





						Thres	hold Concepts						
Working Scientifically			Bio	logy			Chemistry			Physics			
This concept involves learning the methodologies of the discipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand an and humans This concept in becoming family with different transmals, (include humans) and transmals they	nvolves iliar types of ding the life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders	ion and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conceptunderstand circuits and in electrica application	pt involves ding d their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
	Unit 1		Unit 2			Unit 3		Unit 4		Unit 5	1	Unit 6	
s, nd	All about me Celebrations Seasonal change: Our changing world-What is Our changing world-W					Amazing Animal	is	Isn't life wonderful		Kings and Queens		Let's explor	re
 Explore the natural world around them, making observations and drawing pictures of animals and plants; Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. 	Our changing happening to (Autumn) Humans: Exploring the ususing our Label body processes walked children to end and focus of see, hear and talk about same/different to be and talk about same/different took at different took at diff	ne world around r five senses parts cencourage the explore the ld around them n what they can not feel. ir baby photos but what is the	•	_	nat is the	happer (Spring Biology Animals excludir Matchi animals Observ closely they ch Ask que differer young. Play wi animals their yo Talk ab differer animals includir stripes. Scientif over tirchang Classifie	anging world-What is ning to the trees (g) y-Animals and Plants (ng humans: ing pictures of (s) and their young (y) eyoung animals (y) and talk about how hange over time. estions about (n) tanimals and their (y) ith small world (s), matching adults to oung (y) out similarities and (y) ences between (s) and their young, (ng patterns, spots or (s). If it enquiry-observing (me). How does the (ge over time)? ication (animals and their	grow for m Living things and the Explore life Plants: Healthy foo How/where fruits/vege ground, on Label parts Using magr and seeds Plant seeds Look after s	eir habitats:	Seasonal change: • Our changing is happening to (Summer)		W lik Forces: Floca floc Ta ch missir Te do Ta ch	ur changing world- that is the weather se? (Summer) oating and sinking- an you make a boat bat? alk about how they hanged objects to ake them float or







							Thresl	nold Concepts						
This con	Scientifically cept involves the methodologies	Understand plants	Understand ar		Investigate living	Unders		Chemistry Investigate materials	Understand	Understand light and seeing	Physics Investigate sound and hearing	Understand	d electrical	Understand the Earth's
_	scipline of science	This concept involves becoming familiar with different types of plants, their structure and reproduction.	and numans This concept in becoming fam with different animals, (inclu humans) and t processes the	iliar types of iding the life	things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	inherita This co unders organis		This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	movement, forces and magnets This concept involves understanding what causes motion.	and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	and nearing This concept involves understanding how sound is produced, how it travels and how it is heard.	This conceptunderstand circuits and in electrica application	ling I their role I	movement in space This concept involves understanding what causes seasonal changes, day and night.
_		Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	Unit:	Seasonal change: Deciduous trees an plants.		Animals body)	including humans (Hu	ıman	Seasonal chan (evergreen tre	~	Every day materia	ls	Seasonal change (ide name common plant trees).		Animals in (animals).	cluding humans
	Title as a question:	What are deciduou	is trees?	What a	re the parts of the bod	y?		ference between evergreen trees?	What are differen	t objects made from?	How do plants chang over time?	e and grow	How are and different?	nimal's bodies
	Awe and Wonder	Visiting outdoor loo the changes in tree		1	own heads, shoulders l s song and record for	knees	Visiting outdoo the changes in	or locations to see trees.	Investigate differe environment.	nt materials in our	Visiting outdoor locathe changes in trees.	tions to see	Visit a pett	ing zoo.
	Suggested investigations	PLAN Example of V Seasonal changes F			kample of Work Y1 Aning humans FV.pdf	<u>imals</u>	PLAN Example Seasonal chan		PLAN Example of materials FV.pdf	Work Y1 Everyday	PLAN Example of Wo			nple of Work Y1 materials FV.pdf
Year 1		PLAN Example of V FV.pdf	Vork Y1 Plants				PLAN Example FV.pdf	of Work Y1 Plants			PLAN Example of Wo	<u>rk Y1</u>		
) 	Scientist	Maria Sibylla Meria Scientists across th FV.pdf.pdf		1	do Da Vinci ts across the Curriculu odf	ı <u>m</u>	Maria Sibylla N Scientists acro FV.pdf.pdf	Merian ss the Curriculum	Chester Greenwood Scientists across t FV.pdf.pdf		Jim Cantore Scientists across the FV.pdf.pdf	Curriculum	<u>Scientists</u>	champ Procter across the n FV.pdf.pdf
					<u> </u>									
	Oracy outcome	Children can explai deciduous tree is.	n what a	Children body pa	n can name the main h arts.	iuman	Children can e evergreen tree	xplain what an e is.	Children can expla certain material fo	in why they chose a or an umbrella.	Present findings of he trees changed over to			explain how they animals and give
	Links to other subjects													
	Work scientifically	asking sim	ple questions	and red	cognising that they	can be	answered in	different ways						
		• observing	closely, using	simple	equipment									
		performing	simple tests											







				Thres	hold Concepts								
Working Scientifically		Bio	logy		Chemistry			Physics					
This concept involves	Understand	Understand animals	Investigate living	Understand	Investigate	Understand	Understand light	Investigate sound	Understand electrical	Understand the			
learning the methodologies	plants	and humans	things	evolution and	materials	movement,	and seeing	and hearing	circuits	Earth's			
of the discipline of science	This concept	This concept involves	This concept	inheritance	This concept	forces and	This concept	This concept	This concept involves	movement in			
	involves	becoming familiar	involves becoming	This concept involves	involves	magnets	involves	involves	understanding	space			
	becoming familiar	with different types of	familiar with a	understanding that	becoming familiar	This concept	understanding that	understanding how	circuits and their role	This concept			
	with different	animals, (including	wider range of	organisms adapt and,	with a range of	involves	we need light to	sound is produced,	in electrical	involves			
	types of plants,	humans) and the life	living things,	change over time.	materials, their	understanding	see and that light	how it travels and	applications.	understanding			
	their structure	processes they share.	including habitats,		properties, uses	what causes	can be reflected	how it is heard.		what causes			
	and reproduction.		food chains and life		and	motion.	from surfaces.			seasonal			
·			cycles.		reversible/irrever					changes, day and			
	cycles.				sible changes.					night.			
	Unit 1	Linit 2		Unit 2		Linit 4		Linit E	Linit C				
	Onit 1	Unit 2		Utill 3		Unit 4		Unit 5	Office				
	Unit 1 Unit 2 Unit 3 Unit 4 Unit 5 Unit 6 • identifying and classifying • using their observations and ideas to suggest answers to questions • gathering and recording data to help in answering questions												





					RAIT
		Lesson 1 To know that a tree will change over the year.	Lesson 1 To know some basic body parts (Head shoulders knees and toes)		
		To know that different trees have different leaves and this helps us to identify them.	WS- To know how to make close observations. Lesson 2		
		WS - To know how to use observations to answer questions.	To know the parts of the face (nose, mouth, cheek, lips) WS: To know how to make careful		
		Lesson 2 To know and label the basic structure a tree WS- To know how to make	observations Lesson 3 To know which part of the body is		
		close observations. Lesson 3 To know that leaves are	associated with each sense. Lesson 4		
		different shapes and sizes and this will help us to identify the tree it is from. WS- To know how to	To know which part of the body is associated with each sense. WS: To know how to gather data to answer a question.		
	ω	observe closely using simple equipment. Lesson 4	answer a question.		
	Knowledge	To know that a tree is a plant. To know that some trees lose their leaves in			
		different seasons. To know how to accurately label a tree.			
		WS- To know how to identify parts of a tree. Lesson 5 To know that deciduous			
		trees lose their leaves in Autumn. To know there are four			
		seasons in the UK WS- To know how to gather data to answer a			
		question.			







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Working So					logy			Chemistry			Physics			
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		Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
Suc	B Basic Basic A Advancing Advancing					Basic		Basic		Basic		Basic		
sment questic	A Advancing Advancing D Deep Deep					Advancing		Advancing		Advancing		Advancing		
Asses	Understand • Identify and name a variety				Deep		Deep		Deep		Deep			
Biology	plants	derstand • Identify and name a variety			of comming arden gevergree Identify basic stroof comming plants, i Observed the four Identify basic stroof comming plants, i Identify of comming garden gereal	and name a variety mon wild and plants, including en trees. and describe the ructure of a variety mon flowering including trees. e changes across riseasons. and describe the ructure of a variety mon flowering including trees. and name a variety mon flowering including trees. and name a variety mon wild and plants, including bus and evergreen			 Identify and navariety of comand garden plaincluding decide evergreen tree Identify and debasic structure variety of comflowering plantrees. Observe change the four seaso Identify and debasic structure variety of comflowering plantrees. Identify and navariety of comflowering plantrees. Identify and navariety of comand garden plaincluding decide evergreen tree 	mon wild ants, duous and es. escribe the e of a mon ts, including ges across ns. escribe the e of a mon ts, including ame a mon wild ants, duous and				







Working Scientifically			iology			Chemistry			Physics			
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	Unit 1	Unit	2		Unit 3		Unit 4		Unit 5		Unit 6	
Understand animals and humans			Identify name, draw a label the basic parts o human body and say w part of the body is associated with each s	of the which							varianir amp bird • Destarting the varianir amp bird inclue varianir carr	ntify and name a lety of common nals including fish, phibians, reptiles, and mammals. Cribe and compare structure of a lety of common nals (fish, phibians, reptiles, and mammals, luding pets). Intify and name a lety of common nals that are livores, herbivores omnivores.
Investigate living things												
Understand evolution and inheritance												







								Thresh	nold Concepts						
Worki	ng Sc	ientifically			Bio	logy			Chemistry			Physics			
learnii	ng the	ot involves e methodologies oline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand an and humans This concept in becoming fami with different tanimals, (include humans) and the processes they	volves liar types of ding ne life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conce understand circuits and in electrical application	ot involves ling I their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	Chemistry	Investigate materials								everyday m wood, plast and rock. Distinguish and the ma made. Describe th properties of everyday m Compare ar variety of everyday in the basis of properties. Identify and suitability of everyday wood, meta	nd group together a veryday materials on their simple physical decompare the favariety materials, including al, plastic, glass, and paper/cardboard				
		Understand movement, forces and magnets Understand													
	Physics	Investigate sound and													
		hearing Understand electrical circuits													







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			Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
		Understand the Earth's movement in space	 Observe and weather assort the seasons a length varies Observe the movement or during the date 	ociated with and how day apparent f the sun				weather the seas length v • Observe	the apparent ent of the sun					wea with and varie • Obse mov	erve and describe ther associated the seasons how day length es. erve the apparent rement of the sun ng the day
		Title	Plants (Bulbs)		Uses of	every day materials		Animals includ	ing humans	Uses of every day	materials	Living things and the	r habitats.	Plants - see	eds
		Title as a question:	Living things How do bulbs grow? What is a habitat?	?	How car	n we use different mat	erials?	What happens grow older?	to animals as they	Can we change th	ne shape of materials?	How are is an animal suited to its needs?	's habitat	What do p grow?	lants need to
		Awe and Wonder	Visit a range of diffe and compare.	rent habitats	materia			compare how	are baby photos and they have changed.	Visitor in school - created useful ne		Create a habitat for a imaginary creature a why.			and grow plants in assroom.
Year 2		Suggested investigatio ns	PLAN Examples of V FV.pdf PLAN Examples of V things and their hab	Vork Y2 Living		amples of Work Y2 Us y materials FV.pdf	ses of	PLAN Example Animals includ	s of Work Y2 ling humans FV.pdf	PLAN Examples o everyday materia	f Work Y2 Uses of lls FV.pdf	PLAN Examples of W Living things and the FV.pdf		PLAN Exam Plants FV.r	nples of Work Y2 odf
		Scientist	Daniel Solander Scientists across the FV.pdf.pdf			Pearl Agyakwa ts across the Curriculu odf	<u>m</u>		Sarrett Anderson ss the Curriculum	Charles Macir Scientists across t FV.pdf.pdf		Prem Singh Gill Scientists across the FV.pdf.pdf	<u>Curriculum</u>	Scientists a	Burnett across the n FV.pdf.pdf







	Threshold Concepts ag Scientifically Biology Chemistry Physics													
Working So	cientifically			Biology	ЗУ			Chemistry			Physics			
_	pt involves e methodologies pline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand ar and humans This concept ir becoming fam with different animals, (inclu humans) and t processes they	th nvolves involves of tall types of ding with he life live share.	nvolves becoming amiliar with a vider range of	underst organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conceptunderstand circuits and in electrical application	ot involves ling I their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
						Unit 3		Unit 4		Unit 5		Unit 6		
	outcome	habitat is.		were ch	n why certain materia chosen for different j	obs.		xplain what o them as they get		noose a material for a explain why they	Explain their food an audience.	I chain to		en explain what a plant needs to
	Links to other subjects	Explain how the objects.	y sorted the	might b	e why certain materi be the best for a give ng reasons for their									
	other objects.		ment. questions ng that they red in s. mple tests g data. d recording n answering	 Using sugge Perforecore Obsessimple observanswegathe to he Gather 	and classifying. g observations and ic gest answers to quest orming simple tests a ording data. erving closely, perfort ole tests and using ervations to suggest wers to questions, and ering and recording elp in answering quest mering and recording	tions. and rming and data estions. data	simple e Asking s and reco can be a differen Perform and reco Gatheria data to question Using ol	ring simple tests ording data. Ing and recording help in answering his. Diservations and suggest answers to	suggest and Gathering a help in ans Performing recording of	closely, using simple	 Using observat ideas to sugges to questions. Gathering and data to help in questions. 	st answers recording	usin equ Aski que recc can diffe Perf test data Gatl recc in a que Usir	g simple ipment. Ing simple stions and opnising that they be answered in erent ways. Forming simple is and recording in ereing and ording data to help inswering stions. Ing observations and is to suggest wers to questions.





Kno	wledge	Lesson 1	Lesson 1				
		To know that things are living,	To know about the features and				
		dead and never been alive.	suitability of glass for particular				
		WS: To know how to identify	purposes				
		things that are living, dead and	WS: To identify the properties of				
		never been alive.	glass.				
		Lesson 2	Lesson 2				
		To know that seeds and bulbs	To know about the suitability of a				
		grow into plants.	range of different materials for				
		WS: To know how to observe and	particular purposes.				
		classify seeds.					
		Lesson 3	WS: to know how to gather data to				
		To know that a plant bulb	answer a question				
		contains all the parts of a	Lesson 3				
		complete mini plant with enough	To know that some materials are				
		food to help it start to grow.	more suitable for a particular job and				
		WS: to know how to make close	how the shapes of some objects can				
		observations using simple	be changed by squashing, bending,				
		equipment	twisting and stretching				
		Lesson 4	WS: to know how to perform simple				
		To know that different plants and	tests to answer a question				
		animals grow and live in different habitats	Lesson 4 TAPs				
			To know the suitability of a variety of				
		WS : to know how to classify animals and plants according to	everyday materials including paper,				
		habitat.	cardboard, plastic and fabric.				
		Lesson 5	WS: To know how to ask questions				
		To know that habitats provide the	and know that they can be answered				
		basic needs for the animals and	in a variety of ways				
		plants that live and grow there.	Lesson 5				
		WS : to identify and classify	To know the shapes of some objects				
		animals living in one habitat.	can be changed by squashing,				
		Lesson 6	bending, twisting and stretching				
		To know that seeds can be found	WS: to know that questions can be				
		in fruits and what plants need to	answered in different ways				
		grow.	Lesson 6				
		WS: To know how to make close	To know the name of the materials				
		observations using simple	from which different objects are				
		equipment .					
			made and talk about properties				
			using a wide vocabulary				
			WS: N/A				
	D	Pasia	Pasia	Pasia	Pagia	Pasia	Docio
SI	В	Basic	Basic	Basic	Basic	Basic	Basic
ion							
questions	Α	Advancing	Advancing	Advancing	Advancing	Advancing	Advancing
t qu			, and the second		, in the second		0
lent							
vssessme	D	Deep	Deep	Deep	Deep	Deep	Deep
SSe							
∢							







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Working Sc				logy			Chemistry			Physics			
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		Unit 1	Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
Biology		Observe and bulbs grow in plants.	nto mature			includir offsprin adults. Investig the bas includir survival air). Describ for hum eating t				 Identify and nativariety of plant animals in the including microwing live in high which they are describe how habitats provide basic needs of kinds of animal plants, and how depend on each 	ts and ir habitats, ohabitats. nost living abitats to e suited and different de for the f different als and w they	how wat suita	out and describe plants need er, light and a able temperature row and stay thy.
	Investigate living things	that are dead that have nev • Describe how obtain their f plants and ot using the idea	es between re living, things If and things wer been alive. If animals Tood from Ther animals, Therefore a simple Therefore and the simple and the simple Therefore and the simple and the			includir	that animals, ng humans, have ng which grow into						







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Thi lea	s conce	cientifically ot involves e methodologies pline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand an and humans This concept in becoming farm with different animals, (includumans) and the processes the	nvolves iliar types of ding the life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	inherit This co unders organi	stand ion and	Chemistry Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Physics Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concept understand circuits and in electrica application	ot involves ling I their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
		Understand evolution and inheritance Investigate materials • Identify and consultability of a everyday materials wood metal in													
	Chemistry	and inheritance Investigate materials Investigate materials Investigate materials Investigate materials Investigate materials Investigate suitability of a variety of a				lentify and compare the uitability of a variety of a variety of veryday materials, included, metal, plastic, glastic, rock, paper and ardboard, for particula	f uding ass,			objects ma materials c squashing, stretching. • Identify an suitability c everyday m wood, met	ow the shapes of solid de from some an be changed by bending, twisting and de compare the of a variety of naterials, including al, plastic, glass, brick, and cardboard, for uses.				
		movement, forces and magnets Understand light and	novement, orces and magnets nderstand light and seeing												
	Physics	seeing Investigate sound and hearing Understand electrical													
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	Title as a question	Plants: Seed disper	rsal	Rocks a	nd soils		Forces and ma	gnets	Animals including and how we move	humans (nutrition	Light shadows		Plants (par life cycles)	ts of flowers and
		How do plants disp seeds?	erse their		at are the features of erent types of rock?		What is a t magnets v	force and how do vork?	Why is nutrition	on important for	How are shadows for	rmed?	What is the plant?	e life cycle of a
	Awe and Wonder	Visit the garder	ns to observe a ent seeds.	1	itor to bring different i children to handle.	rocks	Children to using mag	o create a compass nets	Create a healt different food	hy meal using the groups.	Children to play shad	low tig.	Grow plan	ts from seeds in
	Suggested investigations	PLAN Examples of FV.pdf	Work Y3 Plants	PLAN EX	camples of Work Y3 Ro	<u>ocks</u>	PLAN Example Forces and ma		PLAN Examples of including humans		PLAN Examples of W FV.pdf	ork Y3 Light	PLAN Exan Plants FV.	nples of Work Y3 odf
Year 3	Scientist	Dr Kelsey Byers Scientists across th FV.pdf.pdf			ana Khatwa ts across the Curriculu odf	ı <u>m</u>	Leonardo Scientists acro FV.pdf.pdf	Da Vinci oss the Curriculum	Adelle Davis Scientists across t FV.pdf.pdf	he Curriculum	Percy Shaw Scientists across the FV.pdf.pdf	<u>Curriculum</u>	Scientists a	genhousz across the n FV.pdf.pdf
	Oracy outcome	Children explai imaginary seed transported us features.	ls could be	gro	pate which rocks shoul uped together using gi eria and giving reasons	iven		o explain how ould be used in ife.		esent their menu and ney chose each food.	Children to expla shadows are forr		preser	en to create a station for the class the life cycle of a
	Links to other subjects													
	Knowledge	Lesson 1 To know the function parts of flowering parts of flowering parts tem/trunk; leaves ws: To know how the findings using scient Lesson 2	plants (roots; ; and flowers). to record	types of WS. To differen observa	v the difference between frocks know how to identify ces through close tions tions how different rocks a									







						Thresh	old Concepts						
Working Scientifically				logy			Chemistry			Physics			
This concept involves learning the methodologies of the discipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand ar and humans This concept in becoming fam with different animals, (inclu- humans) and to processes they	nvolves iliar types of iding the life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	underst organisi	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concellunderstand circuits and in electrical application	pt involves ding d their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
	Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	To know the part the play in the life cycle plants, including set ws: To know how to help in answering Lesson 3 To know that plant to grow ws To know how to simple scientific contest. To know how systematic observation Lesson 4 To know the part the play in the life cycle plants, including set ws: To know how systematic observation Lesson 5 To know that plant grow. ws: to know how to simple practical enquiry/comparation Lesson 6 To know how seeds ws: To	e of flowering eed dispersal. to classify and ariety of ways ag questions as need room to set up a amparative to make ations to make ations. The sed dispersal to make ations. The sed air to to set up a ations are dispersed to gather,	types of To know sedime. Lesson To know propert WS: To in a tab Lesson To know over tin WS: To findings Lesson To know through activity the who the pro WS: To using on Lesson To know soils an according charact To know (plant a inorgan WS: To	w that fossils are containtary rocks w the simple physical cies of different rocks. know how to record fille whow to scratch test residual which rock material when a sample which rock material when a hands-on modelling and are confident in residual and written explanations. know how to report of the sequence of events cess. know how to report fill ral and written explanations of the difference between the di	ndings ock nardest will last n ed, getelling swithin ndings ations een em able nic l in soils.								





								Thres	hold Concepts						
_	cientifically				Bio	logy			Chemistry		_	Physics			
learning th	ept involves ne methodol cipline of scie	_	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand ar and humans This concept in becoming fam with different animals, (inclu humans) and t processes they	nvolves iliar types of ding the life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concept understand circuits and in electrica application	ot involves ling I their role	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	ut	В	Basic		Basic			Basic		Basic		Basic		Basic	
	Assessment questions	Α	Advancing		Advanc	ing		Advancing		Advancing		Advancing		Advancing	
	Assessmel	D	Deep		Deep			Deep		Deep		Deep		Deep	
	Work		 Gathering, reclassifying ar data in a variable in answ questions. Identifying disimilarities or related to sir ideas and professions. Setting up sir enquiries, confair tests. Recording fir simple scient drawings, label diagrams, ker and tables. Using results simple conclupredictions for suggest importaise further. Reporting or enquiries, income and written endured. 	ind presenting iety of ways to rering ifferences, or changes imple scientific ocesses. Imple practical omparative and indings using tific language, belled eys, bar charts, is to draw usions, make for new values, rovements and requestions. In findings from cluding oral explanations, resentations of	• A u u s t e lu s t e lu s e	sking relevant questionsing different types of cientific enquiries to an em. dentifying differences, imilarities or changes repositions or changes repositions and presenting and presenting and presenting and presenting and presenting straightforward cientific evidence to an uestions or to support notings. eporting on findings from the explanations of restonclusions. sking relevant questions of restonclusions. sking relevant questions of including or an explanation of restonclusions. sking relevant questions of including or an explanation of restonclusions.	related as and ing data nelp in nswer t their rom all and isplays ults and ons and ends and isplays and ends an	Setting enquirie fair test Using resimple of prediction suggest raise fur the fair test of the fair	esults to draw conclusions, make ons for new values, improvements and orther questions. In any recording, and presenting a variety of ways to answering ons. In a findings using scientific language, as, labelled ons, keys, bar charts,		g different rocks for andle.	 Setting up sime enquiries, comand fair tests. Gathering, recolassifying and data in a varied to help in answequestions. Reporting on form enquiries oral and written explanations, or presentations and conclusion. Using results to simple conclusion values, suggestimprovements further questions. Using straightfor scientific evides answer questions support their for lidentifying difficulties or conclusion. 	ording, presenting ty of ways vering indings including indisplays or of results ins. o draw sions, make new t and raise ons. forward ence to ons or to findings. ferences, changes ole scientific	Gat class pressivarial in a que simical scie processivates to Recusir langulable keystable Usir simical maken imprais.	ording findings og simple scientific guage, drawings, elled diagrams, s, bar charts, and





								Thresl	hold Concepts	,					
	_	ientifically		1		ology			Chemistry		1	Physics	T		
lear	ning the	ot involves e methodologies pline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand an and humans This concept in becoming fami with different tanimals, (include humans) and the processes they	nvolves iliar types of ding he life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conceptunderstand circuits and in electrical applications	ot involves ling I their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
			Setting up simple proven enquiries, comparate fair tests. Using results to draw so conclusions, make prenew values, suggest improvements and raise questions Explore the role of flowers in the life cycle of flowering plants,			enquiries, comparative air tests. Using results to draw simp conclusions, make predict new values, suggest mprovements and raise f	and ole tions for	including and data • Using st scientific answer	of equipment, g thermometers a loggers. raightforward c evidence to questions or to their findings.			 Setting up simple enquiries, com and fair tests; laccurate meas using standard using a range of equipment, for thermometers loggers. Making system careful observations where appropriaccurate meas using standard using a range of equipment, indicathermometers loggers. 	making urements units, of r example and data natic and ations and, riate, taking urements units, of	from inclu writ disp pres resu	orting on findings in enquiries, uding oral and ten explanations, lays or entations of lts and clusions.
	Biology	Understand plants	flowers in t flowering p including p	the life cycle of plants,						PLAN Examples of FV.pdf	f Work Y3 Rocks	12660101		the find differ flow stem flow Explorequence for light from grow vary plan Investigated in the find grow which which is the find the fin	ore the direments of plants dife and growth (air, direct, nutrients direct, nutrient







		_					Thres	hold Concepts						
Working So					logy			Chemistry			Physics			
	ot involves e methodologies pline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand ani and humans This concept in becoming famil with different to animals, (include humans) and the processes they	volves liar ypes of ling ne life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concest understand circuits and in electrical application	ot involves ling I their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
		Unit 1		Unit 2		•	Unit 3		Unit 4		Unit 5	•	Unit 6	
	Understand animals and humans			in ri n m ge ea • Id so ai	dentify that animals, acluding humans, need ght types and amount utrition, that they can hake their own food aret nutrition from what at. dentify that humans arome animals have skeled muscles for supportotection and movements.	s of not nd they t they and letons			Anjana Khatw Scientists across t FV.pdf.pdf	he Curriculum				
	Investigate living things Understand								rocks should be her using given ving reasons.					
	evolution and inheritance													
Chemistry	Investigate materials								differer the bas physica Relate to propert their for sedime Describe how for things to trapped rock. Recogn	e in simple terms sils are formed when hat have lived are I within sedimentary ise that soils are om rocks and organic				







						Thres	hold Concepts						
Working Scientifically			Bio	logy			Chemistry			Physics			
This concept involves learning the methodologies of the discipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand ar and humans This concept in becoming fam with different animals, (inclu humans) and t processes they	nvolves iliar types of ding he life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organi	ion and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concellunderstand circuits and in electrical application	pt involves ding d their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
	Unit 1		Unit 2		•	Unit 3		Unit 4		Unit 5		Unit 6	
Understand movement, forces and magnets						need cool objects, forces of distance of distance of the compar on diffe. Compar togethe everydal basis of attracte identify materia. Observe attract of and attract of and attract of the compar on diffe. Predict of the compar on distance of the compar on distance of the compared of	re how things move rent surface e and group r a variety of y materials on the whether they are d to a magnet, and some magnetic ls. e how magnets or repel each other act some materials others. e magnets as wo poles. whether two is will attract or ach other, ing on which poles						







						Thres	hold Concepts						
_	Scientifically			Biology			Chemistry			Physics			
learning	cept involves the methodologies scipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand animals and humans This concept involve becoming familiar with different types animals, (including humans) and the lift processes they share	things This concept involves becoming familiar with a wider range of living things,	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conceptunderstand circuits and in electrical application	ot involves ling I their role	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
		Unit 1	Uni	t 2		Unit 3		Unit 4		Unit 5		Unit 6	
	Understand light and seeing									 Recognise that light in order to and that dark if absence of light. Notice that light reflected from the sun can be and that there to protect their experience of the sun can be and that there to protect their experience of the sun can be and that there to protect their experience of the sun can be and that there to protect their experience of the sun can be supported by a subject of the sun can be supported by a subject of the subject of the	o see things is the lat. In this surfaces. It light from dangerous are ways reyes. It shadows the light lurce is colid object. In the way		
	Investigate sound and hearing									o, iding so			
	Understand electrical circuits												
	Understand the Earth's movement in space												







								Thresl	hold Concepts						
	_	cientifically				logy			Chemistry			Physics			
lea	rning th	ept involves ne methodologies ipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand a and humans This concept i becoming fam with different animals, (inclu humans) and processes the	nvolves iliar types of iding the life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conceptunderstand circuits and in electrical application	ot involves ling I their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1	•	Unit 2		<u>'</u>	Unit 3		Unit 4		Unit 5	•	Unit 6	
		Y4 Science	Living things and the (Changes in habitat		States o	f matter.		Electricity		Sound		Living things: classific	ation		cluding humans System and food
		Title as a question	How do changing had animals?	abitats affect	How can materia	n we change the state ?	of a	Will the bulb li	ight up?	How do we hear?)	How can we group liv	ing things?	How do w	e digest food?
		Awe and Wonder	Visit local habitats a animals in their own		Chocola solid ag	te melting and becom ain.	ing	Light show in t	the hall.	Music with Steve	pitch and volume.	Mobile zoo – differer amphibians etc Brockholes trip	nt types of	Dentist to Make poo	visit school. !
Year 4		Suggested investigations	PLAN Examples of V things and their hal		PLAN E matter	xamples of Work Y4 Si FV.pdf	tates of	PLAN Example Electricity FV.		PLAN Examples o FV.pdf	f Work Y4 Sound	PLAN Examples of W Living things and the FV.pdf		'	nples of Work Y4 cluding humans
		Scientist	Wangari Maath Scientists across the FV.pdf.pdf			lers Celsius ts across the Curriculu odf	<u>ım</u>		amkwamba oss the Curriculum	Aristotle Scientists across to FV.pdf.pdf	the Curriculum	Kelsey Archer Bar Scientists across the FV.pdf.pdf		Scientists	n Beaumont across the n FV.pdf.pdf
		Oracy outcome	Children to crea presentation ab importance of p habitats.	out the		pate: all changes reversible	?		o debate whether II work or not based	they chose w	xplain which material ith the reason for - class discussion.	When presented discuss where a ranimals would fit their choices.	ange of	herbiv carniv	are the teeth of ores and ores and explain ference between
		Links to other subjects													







Knowledge	Lesson 1: To know how to compare	Lesson 1: To know that common	
Kilowieuge		appliances that run on electricity.	
	and group materials together	appliances that run on electricity.	
	according to whether they are solids,	WC T I was and also if .	
	liquids or gases.	WS: To know record, classify	
	WS: To know how to ask relevant	and present data in a variety of	
	questions.	ways	
	To know how to identify differences,		
	similarities or changes related to		
	simple scientific ideas and processes		
	Lesson 2: To know that some		
	materials change state when they are		
	heated or cooled and to measure or		
	research the temperature at which		
	this happens in degrees Celsius (°C).		
	WS: To know how to take accurate		
	measurements.		
	Lesson 3: To know 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).		
	WS: To know how to report on		
	findings from enquiries, including		
	oral and written explanations,		
	displays or presentations of results		
	and conclusions.		
	Lesson 4: To know the part played by		
	evaporation and condensation in the		
	water cycle and associate the rate of		
	evaporation with temperature.		
	WS: To know how to set up a simple		
	practical enquiry, comparative and		
	fair tests making systematic and		
	careful observations		
	Lesson 5 : To know the part played by		
	evaporation and condensation in the		
	water cycle and associate the rate of		
	evaporation with temperature		
	WS reporting on findings from		
	WS: reporting on findings from		
	enquiries, including oral and written		
	explanations, displays or		
	presentations of results and		
	conclusions		







						Thresl	nold Concepts						
Working Scientifically			Bio	logy			Chemistry			Physics			
This concept involves	Understand	Understand ar	nimals	Investigate living	Unders	tand	Investigate	Understand	Understand light	Investigate sound	Understand	delectrical	Understand the
learning the methodologies	plants	and humans		things	evoluti	on and	materials	movement,	and seeing	and hearing	circuits		Earth's
of the discipline of science	This concept	This concept in	nvolves	This concept	inherita	ance	This concept	forces and	This concept	This concept	This concep	ot involves	movement in
	involves	becoming fam		involves becoming	This co	ncept involves	involves	magnets	involves	involves	understand	ling	space
	becoming familiar	with different		familiar with a		tanding that	becoming familiar	This concept	understanding that	understanding how	circuits and		This concept
	with different	animals, (inclu		wider range of		ms adapt and,	with a range of	involves	we need light to	sound is produced,	in electrical		involves
	types of plants,	humans) and t		living things,	change	over time.	materials, their	understanding	see and that light	how it travels and	application	S.	understanding
	their structure	processes they	/ share.	including habitats,			properties, uses	what causes	can be reflected	how it is heard.			what causes
	and reproduction.			food chains and life			and	motion.	from surfaces.				seasonal
				cycles.			reversible/irrever						changes, day and
							sible changes.						night.
	Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	Offic 1		Offit 2			Ullit 5		Offic 4		Offic 5		Office	
B S	Basic		Basic			Basic		Basic		Basic		Basic	
ţ													
l l sa l	Advancing		Advanci	n a		Advancina		Advancing		Advancing		Advancing	
t d	Auvancing		Auvanci	ııg		Advancing		Auvancing		Auvancing		Auvancing	
l l au													
D	Deep		Deep			Deep		Deep		Deep		Deep	
Assessment questions													

SCIENCE





Work scientifically

- Identifying differences, similarities or changes related to simple scientific ideas and processes.
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Using straightforward scientific evidence to answer questions or to support their findings.
- Recognising statements that do and do not support an argument.

- Identifying differences, similarities or changes related to simple scientific ideas and processes.
- Setting up simple practical enquiries, comparative and fair tests.
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Using straightforward scientific evidence to answer questions or to support their findings.
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Identifying differences, similarities or changes related to simple scientific ideas and processes.
- Identifying differences, similarities or changes related to simple scientific ideas and processes.
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Using straightforward scientific evidence to answer questions or to support their findings.
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Setting up simple practical enquiries, comparative and fair tests.
- Asking relevant questions and using different types of scientific enquiries to answer them.
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.

- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Identifying differences, similarities or changes related to simple scientific ideas and processes.
- Asking relevant questions and using different types of scientific enquiries to answer them.
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Using straightforward scientific evidence to answer questions or to support their findings.
- Identifying differences, similarities or changes related to simple scientific ideas and processes.
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Setting up simple practical enquiries, comparative and fair tests.







							Thres	hold Concepts						
	_	cientifically ept involves	Understand	Bio Understand animals	logy Investigate living	Unders	tand	Chemistry Investigate	Understand	Understand light	Physics Investigate sound	Understand	l electrical	Understand the
lear	ning th	ne methodologies cipline of science	plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	and humans This concept involves becoming familiar with different types of animals, (including humans) and the life processes they share.	things This concept involves becoming	evoluti inherit This co unders organis	on and	materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	movement, forces and magnets This concept involves understanding what causes motion.	and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	circuits This concept understand circuits and in electrical applications	ot involves ing their role	Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1	Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
		Understand plants												
	Biology	Understand animals and humans											incluence and nutr they own nutr they • Desc funce part syst • Ider type hum simp • Con inte food prod	atify that animals, ading humans, ad the right type amount of ition, and that a cannot make their food; they get ition from what a eat (Year 3). The cribe the simple ations of the basic as of the digestive from in humans. The tity the different are softeeth in from ans and their fole functions. Struct and a variety of a chains, identifying ducers, predators prey.
		Investigate living things									 Explore and use classification keegroup, identify a variety of living their local and environment. Recognise that things can be go variety of ways 	eys to help and name ng things in wider living grouped in a		







							Threshold Concepts					
	_	ientifically			Biology		Chemistry			Physics		
learn	ing th	ot involves e methodologies pline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand animal and humans This concept involution becoming familiar with different type animals, (including humans) and the I processes they sha	things This concept involves becoming es of familiar with a wider range of life living things,	Understand evolution and inheritance This concept inv understanding t organisms adapt change over tim	hat becoming familiar and, with a range of	involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand electric circuits This concept involv understanding circuits and their roin electrical applications.	Earth's movement in space
			Unit 1	Ur	nit 2	Unit 3	•	Unit 4		Unit 5	Unit 6	
		Understand evolution and inheritance	and that the can sometin	nts can change ese changes								
	Chem	Investigate materials										
		Understand movement, forces and magnets Understand light and seeing										
	Physics	Investigate sound and hearing						associating something Recognise sounds trate to the ear. Find patte volume of strength of produced Recognise	that vibrations from evel through a medium rns between the a sound and the f the vibrations that			





							Thres	hold Concepts					
W	Vorking Scientifically This concept involves Earning the methodologi			Bi	ology			Chemistry			Physics		
lea	arning th		Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand animals and humans This concept involves becoming familiar with different types of animals, (including humans) and the life processes they share.	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand electrical circuits This concept involves understanding circuits and their role in electrical applications.	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1	Unit 2			Unit 3		Unit 4		Unit 5	Unit 6	
		Understand electrical circuits					electrica and nar includin switche Identify lamp wi series ci whethe complet battery. Recogni opens a and asso whethe lights in circuit. Recogn	se that a switch nd closes a circuit ociate this with r or not a lamp a simple series lise some common ctors and ors and associate with being good					
		Understand the Earth's movement in space											
			Forces	Earth :	and space		Properties and materials	I changes in	Properties and ch	anges of materials.	Living things and the	ir habitats. Animals i	ncluding humans.
ar 5	5	Title as a question	What are forces?		oes the Earth move in s	space?		roup materials?	gasses?	rate solids, liquids and	How are the life cycle amphibians, mamma insects different?	ls and age?	ve change as we
Vear		Awe and Wonder	Design and make pa	arachutes. Link to	Eid and the moon.		Show child what happ	dren wood burning: pens to it?	Alien soup: how to	o separate	Observe life cycles of and plants in their looen environment.		school







						Thres	hold Concepts						
Working Scientifically			Bio	logy			Chemistry			Physics			
This concept involves learning the methodologies of the discipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand ar and humans This concept in becoming fam with different animals, (inclu humans) and t processes they	nvolves iliar types of ding he life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	inherit This co unders organis	ion and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conce understand circuits and in electrical application	pt involves ding d their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
	Unit 1		Unit 2		•	Unit 3		Unit 4		Unit 5	•	Unit 6	
Suggested investigation s	PLAN Examples of N Forces FV.pdf	Work Y5		kamples of Work Y5 Ea Ice FV.pdf	arth	. PLAN Example Properties and materials FV.p		PLAN Examples of and changes of ma	Work Y5 Properties aterials FV.pdf	PLAN Examples of W Living things and the FV.pdf			mples of Work Y5 ncluding humans
Scientist	Isaac Newton Scientists across th FV.pdf.pdf	e Curriculum		phen Hawking ts across the Curriculuodf	<u>ım</u>		and Arthur Fry oss the Curriculum	Raquel Prado Scientists across to FV.pdf.pdf	he Curriculum	David Attenboro Scientists across the FV.pdf.pdf	_	Scientists	er Arliner Young across the m FV.pdf.pdf
Oracy outcome	Children debate parachute they fall the fastest a reasons why.	believe will	rota	dren to explain why thation of the earth caus			o debate materials: or insulator.	Explain how to soup.	o separate the alien	Children explain difference betwe and asexual repr	en sexual	happe (includ	en to explain what ens to animals ding humans) as get older.
Links to other subjects													





Knowledge	Lesson 1	Lesson 1				
	To know about magnetic forces	To know the movement of the moon				
	and friction	relative to the earth.				
	WS – To know how to take	Lesson 2				
	measurements using a force	To know the movement of the Earth,				
	meter	and other planets, relative to the				
	Lesson 2	Sun in the solar system.				
	To know that unsupported	WS – to know how to accurately				
	objects fall towards and that air	represent the solar system in a				
	resistance slows this down.	labelled, scientific diagram.				
	WS – I knowhow to use scientific	Lesson 3				
	evidence to support my ideas.	To know that the earth's rotation on				
	Lesson 3 TAPs	its axis is responsible for day and				
	To know about some variables	night. WS - to know that the earth's				
	that effect air resistance.	rotation is responsible for the				
	WS – To know how to use test	apparent movement of the Sun				
	results to set up further enquiries.	across the sky in a labelled, scientific				
	Lesson 4	diagram.				
	To know about the effects of	Lesson 4 - TAPs				
	water resistance	To know about some key features of				
	WS – To know how to report and	the other planets in our solar system				
	present findings from enquiries.	including the different lengths of				
	Lesson 5	time orbits take, dependent on the				
	To know how to make and use a	planet's distance from the Sun.				
		WS- to know how to report and				
	pulley system to transport something.	present findings from independent				
		research enquiries using appropriate				
	WS – To know how to report conclusions in oral and written	vocabulary.				
		Lesson 5				
	forms.	To know the relative size and				
	Week 6	distance of the planets in our solar				
	To know how to demonstrate the	system WS – To know how to accurately				
	effects of using levers, pulleys and	measure distances.				
	gears using a Rube Goldberg	Lesson 6				
	machine.	To know how craters are formed and				
	WS – To present findings from	that asteroids and meteorites are				
	enquiries about causal	present in our solar system.				
	relationships	WS – To know how to plan a				
		fair/comparative test and how to				
		control variables.				
ent B	Basic	Basic	Basic	Basic	Basic	Basic
ssme	Advancing	Advancing	Advancing	Advancing	Advancing	Advancing
Assessment questions O P R	Deep	Deep	Deep	Deep	Deep	Deep
Work	Taking measurements,	Recording data and results of	Recording data and results	Reporting and presenting	 Reporting and presenting 	Reporting and
scientifically	using a wide range of	increasing complexity using	of increasing complexity	findings from enquiries, including	findings from enquiries,	presenting findings
,	scientific equipment, with	scientific diagrams and labels,	using scientific diagrams	conclusions, causal relationships	including conclusions,	from enquiries,
	increasing accuracy and	classification keys, tables,	and labels, classification	and explanations of and degree	causal relationships and	including conclusions,
				2 2		







						Thresl	hold Concepts						
Working Scientifically			Bio	logy			Chemistry			Physics			
This concept involves learning the methodologies of the discipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand an and humans This concept i becoming fam with different animals, (incluhumans) and i processes the	nvolves iliar types of iding the life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	inherit This co unders organi	ion and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concel understand circuits and in electrica application	ot involves ling I their role	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
	Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	ideas or argu Planning diff scientific end answer ques recognising a variables wh Using test re predictions t further comp fair tests. Reporting an findings from including cor causal relation explanations of trust in re and written to displays and presentation Recording da of increasing using scientin and labels, ci	cientific at has been cort or refute uments. Ferent types of quiries to attions, including ere necessary. Sults to make to set up coarative and and presenting enquiries, inclusions, conships and a forms such as other ins. The state and results to complexity fic diagrams lassification scatter graphs	li R fi r or fi o t u e a t p	catter graphs and bar a ne graphs. Reporting and presentir indings from enquiries, including conclusions, collectionships and explant and degree of trust in esults, in oral and writter orms such as displays a other presentations. Taking measurements, under range of scientific equipment, with increase ccuracy and precision, aking repeat readings was propriate. Dentifying scientific evice that has been used to so or refute ideas or argumals and the second and fair test of the	ausal nations nations and using a and when dence upport nents. ke	and bar Reportir findings includin causal re explanar of trust and writ displays present. Planning scientific answer includin controll necessa Taking rusing a scientific increasi precisio repeat rappropr Identify evidence used to ideas or Using te prediction	g different types of c enquiries to questions, g recognising and ing variables where ry. measurements, wide range of c equipment, with ng accuracy and n, and taking readings when riate. ing scientific e that has been support or refute arguments. est results to make ons to set up comparative and	written form and other p • Using test re- predictions comparative • Planning dif- scientific en- questions, i	esults, in oral and one such as displays resentations. Esults to make to set up further e and fair tests. If a second ferent types of quiries to answer including recognising ling variables where	explanations of degree of trust in oral and write such as display presentations. Identifying scies evidence that used to suppositive or arguments or arguments.	t in results, tten forms as and other entific has been rt or refute	and and resu writing disp presuction of the contraction of the contrac	explanations of degree of trust in lts, in oral and ten forms such as lays and other entations. Itifying scientific ence that has been to support or te ideas or ments. Ording data and lts of increasing plexity using ntific diagrams and ls, classification to tables, scatter whs and bar and graphs.







								Thresl	hold Concepts						
Wor	ing Sci	entifically	· · · · · · · · · · · · · · · · · · ·						Chemistry			Physics			
learr	ing the	t involves methodologies bline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand an and humans This concept in becoming family with different animals, (include humans) and to processes they	nvolves iliar types of ding he life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conceptunderstand circuits and in electrica application	ot involves ling I their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	Understand plants Understand animals and humans							•		•		• Explain the din the life cycles mammal, an an insect and	cles of a amphibian,	pro rep plar • Star - Pla • Des	cribe the changes umans develop to
		Investigate living things													
		Understand evolution and inheritance													





								Threst	old Concepts						
	_	cientifically				logy			Chemistry			Physics			
lea	rning th	ot involves e methodologies pline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand an and humans This concept in becoming fami with different tanimals, (include humans) and the processes they	volves liar types of ding he life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concept understand circuits and in electrica application	ot involves ling I their role	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	Chemistry	Investigate materials						together material evidence and fair hardnes transpar (electric and resp • Give rea evidence and fair uses of e	e and group r everyday s based on e from comparative tests, including s, solubility, rency, conductivity al and thermal) conse to magnets. sons, based on e from comparative tests, for specific everyday materials, g metals, wood and	and gases to mixtures mi including th sieving and • Know that s dissolve in I solution and	dge of solids, liquids of decide how ght be separated, rough filtering, evaporating. Some materials will iquid to form a didescribe how to abstance from a				
	Physics	Understand movement, forces and magnets	surfaces. • Explain that objects fall to	vater and friction, atween moving unsupported owards the se of the force ting between d the falling at some , including ys and gears, ler force to											
		Understand light and seeing													







								Thresl	hold Concepts						
Worki	ng Scie	entifically			Biol	ogy			Chemistry			Physics			
learnir	ng the	t involves methodologies dline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand an and humans This concept in becoming family with different animals, (include humans) and the processes they	nvolves iliar types of ding he life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	unders organis	on and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conceptunderstand circuits and in electrica application	ot involves ling I their role	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
		Investigate sound and hearing Understand electrical circuits Understand the Earth's movement in space			Ea re Sy • U ex ap Su • D	escribe the movement arth, and other planets elative to the Sun in the system. se the Earth's rotation explain day and night are parent movement of un across the sky. escribe the movement loon relative to the Earth's rotation when the sky.	s, e Solar n to nd the the								
		earn (Accrington ny workshop)	UnderstandApply yourUnderstandIdentify ho	components of d what it means knowledge about d why we need t w to stay hydrat ors that affect hy	to have a ut the Eat to stay hy red	balanced diet well Guide to design a drated	a balance	ed menu for a d	ay						
		Y6 Science	Living things and th	eir habitats.	Electrici	ty		Animals includ (Circulatory sy	stem)	Evolution and inhe	eritance	Light		Transition	
Year 6		Title as a question	How can we classify types of animals?	/ different	What ar circuit?	e the different parts o	of a	How does the system work?	human circulatory	What is evolution	and inheritance?	How do we see object	ts?		
×		Awe and Wonder	Create a clas invented plas	s zoo of sticine animals.		reate a useful circuit su burglar alarm.	uch as	• Lambs h	eart dissection.			 Show children bubbles – learn happens. 			







							Thres	hold Concepts						
Workin	g Scientifically			Bio	logy			Chemistry			Physics			
learning	ncept involves g the methodologies discipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand ar and humans This concept in becoming fam with different animals, (inclu humans) and t processes the	nvolves iliar types of ding the life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	inherit This co unders organis	ion and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concept understand circuits and in electrical applications	ot involves ling I their role	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
		Unit 1		Unit 2			Unit 3		Unit 4		Unit 5		Unit 6	
	Suggested investigation s	PLAN Examples of things and their ha			kamples of Work Y6 ity FV.pdf		PLAN Example Animals include	es of Work Y6 ding humans FV.pdf	PLAN Examples of and inheritance F	f Work Y6 Evolution V.pdf	PLAN Examples of W FV.pdf	ork Y6 Light		
	Scientist	• Carl Linnaeus Scientists across th FV.pdf.pdf			likola Tesla ts across the Curriculu odf	<u>um</u>	Santorio Scientists acro FV.pdf.pdf	o Santorio oss the Curriculum	Charles Dar Scientists across t FV.pdf.pdf		Euclid Scientists across the FV.pdf.pdf	Curriculum		
	Oracy outcome	Children deb animals shou and give reas	ıld be placed		xplain why a range of o	circuits	present circulate	n to create a ation of how the ory system works to to parents.		create a presentation k of Charles Darwin.	Children to explight travels and shadows are formula.	id why		
	Links to other subjects													

SCIENCE





Knowledge	Lesson 1: To know how to construct	Lesson 1: To know some parts of		
	an electrical circuit and name the	the circulatory system		
	components of a circuit.	WS: NA – pre assessment week		
	WS: To know how to ask relevant			
	questions and use different types of	Lesson 2 : To know how to identify		
	scientific enquiries to answer them	and name the main parts of the		
	To know how to set up simple	human circulatory system and		
	practical enquiries	describe the functions of the		
		heart, blood vessels and blood.		
	Lesson 2: To know that symbols are	WS: present findings from		
	used to represent circuit	enquiries, including conclusions,		
	components	causal relationships and,		
	WS: To know how to use scientific	explanations of and degree of		
	diagrams	trust in results, in oral and written		
		forms such as displays and other		
	Lesson 3: To know how components	presentations		
	function, including the brightness of			
	bulbs, the loudness of buzzers and	Lesson 3: To know the impact of		
	the on/off position of switches.	diet, exercise, drugs and lifestyle		
	WS: To know how to report findings	on the way bodies function.		
	about causal relationships.	WS: To know how to record data		
		and results of increasing		
	Lesson 4: To know how to alter the	complexity using tables, scatter		
	brightness of a bulb and give reasons	graphs, bar and line graphs		
	for this.	Leasen 4 To be south a major wants		
	WS: To know how to plan a scientific	Lesson 4 : To know the main parts		
	enquiry to answer a question,	of the human circulatory system, and describe the functions of the		
	recognising and controlling variables.	heart, blood		
	Lesson 5: To know the number of,	WS : To know how to report and		
	and voltage of cell, effects the	present findings from enquiries,		
	brightness of a bulb	including conclusions, and degree		
	WS: To know how to take	of trust in results.		
	measurements, using a range of	or trust in results.		
	scientific equipment, with increasing	Lesson 5 : to know the main parts		
	accuracy and precision, taking	of the human circulatory system,		
	repeat readings when appropriate	and describe the functions of the		
		heart, blood vessels and blood.		
	Lesson 6: To know how to work	WS: To know how to use test		
	systematically to create a range of	result to make predictions to set		
	circuits. To identify the dough as a	up further comparative and fair		
	conductor and recognise the need	tests.		
	for a complete circuit (without a			
	short circuit) in order for the	Lesson 6: To know that diet,		
	LED/bulb to light	exercise, drugs and lifestyle effect		
	WS: To know how to use recognised	the way their bodies function.		
	symbols when representing a simple	To know the ways in which		
	circuit in a diagram.	nutrients and water are		
		transported within animals,		
		including humans		







							Thres	nold Concepts						
Working Scientifically				Bio	logy			Chemistry			Physics			
This concept involves learning the methodologies of the discipline of science		Understand plants This concept involves becoming familiar	Understand an and humans This concept in becoming fami with different	ivolves iliar types of	Investigate living things This concept involves becoming familiar with a		on and	Investigate materials This concept involves becoming familiar	Understand movement, forces and magnets This concept	Understand light and seeing This concept involves understanding that	Investigate sound and hearing This concept involves understanding how	Understand circuits This concept understand circuits and	ot involves ling	Understand the Earth's movement in space This concept
		with different types of plants, their structure and reproduction.	animals, (incluinumans) and to processes they	he life	wider range of living things, including habitats, food chains and life cycles.	_	sms adapt and, e over time.	with a range of materials, their properties, uses and reversible/irrever sible changes.	involves understanding what causes motion.	we need light to see and that light can be reflected from surfaces.	sound is produced, how it travels and how it is heard.	in electrica application		involves understanding what causes seasonal changes, day and night.
		Unit 1		Unit 2		•	Unit 3		Unit 4		Unit 5		Unit 6	
							WS: To know to evidence can be or refute ideas	e used to support						
Assessment B	_	Basic		Basic			Basic		Basic		Basic		Basic	
questions A	_	Advancing Deep		Advanc Deep	ing		Advancing Deep		Advancing Deep		Advancing Deep		Advancing Deep	





							Thres	hold Concepts						
Wo	rking Sc	entifically		Bi	ology			Chemistry			Physics			
Thi lea	concep	t involves e methodologies oline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand animals and humans This concept involves becoming familiar with different types of animals, (including humans) and the life processes they share.	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	inherit This co unders organis change	ion and	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concept understand circuits and in electrical application	ot involves ling I their role I	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
			Unit 1	Unit 2			Unit 3		Unit 4	•	Unit 5	1	Unit 6	
		Work scientifically	and bar and Reporting an findings from including cor causal relations of trust in reand written findisplays and presentation. Identifying so evidence that used to suppideas or argumentations. Planning differenquiries to questions incorrecognising and finding and find	g complexity fic diagrams lassification scatter graphs, line graphs. ad presenting n enquiries, nclusions, onships and s of and degree sults, in oral forms such as other as. cientific at has been oort or refute uments. ferent types of answer	Recording data and restincreasing complexity uscientific diagrams and classification keys, table scatter graphs, and bardine graphs. Reporting and presentifindings from enquiries including conclusions, or relationships and explatof and degree of trust it results, in oral and write forms such as displays another presentations. Identifying scientific eventhat has been used to soor refute ideas or argur	using I labels, es, r and ing s, causal anations in tten and vidence support	of increasusing so and labe keys, tal and bar explana of trust and write displays present evidence used to ideas or Taking requipment accuract taking reserved.	ng data and results asing complexity ientific diagrams els, classification bles, scatter graphs, and line graphs. In gand presenting from enquiries, g conclusions, elationships and tions of and degree in results, in oral tten forms such as and other ations. In g scientific e that has been support or refute arguments. In easurements, range of scientific ent, with increasing y and precision, epeat readings appropriate.	increasing of scientific dia classification graphs, and Identifying sthat has been refute ideas Planning different enquiries to including recontrolling and explanation of trust in recontrol in the written form	lata and results of omplexity using agrams and labels, in keys, tables, scatter bar and line graphs. Scientific evidence en used to support or or arguments. If or answer questions cognising and variables where and presenting in enquiries, including a causal relationships ations of and degree esults, in oral and ins such as displays resentations.	 Identifying scie evidence that used to suppoideas or argum Using test resupredictions to further compafair tests. Recording dataresults of increcomplexity usidiagrams and liclassification kiscatter graphs and line graph Planning differ of enquiries to questions inclurecognising an controlling varwhere necessare. Reporting and findings from eincluding concausal relation explanations of degree of trustin oral and wrisuch as display presentations. 	has been at or refute hents. Alts to make set up rative and and easing ang scientific abels, eys, tables, and bar s. ent types answer uding diables ary. presenting enquiries, lusions, ships and f and tin results, tten forms and other	resucom scie labe keys grap line Rep pres fron inclu caus and and resu writ disp	ording data and alts of increasing aplexity using ntific diagrams and els, classification s, tables, scatter obs, and bar and graphs. Forting and senting findings an enquiries, adding conclusions, sal relationships explanations of degree of trust in alts, in oral and exten forms such as plays and other sentations.
	Biology	Understand plants												







					Thresh	nold Concepts						
Working Scientifically			Biology			Chemistry			Physics			
This concept involves learning the methodologies of the discipline of science	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand anima and humans This concept involved becoming familiar with different type animals, (including humans) and the liprocesses they sha	things This concept involves becoming familiar with a wider range of living things,	understar	n and oce cept involves nding that as adapt and,	Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This concep understandi circuits and in electrical applications	t involves ing their role	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
	Unit 1	Un	it 2	U	Jnit 3		Unit 4		Unit 5		Unit 6	
Understand animals and humans Investigate living things	·	I into broad rding to servable cs and based es and including iisms, plants										





Understand		Recognise that living things		
evolution		produce offspring of the same		
and		kind, but that offspring normally		
inheritance		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.		
		Recognise that living things have		
		changed over time and that		
		fossils provide information about		
		living things that inhabited the		
		Earth millions of years ago.		
		 Identify how animals and plants 		
		are adapted to suit their		
		environment in different ways		
		and that adaptation may lead to		
		evolution.		
		 Describe the differences in the 		
		life cycles of a mammal, an		
		amphibian, an insect and a bird.		
		 Recognise that living things 		
		produce offspring of the same		
		kind, but that offspring normally		
		vary and are not identical to their		
		parents.		
		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.		
		'		
Investigate				
materials				
Understand				
movement, forces and				
forces and				
magnets				
Understand			Explain that we see things	
light and			because light travels from	
seeing			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	
			travels in straight inies to	







Threshold Concepts															
Working Scientifically		cientifically	Biology					Chemistry	Physics						
This concept involves learning the methodologies of the discipline of science		e methodologies	Understand plants This concept involves becoming familiar with different types of plants, their structure and reproduction.	Understand and and humans This concept in becoming family with different transmals, (include humans) and the processes they	volves liar ypes of ling ne life	Investigate living things This concept involves becoming familiar with a wider range of living things, including habitats, food chains and life cycles.	Understand evolution and inheritance This concept involves understanding that organisms adapt and, change over time.		Investigate materials This concept involves becoming familiar with a range of materials, their properties, uses and reversible/irrever sible changes.	Understand movement, forces and magnets This concept involves understanding what causes motion.	Understand light and seeing This concept involves understanding that we need light to see and that light can be reflected from surfaces.	Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how it is heard.	Understand circuits This conceptunderstand circuits and in electrical applications	ot involves ling I their role	Understand the Earth's movement in space This concept involves understanding what causes seasonal changes, day and night.
	Unit 1 Unit		Unit 2		Unit 3			Unit 4		Unit 5		Unit 6			
Investigate		Investigate sound and										explain that obseen because to out or reflect lithe eye. Recognise that appears to transtraight lines. Use the idea the travels in straige explain why she have the same the objects that	chey give ight into clight well in the storage in adows shape as		
		hearing Understand													
		electrical circuits													
		Understand the Earth's movement in space													