				Worki	ng Scientifically	Y		
Ye	ear 1	Ye	ar 2	Yea	ar 3	Year 4	Year 5	Year 6
Questions Answers Equipment Results Sort Explore Observe Similar Similarities Egg timers Ruler Tape Measure	Metre stick Beaker Collect Measure Record Group Test Compare, Describe Different Differences	As year 1 + Chart Table Pictogram Tally chart Block diagram Block Graph Gather	Order Notice patterns Link ideas Stop watch Pipette Syringe Results Differences, Similarities Use comparatives: hotter/ cooler, older / younger etc	As KS1 + Scientific enquiry Similarities Differences Observations Keys Bar charts Thermometer Data logger Changes over time Identify Classify Evidence Conclusion Prediction	Magnifying glass Microscope Comparative tests Fair test Careful Present Data Results Support Not support Systematic Gather Evidence Rank	As previous plus Increase Decrease Accurate, Appearance Disprove	As previous plus Opinion Fact Variables Independent variable Dependent variable Controlled variable Precision Classification keys Scatter graphs Line graphs Notice relationships Support	As previous plus Systematic Casual relationships Refute Degree of Trust
Adult should a Differences, Similarities, Results Collect Evidence Data Table Chart Classify Identify Observe chang Notice pattern Notice relation Secondary sou Hand lenses Communicate	ges of time is nships irces	Adult should a gather evidence data Venn diagram Identify Classify Rank notice relationships comparatives	lso use:	Adult should all Systematic Accurate Disprove Notice relations		Adult should also use: Accurate Disprove Notice relationships Systematic Disprove	Adult should also use: Degree of trust Causal relationship Refute	

BIOLOGY

			AN	IIMALS, INCL	UDING HUMA	NS			
Yea	ar 1	Year 2	Yea	ar 3	Yea	ar 4	Year 5	Ye	ar 6
Names of common animals – fish, birds etc. Meat-eaters Plant feeders Habitat Wild animals Pets Senses Hear/hearing See/seeing Touch / touching Taste/tasting Body parts Mouth Head	Body Neck Arms Eyebrows Eyelashes Legs Elbows Knees Face Eyes Ears Wing Claw Tail Beak Fur Feather Fin Scales	As year 1 + Adult Young Baby Toddler Child Teenager Grow Offspring Survival Basic needs – water, food, air Food types – name Common egs Hygiene Infection Exercise Unhealthy	As KS1 + Nutrition Nutrients Dietary fibre Balanced diet Carbohydrate Protein Vitamins Minerals Fat Skeleton Muscles Support Protection Movement	Brain Blood vessels Heart Skull Ribs Spine Backbone Joints Sockets Bones Tendons	As previous plus Digestive system digestion Saliva Oesophagus Stomach Small intestine Large intestine Absorb into blood stream Swallowing Chewing Rectum Anus Faeces	Consumer Predator Prey Producers Canines Incisors Pre-molars Molars Cavities Dentine Plaque Pulp-cavity Fluoride Tooth decay Gums Nerves Enamel	As previous plus Adolescence Adolescent Arthritis Gestation period Life expectancy Menstruation Pregnant Puberty	As previous plus Circulatory system Blood vessels Capillaries Arteries Veins Red blood cells White blood cells Oxygen Carbon dioxide Lungs Air sacs	Ventricles Aorta Wind pipe Diaphragm Bronchi Pulmonary vein / artery Lifestyle Drugs Diet Heart rate Clotting Plasma
Adult should also use: Amphibians Reptiles Mammals Carnivores Herbivores Omnivores		Adult should also use: Develop Reproduction Life cycle Heart rate Nutrition	Adult should also use: Vertebrates Invertebrates Endoskeleton Exoskeleton		Adult should also use: Chemical enzymes breakdown food Gastric juices Reabsorption of water		Adult should also use:	Adult should Gaseous exch Oxygenated, deoxygenate Respiratory s Aerobic respi Trachea Haemoglobir Bronchioles Alveoli	nange / d ystem ration

BIOLOGY

			LIVING	THINGS AND TI	HEIR HABITATS			
Year 1	Yea	ar 2	Year 3	Ye	ar 4	Ye	ar 5	Year 6
Year 1	As year 1 + Living Alive Non-living Dead Move Grow Feed Breathe Have young Needs Shelter Heat Habitats Conditions Characteristi cs Adaptation	Food chain Name micro- habitats — log, bush Describes conditions — damp, dark etc Food chain Carnivore Herbivore Omnivore Name local habitats — pond, woodland	Year 3	As previous plus Classification keys Environment Fish Reptiles Amphibians Mammals Birds Vertebrates Invertebrates Human impact	Plant groups (trees, grasses, flowering and non-flowering plants) Name some common invertebrates	As previous plus Anther Asexual reproduction Carpel External fertilisation Fertilisation Filament Germination Gestation Internal fertilisation Larva	Metamorpho sis Pollen Pollination Seed dispersal Seed formation Sepal Sexual Reproduction Sperm Stamen Style Stigma	As previous plus Organism Micro-organism Bacteria Microbes Fungus Name invertebrates: arachnid, mollusc, insect and crustacean
	Adult should a Life processes Reproduce Respire Excrete Producer Consumer Sources of foo Seashore Ocean Rainforest Micro-habitat Conditions Depends on/se	od		Adult should a Organism Population Deforestation Development Pollution Positive human Negative human Variation chara	ı impact n impact	Adult should a Plantlets e.g. s Runners e.g. st Chromosomes Ovum Zygote Fallopian tubes Gestation Hormones	pider plants rawberry plants	Adult should also use:

BIOLOGY

			PLANTS			
Yea	ar 1	Year 2	Year 3	Year 4	Year 5	Year 6
Names of	Petal	As year 1 +	As KS1 +			
locally found	Fruit	Seedling	Part			
garden plants	Berry	Shoot	Role			
/ wild plants /	Names of	Fully grown	Temperature			
flowering	vegetables	Growth	Absorb			
plants / trees	grown	Healthy	Soil			
Vegetable	Root	Wither	Well-drained			
Name of	Bulb	Soil	Fertiliser			
plants grown	Seed	Earth	Nutrients			
Leaf / leaves	Trunk	Water	Plant life cycle			
Flower	Branch	Light	Transported			
Blossom	Stem	Hot/cold	Pollination			
Bud	Stalk	Nutrients	Seed formation			
Habitat	Identify		Seed dispersal			
Adult should a	so use:	Adult should also use:	Adult should also use:	Adult should also use:	Adult should also use:	Adult should also use:
Wild plants		Mature plant	Structure			
Garden plants		Temperature	Function			
Flowering plant	īs .	Germinate / germination	Plant tissues			
Deciduous		Pollination	Pores			
Evergreen		Seed dispersal	Competition for resources			

			EVO	LUTION AND IN	HERITANCE				
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6				
					Evolution Adaptation Genes DNA Chromosomes Evolutionary change	Features Inherit Inheritance Environmental conditions Fossil records Natural selection	Variation Reproduction Competition Environmental variations Survival of the fittest		
					Adult should also use: Dominance Recessive				

CHEMISTRY

					MATERIALS					
	/ear 1 lay Materials	Year 2 Uses of Everyday Materials		Year 3 Rocks		Year 4 States of Matter		Year 5 Properties and changes of materials		Year 6
Object	Bright / shiny	As year 1 +	Rigid	As KS1 +	Molten	As previous	Heating	As previous	Solute	
Material	Dull / dim	Man-made	Flexible	Rock	magma	plus	/cooling	plus	Solvent	
Wood	Absorbent	Natural	Strong	Stone	Name	Air	Degree	Solubility	Burning	
Plastic	Waterproof	Describe	Weak	Pebble	properties of	Oxygen	Celsius	Electrical	Rusting	
Glass	Bendy	features of	Reflective	Boulder	such as	Powder	Melt	conductivity	Gas given off	
Metal	Stiff	change –	Non-	Absorb water	hard, soft	Grain /	Freeze	Thermal	Mixture	
Solid	Soft	pushing /	reflective	Let water	Name	granular	Boil	conductivity	Filtering	
Liquid	Hard	pulling	Transparent	through	common	Changes	Evaporation	New material	Sieving	
Gas	Squashing	Suitable	Opaque	Soil	rocks/soil	state	Condensation	Buoyancy	Reversible	
Water	Stretching	Use / useful	Translucent	Fossil	types,	Gaseous	Energy	suspension	change	
Rock	See through	Characteristics	Shape	Grains	marble,	Particles	transfer	Dissolve	Irreversible	
Rough/	Names of	Properties	Changes	Crystals	chalk, clay,	Water		Solution	change	
smooth	common			Layers	sandy	vapour		Soluble	Hard to	
	materials			Texture		Water cycle		Insoluble	reverse	
Adult should	d also use:	Adult should a	lso use:	Adult should a	lso use:	Adult should	also use:	Adult should a	lso use:	
Textures (de	escribing words	Suitability		Erosion		Solidify		Combustion		
for different	textures)	Purpose		Strata		Boiling point		Oxidisation		
Reflection				Particles		Precipitation		Chemical react	tion	
Properties				Physical prope	rties	Transpiration		Residue		
Transparent				Porous Permeable / in		Forces of attraction		Filtrate		

PHYSICS

			L	IGHT AND SOUND)			
Year 1	Year 1 Year 2		Year 3 Light		Year 4 Sound		Year 6 Light	
		Light Light source Names of light sources, torch etc Dark / darkness Reflect Reflective Mirror Shadow Block / absorb	Direction of light Transparent Opaque Translucent Bright Dim Light beam sunlight	Sound Sound source Noise Vibrate / vibration Travel Sound wave Pitch Volume Loud / quiet Tune High / low	Echo Tuning fork Insulation Instrument Percussion String Brass Woodwind Tunes instrument		As Year 3 plus Absorption Transmission Cornea Lenses Iris Light ray Optics	Pupil Prism Rainbow Refraction Spectrum, Symmetry
		Adult should als Speed of light Emit Light spectrum	o use:	Adult should als Strength of vibra Reflection of sou	ations		Adult should als	o use:

PHYSICS

				EARTH AND SPACE						
Year 1	Year 2	Year 3	Year 4		Year 5					
				Earth	Axis / axes	Orbit				
				Planets	Night / day	Elliptical orbit				
				Sun	Mercury	Revolve				
				Solar system	Mars	Shadow clocks				
				Moon	Neptune	Sundials				
				Celestial body	Venus	Asteroids				
				Sphere / spherical	Jupiter	Comets				
				Rotation	Saturn	Galaxy				
				Spin	Pluto	Meteors				
				Phases of moon	Uranus	Light years				
					Time zones					
				Adult should also use	!					
				Geocentric model						
				Heliocentric model						
<u> </u>										

PHYSICS

	SEASONAL CHANGE										
	Year 1		Year 2	Year 3	Year 4	Year 5	Year 6				
Season Autumn Winter Spring Summer	Weather Names of common weather features Days Hours Months	Light Dark Shadow Moon movement									
Adult should also Day Length	use:										

PHYSICS

			FORCES AND N	//AGNETS		
Year 1	Year 2	Ye	ar 3	Year 4	Year 5	Year 6
Teur I	Teur 2	Force gravity Push / pull Direction of force Air resistance streamlined Float / sink Friction Force-meter Magnet Magnetic force Strength	Repel Poles North pole South pole Bar magnet Ring magnet Button magnet Horse-shoe magnet Name common magnetic and non-magnetic materials	TCUI 4	As previous plus: Mechanisms Air resistance Water resistance Levers Pulleys Gears Springs Drag forces Transference of force and motion Newton non-contact force reliable	Tear o
		Adult should also Constant force Non constant for Newton meter Newton	o use:		weight Adult should also use:	

PHYSICS

			ELECTRICITY	1		
Year 1	Year 2	Year 3	Yea	ar 4	Year 5	Year 6
			Electricity	Switch		As previous plus:
			Electrical device	Buzzer		Series circuit
			/ appliances	Motor		Terminal
			Mains	Connection		Voltage
			Plug	Electrical /		Volume
			Components	simple circuit		Current
			Conductor	Complete		Resistance
			Insulator	circuit		Circuit diagrams
			Circuit symbol	Closed circuit		
			Cell	Open circuit		
			Battery	Positive		
			Wire	Negative		
			Bulb	Crocodile clip		
			Adult should also	use:		Adult should also use:
			Series circuit			Parallel circuits
			terminal			