Year 1			
NC Unit	**NC Objectives**	**Dimensions Unit**	**Dimensions Incidental Science**
Animals Including Humans	• identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • identify and name a variety of common animals that are carnivores, herbivores and omnivores • describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) • identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	Happily Ever After	•To know the difference between living things and things that have never been alive • To identify and name a variety of birds
		Never Eat Shredded Wheat (no science coverage)	
		Powhatan People (no science coverage)	
		Christmas Theme (no science coverage)	
Plants and seasonal changes	• identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • identify and describe the basic structure of a variety of common flowering plants, including trees. • observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies.	Unity In The Community	•To know and describe the basic structure of a variety of common flowering plants (year 1 NC) •To know and describe how seeds and bulbs grow into mature plants (previously year 2) •To learn that plants need water, light and a suitable temperature to grow and stay healthy (previously year 2) •To name and identify a variety of common wild and garden plants, including deciduous and evergreen trees (year 1 NC) •To know how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food (Previously taught in year 4 animals including humans)
		Jurassic Hunter (no science coverage)	
Materials	• distinguish between an object and the material from which it is made • identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock • describe the simple physical properties of a variety of everyday materials • compare and group together a variety of everyday materials on the basis of their simple physical properties	Light Up The World	• To recognise that we need light in order to see things and that dark is the absence of light (LKS2- NC) • To know, name and observe a variety of sources of light, including electric lights, flames and the sun. • To recognise that light from the sun can be dangerous and that there are ways to protect their eyes (LKS2-NC) • To understand that the sun provides energy, and that solar power is a sustainable energy source. • To be aware of simple ways to save electricity. • To know that shadows are formed when the light from a light source is blocked by a solid object (LKS2 - NC) • To understand the term 'nocturnal' and learn about nocturnal animals
		Royal Patron (no science coverage)	
		Zero To Hero	• To observe and name a variety of sources of light, including electric lights, flames and the sun. • To know that fire has been used throughout history for heat and light. • To know about simple circuits involving batteries, wires, bulbs and other components • To know how a switch can be used to break a circuit

Year 2			
NC Unit	**NC Objectives**	**Dimensions Unit**	**Dimensions Incidental Science**
Plants	• observe and describe how seeds and bulbs grow into mature plants • find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Inter-Nation Media Station (no science coverage)	
		Paddington's Passport (no science coverage)	
		Medicine Woman (no science coverage)	
		Christmas Theme (no science coverage)	
Animals Including Humans	• notice that animals, including humans, have offspring which grow into adults • find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Land Ahoy!	•To compare how different things move •To notice and describe how things are moving, using simple comparisons such as faster and slower •To understand that there are many kinds of sound and sources of sound •To know that sounds get fainter as the distance from the sound source increase
		Dancing Spy (no science coverage)	
Living things and their habitats Everyday materials	• explore and compare the differences between things that are living, dead, and things that have never been alive • identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other • identify and name a variety of plants and animals in their habitats, including microhabitats • describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food • identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses • find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Going Wild	• To understand the difference between things that are living and things that have never been alive • To know that animals, as well as humans, have o spring, which grow into adults • To learn about the basic needs of animals, as well as humans, for survival (which are water, food and air) • To identify and name a variety of common animals that are birds, fish, amphibians, reptiles and mammals • To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) • To identify and name a variety of common animals that are carnivores, herbivores and omnivores • To recognise that environments can change and that this can sometimes post dangers to living things • To know that some animals are endangered, the reasons why and what is being done to preserve these species
		Record Breaker (no science coverage)	
		Come Fly With Me! Arctic Circle	• To identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other •To identify and name a variety of plants and animals in their habitats, including micro habitats •To learn about the Inuit people group and their customs and traditions •To learn about the Aurora Borealis (Northern Lights) • To learn the names of, describe weather associated with and observe changes across the four seasons •To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock, and to know, describe and compare how their simple physical properties vary. Group together a variety of everyday materials on the basis of their simple physical properties •To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching •To distinguish between an object and the material from which it is made and compare the uses of a variety of everyday materials

Year 3			
NC Unit	**NC Objectives**	**Dimensions Unit**	**Dimensions Incidental Science**
Forces and magnets /Rocks	• compare how things move on different surfaces • notice that some forces need contact between two objects, but magnetic forces can act at a distance • observe how magnets attract or repel each other and attract some materials and not others • compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials • describe magnets as having two poles • predict whether two magnets will attract or repel each other, depending on which poles are facing • compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • describe in simple terms how fossils are formed when things that have lived are trapped within rock • recognise that soils are made from rocks and organic matter.	That's All Folks!	No Science coverage (Cover Forces and Magnets as a discrete subject)
		Rocky The Findosaur	• To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties (NC) • To know and describe in simple terms how fossils are formed when things that have lived are trapped within rock (NC) To recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago (UKS2 NC) To know that soils are made from rocks and organic matter (NC) • To compare and group materials together, ac-cording to whether they are solids, liquids or gases (NC) To know and observe how some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (oC) (NC) • To identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature (NC)
		Lindow Man (no science coverage)	
		Christmas Theme (no science coverage)	
Plants	• identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers • explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant • investigate the way in which water is transported within plants • explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	Athens V Sparta	• To know that some objects float in water while some other sink • To understand that displacement occurs when something is placed in liquid **Complete these objectives as starters and put in floor books – Do not complete as full lessons.**
		Out And About (no science coverage)	
Light (Teach during discrete first)	• recognise that they need light in order to see things and that dark is the absence of light • notice that light is reflected from surfaces • recognise that light from the sun can be dangerous and that there are ways to protect their eyes • recognise that shadows are formed when the light from a light source is blocked by an opaque object • find patterns in the way that the size of shadows change.	Picture Our Planet	• To identify how sounds are made, associating some of them with something vibrating (NC) • To know that vibrations from sounds travel through a medium to the ear (NC) • To recognise patterns between the volume of a sound and the strength of the vibrations that produce it (NC) • To identify patterns between the pitch of a sound and the feature of the object that produced it (NC) **Bulk these objectives at the end of your unit.**
		Viking Warrior (no science coverage)	

Animals Including Humans	• identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat • identify that humans and some other animals have skeletons and muscles for support, protection and movement.	Come Fly With Me! Africa	• To recognise that living things can be grouped in a variety of ways (NC) • To understand and use classification keys to help group, identify and name a variety of living things in their local and wider environment (NC) • To know that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat (NC) • To know the different types of teeth on humans and their simple functions (NC) • To know and describe the simple functions of the basic parts of the digestive system (NC) • To know how to construct and interpret a variety of food chains, identifying producers, predators and prey (NC) • To know that humans and some other animals have skeletons and muscles for support, protection and movement (NC)

Year 4			
NC Unit	**NC Objectives**	**Dimensions Unit**	**Dimensions Incidental Science**
Electricity and Sound	• identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors. • identify how sounds are made, associating some of them with something vibrating • recognise that vibrations from sounds travel through a medium to the ear • find patterns between the pitch of a sound and features of the object that produced it • find patterns between the volume of a sound and the strength of the vibrations that produced it • recognise that sounds get fainter as the distance from the sound source increases.	Lightning Speed	• To identify common appliances that run on electricity (NC) • To know how to construct a simple series electrical circuit and demonstrate this, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers (NC) • To identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery (NC) • To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit (NC) • To know and identify some common conductors and insulators, and associate metals with being good conductors (NC)
		May the Force Be With You	• To know how things move on different surfaces • To know that and observe how some forces need contact between two objects and some forces act at a distance • To know that and observe how magnets attract or repel each other and attract some materials and not others • To describe magnets as having two poles • To predict whether two magnets will attract or repel each other, depending on which poles are facing • To compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
		Window on the World	
		Christmas Theme	
States of Matter	• compare and group materials together, according to whether they are solids, liquids or gases • observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Law and Order	
		Saxon King	
Animals including Humans and Living Things and Their Habitats	• describe the simple functions of the basic parts of the digestive system in humans • identify the different types of teeth in humans and their simple functions • construct and interpret a variety of food chains, identifying producers, predators and prey • recognise that living things can be grouped in a variety of ways • explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment	Under the Canopy	• To identify and describe the functions of different parts of flowering plants: roots, stem / trunk, leaves and flowers • To learn about and explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant • To investigate the way in which water is transported within plants • To know and explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal
		Tree Giant	

	• recognise that environments can change and that this can sometimes pose dangers to living things.	Cry Freedom	• To know that light is reflected from surfaces • To find patterns in the way that shadows change

Year 5			
NC Unit	**NC Objectives**	**Dimensions Unit**	**Dimensions Incidental Science**
Earth and Space Forces	• describe the movement of the Earth, and other planets, relative to the Sun in the solar system • describe the movement of the Moon relative to the Earth • describe the Sun, Earth and Moon as approximately spherical bodies • use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. • explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • identify the effects of air resistance, water resistance and friction, that act between moving surfaces • recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	Mission Control	• To know that the sun, Earth and Moon are approximately spherical bodies (NC) • To know about and explain the movement of the Earth relative to the Sun in the solar System (NC) • To use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky (NC) • To know about and explain the movement of the Moon relative to the Earth (NC)
		Been Around The World	
		British Bulldog	
		Christmas Theme	
Living Things and Their Habitats Animals Including Humans	• describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • describe the life process of reproduction in some plants and animals • describe the changes as humans develop to old age.	You're Not Invited	
		In Your Element	
Properties of Materials	• compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets • know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution • use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic • demonstrate that dissolving, mixing and changes of state are reversible changes • explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	Full of Beans	• To identify common appliances that run on electricity • To compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on / off positions of switches (NC) • To be able to associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit (NC) • To know how to use recognised symbols when representing a simple circuit in a diagram (NC) • To understand the term 'energy' and identify a range of different renewable and non-renewable energy sources
		The Rescuers	
		Come Fly With Me! America	• To distinguish between an object and the material from which it is made • To understand the difference between man-made and natural materials and identify and sort both

Year 6			
NC Unit	**NC Objectives**	**Dimensions Unit**	**Dimensions Incidental Science**
Electricity Animals including Humans	• associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • use recognised symbols when representing a simple circuit in a diagram	A World of Bright Ideas	• To know that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • To identify the effect of air resistance and friction, that act between moving surfaces • To recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect
		Go with the Flow	• To know and describe the changes as humans develop to old age • To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

	• 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		• To identify and name the main parts of the human circulatory systems, and explain the functions of the heart, blood vessels and blood • To describe the ways in which nutrients and water are transported within animals, including humans
		Pharaoh Queen	
		Christmas Theme	
Light	• 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.	Wars of the World	• To understand that light appears to travel in straight lines • To 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 • To know that we see things because light travels from light sources to our eyes or from light sources to objects and then our eyes see them • To use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
		True Crime	
Living Things and Their Habitats Evolution and Inheritance	• describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • give reasons for classifying plants and animals based on specific characteristics. • recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago • recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	Global Warning	• To know that some changes result in the formation of new materials, and that this kind of change is not usually reversible • To compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets • To suggest how mixtures might be separated, including through filtering, sieving and evaporating, using their knowledge of solids, liquids and gases • To know how to demonstrate that dissolving, mixing and changes of state are often reversible changes • To understand how some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution • To show understanding by giving reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
		Time Team	
		I have a Dream…	• To know the difference in the life cycles of a mammal, an amphibian, an insect and a bird • To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • To be able to describe the life process of reproduction in some plants and animals • To be able to classify plants and animals based on specific characteristics and give reasons • To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences • To know and identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution