Our Lady and St Patrick's RC Primary School

Curriculum Flight Path: Science

Theme 1	Curriculum Flight Path Year A			
	EYFS	KS1	Year 3/4	Year 5/6
Theme (overarching e.g	Our World	Our World	Our World	Our World
Tudors)	Plants	Plants	1. Plants	1. Space
	Seasonal Changes	(Y1 & Y2 Objectives to be	2. Rocks	2. Evolution and Inheritance
		covered over the term)		
Question (based on specific	What food can we grow?		How do plants reproduce?	How does Earth compare to other
components of knowledge		How do plants grow?		planets in our Solar System?
and	What happens to the trees		How are rocks formed into fossils?	
	throughout the year?			Why do living things evolve over time?
Vocabulary (progressive – so	Leaf, Flower, Sun, Water, Stem, Plant,	Common plant, Wild plant, Garden	Nutrients, Transportation, Pollination,	Solar system, Celestial body, spherical,
what are the new words?)	Growth	plant, Tree, Deciduous, Evergreen, Flowering, Root, Trunk, Seed, Bulb,	Dispersal, Life Cycle	rotation, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, 'dwarf'
	Hot, Cold, Light, Dark, Spring, Summer,	Bud, Temperature, Germination,	Sedimentary, Metamorphic, Igneous,	planet, orbit, revolve, geocentric model,
	Autumn, Winter, Wind, Rain, Cloud,	Reproduction	Organic, Volcanic, Permeable, Non-	heliocentric model, sundials, astronomical
	Snow, Fog		permeable, Porous, Non-porous,	
			Grains, Crystals, Fossils	offspring, vary, non-identical, variation, evolution, adaption, inheritance, adapt,
				advantageous/disadvantageous,
				palaeontologists
Working Scientifically	TAPs Assessment Tasks:	TAPs Assessment Tasks:	TAPs Assessment Tasks:	TAPs Assessment Tasks:
Assessment (progressive)	'Scavenger Sort'	Plants: Structure	Plants: 'Measuring Plants' and	Space: Craters
		Plants: Compare Growth	'Function of Stem'	Evolution: 'Fossil Habitat' and 'Egg
			Rocks: Rock Reports	Strength'
Opportunities in the Local	Nature Reserve	Nature Reserve	Nature Reserve	Planetarium Visit - Space Odyssey
Environment			Kents Cavern	@Bristol Planetarium
				Nature Reserve
Theme 2	Curriculum Flight Path Year A			
	EYFS	KS1	Year 3/4	Year 5/6
Theme (overarching e.g	<u>Materials</u>	<u>Materials</u>	<u>Materias</u>	<u>Materials</u>
Tudors)	Everyday Materials	Everyday Materials	1. Electricity	Electricity
		(Y1 Objectives to be covered)	2. States of Matter P1	
Question (based on specific	What are objects made of?	How can we group and sort	How does electricity power a light	How does voltage affect the brightness
components of knowledge		different materials?	bulb?	of a bulb?
and			Nath and a man about a man and a man	
			What are the properties of a solid,	
			liquid and gas?	

Vocabulary (progressive – so what are the new words?)	Fast, Slow, Smooth, Rough, Bumpy, Material, Wood, Plastic, Metal, Paper, Fabric, Soft , Hard	Object, Properties, Man-made, Natural, Hard, Soft, Malleable, Non- malleable, Waterproof, Non- waterproof, Opaque, Transparent, Absorbent, Non-absorbent, Brittle, Rigid, Shiny, Dull, Rough, Smooth, Stretchy, Squashy	Appliances, Circuit, Cell, Wire, Bulb, Buzzer, Danger, Insulators, Conductors, Switch Solid/solidify, Iron, Melt, Freeze, Liquid, Evaporate, Condense, Gas, Changing State, heated, cooled, Degrees celsius, Thermometer	voltage, brightness, volume, series circuit, motor, symbols.
Working Scientifically Assessment (progressive)	TAPs Assessment Tasks: 'Butter' and 'Frozen Balloons'	TAPs Assessment Tasks: Materials: 'Reflection Tests' and 'Floating and Sinking'	TAPs Assessment Tasks: Electricity: 'Conductors' States of Matter: 'Drying Materials'	TAPs Assessment Tasks: Electricity: 'Bulb Brightness'
Opportunities in the Local Environment				
Theme 3		Curriculum	Flight Path Year A	
	EYFS	KS1	Year 3/4	Year 5/6
Theme (overarching e.g Tudors)	Living Things 1. Animals including Humans 2. Living things and their habitats	Living Things Animals including Humans (Y1 & Y2 Objectives to be covered over the term)	Living Things Animals including Humans (Y3 & Y4 objectives to be covered over the term)	Living Things Animals including Humans (Y5 & Y6 Objectives to be covered over the term)
Question (based on specific components of knowledge and	How do my senses help me explore the world around me? What lives in our gardens?	How can different animals be grouped?	What happens to food when we've eaten it?	What happens to us as we get older?
Vocabulary (progressive – so what are the new words?)	Animal names, Family, Friend, Parents, Brother, Sister Grow, alive, dead, desert, jungle	Amphibian, Reptile, Mammal, Invertebrate, Vertebrate, Carnivore, Herbivore, Omnivore, Skeleton, Bone, Offspring, Reproduce, Survival, Growth, Hygiene, Exercise	Nutrition, Skeleton, Muscle, Joint, Socket, Ligament, Bend, Flex, Digest, Saliva, Incisor, Canine, Pre-molar, Molar, Wisdom Teeth, Enzyme, Esophagus, Stomach, Transports, Absorbs, Small intestine, Large intestine, Rectum, Anus, Vitamins, Acid, Producer, Consumer (Secondary, Tertiary), Predator, Prey	Development, Puberty, Gestation, Mass, Internal Organs, Heart, Lungs, Liver, Kidney, Brain, Skeletal, Muscular, Circulatory System, Blood Vessels, Diet, Exercise, Drugs, Lifestyle, Nutrients, Water, Damage, Alcohol, Substances
Working Scientifically Assessment (progressive)	TAPs Assessment Tasks: Animals: 'Brown Apples', 'Taste Test' Living: 'Incy Wincy Spider Shelter'	TAPs Assessment Tasks: Animals: 'Animal Classification,' 'Body Parts' and 'Hand Spans'	TAPs Assessment Tasks: Animals: 'Investigating Skeletons' and 'Teeth (eggs) in Liquids'	TAPs Assessment Tasks: Animals: 'Growth Survey' and 'Heart Rate'

Opportunities in the Local	Nature Reserve		
Environment	Life Cycles?		

Theme 1	Curriculum Flight Path Year B			
	EYFS	KS1	Year 3/4	Year 5/6
Theme (overarching e.g	Our World	Our World	Our World	Our World
Tudors)	1. Plants	Seasonal Changes	 Forces & Magnets 	 Forces & Magnets
	Seasonal Changes		2. Light	2. Light
Question (based on specific	What food can we grow?	What changes occur between	What types of materials are	How do different types of forces
components of knowledge and		Spring and Summer?	magnetic?	affect gravity?
	What happens to the trees		Have done light from the com	Have da vea and links?
	throughout the year?		How does light from the sun create shadows?	How do we see light?
Vocabulary (progressive – so what are the new words?)	Leaf, Flower, Sun, Water, Stem, Plant, Growth	Weather, Equinox, Sunrise, Sunset, Dusk, Dawn, Day, Night, Temperature, Wet, Dry, Wind, Hot, Cold,	Friction, Magnetic, Pole, Positive , Negative, Attract, Repel	gravity, air resistance, water resistance, accelerate, decelerate, direction, brake mechanism, pulley, gear, spring,
	Hot, Cold, Light, Dark, Spring, Summer, Autumn, Winter, Wind, Rain, Cloud, Snow, Fog	Thermometre, Degrees	Reflection, Surface, Shadow, Light Source, Natural light, Absence, Opaque, Transparent	gravitation, Galilei, Newton travels, straight lines, source,
Working Scientifically	TAPs Assessment Tasks:	TAPs Assessment Tasks:	TAPs Assessment Tasks:	periscope, rainbow, filters TAPs Assessment Tasks:
Assessment (progressive)	'Scavenger Sort'	Seasonal: 'Seasonal Change'	Forces: 'Shoe Grip' and	Forces: 'Spinners' and
rissessment (progressive)	Seavenger sort	Seasonal Seasonal Change	'Strongest Magnet' 'Cars down	'Aquadynamics'
			Ramps' 'Balloon Rockets' Light: 'Making Shadows'	Light: 'Investigating Shadows'
Opportunities in the Local	Nature Reserve		5	
Environment				
Theme 2				
Theme (overarching e.g	<u>Materials</u>	<u>Materials</u>	<u>Materials</u>	<u>Materials</u>
Tudors)	Everyday Materials	Everyday Materials	1. Sound	Properties and changes of
		(Y2 Objectives)	2. States of Matter P2	materials
Question (based on specific	What are objects made of?	How does a surface affect how an	How do we hear sound?	How can different materials be
components of knowledge and		object moves?	How can water be a solid, a liquid and a gas?	changed?
Vocabulary (progressive – so what are the new words?)	Fast, Slow, Smooth, Rough, Bumpy, Material, Wood, Plastic, Metal, Paper, Fabric, Soft, Hard	Translucent, Waterproof, Non- waterproof, Squashing, Bending, Twisting	Vibrate/vibration/vibrating, Medium, Hear, Sound, Volume, Pitch,	properties, solubility, transparency, dissolve, solution, solute, separate, separating, filtering, sieving,

			Faint/fainter, Loud/louder, String, Percussion, Woodwind, Brass, Insulate Water cycle, Evaporation, Condensation, Temperature, Melting, Water vapour	evaporating, reversible changes, irreversible, chemical, opaque, translucent, rusting, residue
Working Scientifically Assessment (progressive)	TAPs Assessment Tasks: 'Butter' and 'Frozen Balloons'	TAPs Assessment Tasks: Materials: 'Waterproof' and 'Rocket Mice'	TAPs Assessment Tasks: Sound: 'Investigating Pitch' and 'String Telephones' States of Matter: 'Measure Temperature'	TAPs Assessment Tasks: Materials: 'Dissolving', 'Nappy Absorbency', 'Insulation Layers', 'Sugar Cubes' and 'Champion Tapes'
Opportunities in the Local Environment				
Theme 3				
Theme (overarching e.g	Living Things	Living Things	Living Things	Living Things
Tudors)	Animals including Humans Living things and their habitats	Living things and their habitats (Y1 & Y2 Objectives to be covered over the term)	Living things and their habitats (Y3 & Y4 Objectives to be covered over the term)	Living things and their habitats (Y5 & Y6 Objectives to be covered over the term)
Question (based on specific components of knowledge and	How do my senses help me explore the world around me? What lives in our gardens?	Is an animal's habitat important habitat important for their survival?	How does deforestation and plastic in the oceans affect living things?	How can different animals be classified?
Vocabulary (progressive – so what are the new words?)	Animal names, Family, Friend, Parents, Brother, Sister Grow, alive, dead, desert, jungle	Habitat, Microhabitat, Interdependent, Dependent, Food chain, Predator, Prey, Energy	environment, flowering non-flowering, vertebrate, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, human impact.	micro-organisms, classification
Working Scientifically Skills, Assessment and Vocabulary (progressive)	TAPs Assessment Tasks: Animals: 'Brown Apples', 'Taste Test' Living: 'Incy Wincy Spider Shelter'	TAPs Assessment Tasks: Living things: 'Woodlice Habitats' and 'Nature Spotters'	TAPs Assessment Tasks: Living things: 'Local Survey'	TAPs Assessment Tasks: Living things: 'Life Cycle Research', 'Outdoor Keys' and 'Invertebrate Research'
Opportunities in the Local Environment	Nature Reserve Life Cycles?	Nature Reserve	Nature Reserve	Nature Reserve