|---|--|



Relationships

In this unit pupils will explore relationships, love and loss, power and control and being safe with technology

Changing Me

In this unit pupils will explore self and body image, puberty, conception to birth, attraction and transition to secondary school

National Curriculum	Pre-Requisite Knowledge	Retrieval Vocabulary																																			
	Knowledge Components	New Vocabulary																																			
	<p>Relationships</p> <table border="1"> <thead> <tr> <th>Weekly Celebration</th> <th>Pieces</th> <th>PSHE Education (Developed from National Framework DFEE 2000)</th> <th>Emotional Literacy/Social Skills (Developed from SEAL - Social and Emotional Aspects of Learning DFES 2004)</th> <th>Resources</th> </tr> </thead> <tbody> <tr> <td>Know how to make friends</td> <td>1. My Relationship Web</td> <td>I can identify the most significant people to be in my life so far</td> <td>I understand how it feels to have people in my life that are special to me</td> <td>Ball of string/wool, Jigsaw Chime, 'Calm Me' script, Box of natural objects e.g. shells, pebbles, sticks, leaves and then additional boxes containing natural objects for each table, Jigsaw Jem, Jigsaw Journals.</td> </tr> <tr> <td>Try to solve friendship problems when they occur</td> <td>2. Love and Loss 1</td> <td>I know some of the feelings we can have when someone dies or leaves</td> <td>I can use some strategies to manage feelings associated with loss and can help other people to do so</td> <td>Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, 'The Sad Book' by Michael Rosen, Coping with loss scenario cards, Jigsaw Journals.</td> </tr> <tr> <td>Help others to feel part of a group</td> <td>3. Love and Loss 2</td> <td>I understand that there are different stages of grief and that there are different types of loss that cause people to grieve</td> <td>I can recognise when I am feeling those emotions and have strategies to manage them</td> <td>20 random objects on a tray, Jigsaw Chime, 'Calm Me' script, Loss or change cards, Post-its, PowerPoint - stages of grief, Jigsaw Journals.</td> </tr> <tr> <td>Show respect in how they treat others</td> <td>4. Power and Control Assessment Opportunity ★</td> <td>I can recognise when people are trying to gain power or control</td> <td>I can demonstrate ways I could stand up for myself and my friends in situations where others are trying to gain power or control</td> <td>Jigsaw Chime, 'Calm Me' script, PowerPoint slide 'Power and Control', Power and Control scenario cards, Jigsaw Jem, Jigsaw Journals.</td> </tr> <tr> <td>Know how to help themselves and others when they feel upset or hurt</td> <td>5. Being Safe with Technology 1</td> <td>I understand how technology can be used to try to gain power or control and I can use strategies to prevent this from happening</td> <td>I can take responsibility for my own safety and well-being</td> <td>Chat Room Abbreviations' - a checklist, Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, Cyberbullying film 'Let's Fight It Together' http://www.childnet.com/resources/lets-fight-it-together, Be SMART on the Internet' poster: http://www.kidsmart.org.uk/downloads/cn_A2posterPRIMARY.pdf, Online scenario cards, Jigsaw song sheet - 'Learning Together'.</td> </tr> <tr> <td>Know and show what makes a good relationship</td> <td>6. Being Safe with Technology 2</td> <td>I can use technology positively and safely to communicate with my friends and family</td> <td>I can take responsibility for my own safety and well-being</td> <td>Jigsaw Song sheet - 'Learning Together', 'Keeping Myself Safe Online' quiz, Jigsaw Chime, 'Calm Me' script, Materials for poster design, Filming equipment, Jigsaw Journals.</td> </tr> </tbody> </table>	Weekly Celebration	Pieces	PSHE Education (Developed from National Framework DFEE 2000)	Emotional Literacy/Social Skills (Developed from SEAL - Social and Emotional Aspects of Learning DFES 2004)	Resources	Know how to make friends	1. My Relationship Web	I can identify the most significant people to be in my life so far	I understand how it feels to have people in my life that are special to me	Ball of string/wool, Jigsaw Chime, 'Calm Me' script, Box of natural objects e.g. shells, pebbles, sticks, leaves and then additional boxes containing natural objects for each table, Jigsaw Jem, Jigsaw Journals.	Try to solve friendship problems when they occur	2. Love and Loss 1	I know some of the feelings we can have when someone dies or leaves	I can use some strategies to manage feelings associated with loss and can help other people to do so	Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, 'The Sad Book' by Michael Rosen, Coping with loss scenario cards, Jigsaw Journals.	Help others to feel part of a group	3. Love and Loss 2	I understand that there are different stages of grief and that there are different types of loss that cause people to grieve	I can recognise when I am feeling those emotions and have strategies to manage them	20 random objects on a tray, Jigsaw Chime, 'Calm Me' script, Loss or change cards, Post-its, PowerPoint - stages of grief, Jigsaw Journals.	Show respect in how they treat others	4. Power and Control Assessment Opportunity ★	I can recognise when people are trying to gain power or control	I can demonstrate ways I could stand up for myself and my friends in situations where others are trying to gain power or control	Jigsaw Chime, 'Calm Me' script, PowerPoint slide 'Power and Control', Power and Control scenario cards, Jigsaw Jem, Jigsaw Journals.	Know how to help themselves and others when they feel upset or hurt	5. Being Safe with Technology 1	I understand how technology can be used to try to gain power or control and I can use strategies to prevent this from happening	I can take responsibility for my own safety and well-being	Chat Room Abbreviations' - a checklist, Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, Cyberbullying film 'Let's Fight It Together' http://www.childnet.com/resources/lets-fight-it-together , Be SMART on the Internet' poster: http://www.kidsmart.org.uk/downloads/cn_A2posterPRIMARY.pdf , Online scenario cards, Jigsaw song sheet - 'Learning Together'.	Know and show what makes a good relationship	6. Being Safe with Technology 2	I can use technology positively and safely to communicate with my friends and family	I can take responsibility for my own safety and well-being	Jigsaw Song sheet - 'Learning Together', 'Keeping Myself Safe Online' quiz, Jigsaw Chime, 'Calm Me' script, Materials for poster design, Filming equipment, Jigsaw Journals.	<p>Relationships Significant Relationship Special Feeling</p> <p>Changing Me Self-image Self-esteem Real self</p>
Weekly Celebration	Pieces	PSHE Education (Developed from National Framework DFEE 2000)	Emotional Literacy/Social Skills (Developed from SEAL - Social and Emotional Aspects of Learning DFES 2004)	Resources																																	
Know how to make friends	1. My Relationship Web	I can identify the most significant people to be in my life so far	I understand how it feels to have people in my life that are special to me	Ball of string/wool, Jigsaw Chime, 'Calm Me' script, Box of natural objects e.g. shells, pebbles, sticks, leaves and then additional boxes containing natural objects for each table, Jigsaw Jem, Jigsaw Journals.																																	
Try to solve friendship problems when they occur	2. Love and Loss 1	I know some of the feelings we can have when someone dies or leaves	I can use some strategies to manage feelings associated with loss and can help other people to do so	Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, 'The Sad Book' by Michael Rosen, Coping with loss scenario cards, Jigsaw Journals.																																	
Help others to feel part of a group	3. Love and Loss 2	I understand that there are different stages of grief and that there are different types of loss that cause people to grieve	I can recognise when I am feeling those emotions and have strategies to manage them	20 random objects on a tray, Jigsaw Chime, 'Calm Me' script, Loss or change cards, Post-its, PowerPoint - stages of grief, Jigsaw Journals.																																	
Show respect in how they treat others	4. Power and Control Assessment Opportunity ★	I can recognise when people are trying to gain power or control	I can demonstrate ways I could stand up for myself and my friends in situations where others are trying to gain power or control	Jigsaw Chime, 'Calm Me' script, PowerPoint slide 'Power and Control', Power and Control scenario cards, Jigsaw Jem, Jigsaw Journals.																																	
Know how to help themselves and others when they feel upset or hurt	5. Being Safe with Technology 1	I understand how technology can be used to try to gain power or control and I can use strategies to prevent this from happening	I can take responsibility for my own safety and well-being	Chat Room Abbreviations' - a checklist, Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, Cyberbullying film 'Let's Fight It Together' http://www.childnet.com/resources/lets-fight-it-together , Be SMART on the Internet' poster: http://www.kidsmart.org.uk/downloads/cn_A2posterPRIMARY.pdf , Online scenario cards, Jigsaw song sheet - 'Learning Together'.																																	
Know and show what makes a good relationship	6. Being Safe with Technology 2	I can use technology positively and safely to communicate with my friends and family	I can take responsibility for my own safety and well-being	Jigsaw Song sheet - 'Learning Together', 'Keeping Myself Safe Online' quiz, Jigsaw Chime, 'Calm Me' script, Materials for poster design, Filming equipment, Jigsaw Journals.																																	

Changing Me

Weekly Celebration	Pieces	PSHE Education (Developed from National Framework DfEE 2000)	Emotional Literacy/Social Skills (Developed from SEAL - Social and Emotional Aspects of Learning DfES 2004)	Resources
Understand that everyone is unique and special	1. My Self Image	I am aware of my own self-image and how my body image fits into that	I know how to develop my own self esteem	Jigsaw Chime, 'Calm Me' script, Jigsaw Song sheet: 'Changing as I grow', PowerPoint of celebrity images, 'Real' self/ideal' self template, Highlighter pens, Jigsaw Journals, 3 bottles as props, Smoothie label template, Smoothie recipe template, Fruit smoothies (optional).
Can express how they feel when change happens	2. Puberty	I can explain how girls' and boys' bodies change during puberty and understand the importance of looking after yourself physically and emotionally	I can express how I feel about the changes that will happen to me during puberty	Jigsaw Chime, 'Calm Me' script, Growing-Up Bingo cards, Puberty Flashcards, PowerPoint slides of male and female organs, PowerPoint slides showing girl to woman and boy to man, Animations: Female and Male Reproductive Systems, Puberty Truth or Myth cards, enough for each working group to have one complete set, Blank paper, Jigsaw Jem's Private Post Box.
Understand and respect the changes that they see in themselves	3. Girl Talk/Boy Talk (We recommend this Piece is taught in single, gender-specific groups, preferably girls with a female facilitator and boys with a male facilitator)	I can ask the questions I need answered about changes during puberty	I can reflect on how I feel about asking the questions and about the answers I receive	Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, Preferably two separate spaces for boys and girls to work separately, The questions submitted by the children at the end of the previous Piece, typed up and checked for anonymity, and sorted into sets of boy's and girl's questions, Animations: Female and Male Reproductive Systems.
Understand and respect the changes that they see in other people	4. Babies - Conception to Birth Assessment Opportunity ★	I can describe how a baby develops from conception through the nine months of pregnancy, and how it is born	I recognise how I feel when I reflect on the development and birth of a baby	Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, Tennis ball, PowerPoint slides of scans of babies in the womb, Animations: Female and Male Reproductive Systems, YouTube footage of baby in womb, A set of 'Baby Can...' cards, cut up and shuffled, Conception to Birth resource sheet, Conception to Birth Card Sort Template, Jigsaw Journals.
Know who to ask for help if they are worried about change	5. Attraction	I understand how being physically attracted to someone changes the nature of the relationship	I can express how I feel about the growing independence of becoming a teenager and am confident that I can cope with this	Jigsaw Chime, 'Calm Me' script, Jigsaw Jem, Photo cards: Holding hands, Jigsaw Journals.
Are looking forward to change	6. Transition to Secondary School	I can identify what I am looking forward to and what worries me about the transition to secondary school	I know how to prepare myself emotionally for starting secondary school	Jigsaw Chime, 'Calm Me' script, Jigsaw Song sheet: 'Changing as I grow', Jigsaw Jem, PowerPoint slide of Bungee, Coloured card and pens, Blank T-shirts, Fabric pens.