

British International School – HCMC Science Curriculum Map



Academic Year 2024 - 2025

Key							
	Biology		Key Stage 1				
	Chemistry		Key Stage 2				
	Physics		Key Stage 3				
	Investigative skills						

Science	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6		
EYFS	Guid children to make sense of their physical world and their community through opportunities to explore, observe and find out about people and communities , the World , its places, technology , and the environment.							
Year 1	Animals Including humans Recognise, describe and sort common animals.	Materials Identify and sort common materials by their properties.	Plants Identify and describe common plants and their basic structure.	Children begin to learn about light sources and shadows.	Identify differences in changes across seasons in both temperate and tropical regions.			
	Ask simple questions and make predictions. Observe using simple equipment and perform simple tests, with help. Identify a method of presenting data.							



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	Use observations and ideas to answer simple questions.						
	With support, describe what they observe and discuss what they would do differently in a future investigation.						
Year 2	Living Things and their Habitats Explore differences between living, dead and non-living. Identify how habitats provide for different needs and how animals obtain food. INVESTIGATIVE SKILLS	Plants Explore how seeds and bulbs grow into mature plants and the conditions required for this.	Observe and name sources of sound, recognise we use our ears and that distance affects perception.	Uses of Everyday Materials Identify and compare materials and their suitability for different applications.	Animals Including Humans Notice that animals have offspring and that different animals have different needs in order to stay healthy.		
Ask simple questions and recognise that they can be answered in different ways and make predictions. Independently select and use simple and appropriate equipment to perform tests. Begin to decide how to record observations from a choice of familiar approaches. Talk about what they have found out explaining what happened in relation to their predictions. Based on observations, describe what they would change about an investigation and why.							
Year 3	Rocks Sort rocks by properties and formation, understanding how they are made and what they are made from.	Forces and Magnets Recognise how magnets attract and repel each other, based on their polar properties, and compare magnetic and nonmagnetic materials.	Animals Including Humans Identify that animals cannot make their own food and get nutrients from what they eat. Identify how some animals use skeletons and muscles for support, protection and movement.	Recognise that objects can be seen as light is reflected from their surfaces and how shadows change depending on the translucency of the material casting a shadow and the position of the light	Plants Identify and describe parts of flowering plants, their functions as well as the requirements of plants for life and growth.		



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INVESTIGATIVE SKILLS						
Make decisions about w Make careful observation Begin to recognise why a Identify more than one of Suggest some improvem Gather, record, classify a Identify patterns in resu	hat observations to make ns and, where appropriat a fair test is necessary and variable factor in an invest tents that could be made and present data in a varie	. e, take measurements usir I help to decide how to set tigation. to an investigation. ety of ways to help in answ	ng standard units, using a it up. ering questions.	range of equipment.	nd raise further	
States of Matter	Electricity	Animals Including	Living Things	Sound		
Begin to learn about the states of matter and changes between them, understanding this in the context of the water cycle.	Recognise electrical appliances and key components in a circuit, including switches, conductors and insulators.	Humans Learn the functions and names of the organs in the human digestive system, including the different types of teeth. Begin to understand Food chains and ecosystems.	Name living things in the environment and recognise how the environment can sometimes pose dangers.	Explore how sounds are made, associating the sounds with vibrations and patterns between pitch and volume and the strength and speed of vibrations.		
Ask relevant questions and make reasonable predictions drawing on prior knowledge. Decide which types of enquiry will be the best at answering questions. Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used. Set up simple practical enquiries that utilise comparative and fair tests. Carry out simple comparative fair tests by making systematic and careful observations and, where appropriate, taking accurate measurements using standard units and a range of equipment. Report and present findings from enquiries using familiar methods.						
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	questions.										
	Earth and Space	Properties and	Animals Including	Forces	Famous Scientists						
		Materials	Humans								
	Learn about planets			Children continue to	Children develop						
	and moons and their	Learn about mixing	Children learn about	develop their	skills of ICT and						
Year 5	movements and about	and separating	the life cycles of a	understanding of	research while finding						
	the effects of gravity.	materials, including	variety of amphibians,	gravity and begin to	out about the social						
		dissolving, filtering,	insects, birds and	consider the effects of	impact of famous or						
		sieving and	mammals, including	friction and	important scientists.						
		evaporating.	humans.	air-resistance.							
	INVESTIGATIVE SKILLS:										
	Use previous knowledge	e to develop research ques	stions and make prediction	ns, identifying and suggest	ing control and independe	nt variables.					
	Recognise and select so	me appropriate equipmen	it to complete an investiga	tion.							
	Independently identify s	suitable methods for recor	ding data and results of in	creasing complexity using	a variety of techniques.						
			results to make prediction								
		itations of their investigat	· · · · · · · · · · · · · · · · · · ·	o o							
	Animals Including	Evolution and	Living Things	Electricity	Light & Seeing						
	Humans	Inheritance									
			Develop their	Develop	Develop						
	Develop	Learn that living things	understanding of	understanding of the	understanding of how						
	understanding of the	evolve through natural	classifying living things	relationship between	light travels and is						
	circulatory system and	selection and that	according to	input and output	perceived by the eye.						
	a healthy lifestyle,	species gradually	observable	power within a circuit,							
	recognising the impact	change over time to	characteristics,	including changes in							
Year 6	of diet, exercise and	better suit their	including	the number of cells							
	drugs on the	environment.	microorganisms,	and components,							
	way the body and		plants and animals.	confidently using							
	organs function.		·	symbols in diagrams.							
	INVESTIGATIVE SKILLS										
					Identify key control variables, selecting and naming appropriate equipment to address a research question.						
	Identify key control varia	ables, selecting and namir	ng appropriate equipment	to address a research que	stion.						
					stion. ly using the most appropri	ate equipment.					



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	Form a conclusion based on interpreting data and finding patterns. Make informed decisions about what would happen in future investigations if different variables were changed.						
Year 7							