

Baytree School – Science Continuum

GOLDEN THREADS – Independence and Communication	
Early Years Foundation Stage	
Prime areas: Understanding the World	ELG: The Natural World <ul style="list-style-type: none"> • 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
Personal, Social & Emotional Development:	ELG: Managing Self <ul style="list-style-type: none"> • Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.
Playing and exploring Active learning Creating and thinking critically	Playing and exploring <i>children investigate and experience things, and 'have a go'.</i> <ul style="list-style-type: none"> • Realise that their actions have an effect on the world, so they want to keep repeating them. • Reach for and accept objects. Make choices and explore different resources and materials. • Plan and think and about how they will explore or play with objects. • Make independent choices. • Respond to new experiences that you bring to their attention. Active learning <i>children concentrate and keep on trying if they encounter difficulties, and enjoy achievements.</i> <ul style="list-style-type: none"> • Participate in routines. • Use a range of strategies to reach a goal they have set themselves. • Keep on trying when something is difficult.

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	<p>Creating and thinking critically <i>children have and develop their own ideas, make links between ideas, and develop strategies for doing things.</i></p> <ul style="list-style-type: none"> • Take part in simple pretend play. • Review their progress as they try to achieve a goal. • Solve real problems. • Know more, so feel confident about coming up with their own ideas.
<p style="text-align: center;">Outdoor play curriculum Play based curriculum Self-directed curriculum</p>	
<p style="text-align: center;">Baytree School EYFS curriculum topics</p>	
<p style="text-align: center;">Moving and handling Health and self-care</p>	
<p style="text-align: center;">EYFS curriculum approaches</p>	
<p style="text-align: center;">Busy bugs gym Outdoor play curriculum Play based curriculum Self-directed curriculum Peer to peer curriculum Sensory curriculum</p>	

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	KS1	KS2	KS3	KS4
Area of Scientific Learning:	By the end of primary school, learners will be able to:		By the end of secondary school, learners will be able to:	
Working Scientifically	<ul style="list-style-type: none"> • Group and classify objects • Explore the natural world around them • Taking part in simple experiments • Handle and observe objects and equipment • Be curious about the world and ask why? 		<ul style="list-style-type: none"> • Exploring science in the world • Carrying out simple investigations using a range of equipment • Exploring similarities and differences • Grouping and classifying objects • Recording findings from their investigations 	
Biology	<ul style="list-style-type: none"> • Explore animals in the local environment • Observe the growth of animals • Make observations of changes in habitats • Explore the basic needs of animals • Explore the different senses • Develop an awareness of parts of the body • Develop an awareness of healthy eating and exercise • Develop an awareness of personal hygiene • Explore plants in the local environment • Observe the growth of plants • Make observations of changes in plants • Exploring the basic needs of plants 		<ul style="list-style-type: none"> • Exploring the functions and life cycles of living things • Exploring what animals eat • Making comparisons • Healthy eating and nutrition • Sorting animals into categories • Developing an awareness of muscles and bones in the body • Exploring animals in local habitats and environments • Exploring how animals adapt to their environment • Exploring food chains • Dental health & hygiene • Developing an awareness of the digestive system • Developing an awareness of different parts of a plant • Life cycles of plants • Exploring how water is transported within plants 	

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		<ul style="list-style-type: none"> • Taking part in experiments about how plants grow in different conditions
Chemistry	<ul style="list-style-type: none"> • Sorting materials and exploring their properties • Taking part in simple experiments to test different materials • Observing how materials can change • Manipulating materials to explore how materials can change property 	<ul style="list-style-type: none"> • Comparing materials and their properties • Taking part in simple experiments to test different materials • Exploring materials in states of matter (liquid, gas, solid) • Observing changes materials change state through heating and cooling • Recycling
Physics	<ul style="list-style-type: none"> • Exploring different sources of light • Exploring differences of light / dark • Sources of electricity • Exploring magnetic forces • Exploring how sounds are made • Exploring how sound travels through vibrations • Develop an awareness of seasons and different weathers • Making observations of changes in seasons • Exploring solar system • Comparing day / night 	<ul style="list-style-type: none"> • Exploring how shadows are made • Explore how light is reflected • Exploring magnetic forces • Developing an awareness of how sounds are made • Exploring how sound travels through vibrations • Identifying pitch and volume of sounds • Electricity circuits • Exploring conductors and insulators of electricity • Exploring and comparing different forces (e.g. friction, gravity, push / pull)
	<p>Cross curricular links</p> <p>ICT – Investigation and control of systems and machines</p> <p>PE – Physical health and fitness</p> <p>Writing – Critical thought process and explanation</p>	

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Post - 16			
	Year 12	Year 13	Year 14
Preparation for adulthood <ul style="list-style-type: none"> ○ Good health ○ Employability ○ Independent living skills ○ Friends, relationships and community 	<p>Good health</p> <ul style="list-style-type: none"> • Young people are supported to manage their own health as they move into adulthood through knowledge and understanding of the developing body and the impact of exercise and diet upon this. <p>Employability</p> <p>Young people are provided with a broad and stable careers programme following the SEND Gatsby Benchmarks.</p> <ul style="list-style-type: none"> • A stable careers programme including opportunities in the STEM community • Linking curriculum learning to STEM careers • Encounters with STEM employers and employees • Experiences of STEM workplaces • Enterprise opportunities with STEM components <p>Independent living skills</p> <p>Young people are offered advice and support to think about what they want for their future and where they want to live.</p> <ul style="list-style-type: none"> • Making healthy choices • Thinking critically about their future and make choice based upon evidence and effective investigation <p>Friends, relationships and community</p> <p>Young people have opportunities to spend time with their peers outside of school or college. They are supported to maintain and develop friendships and relationships through a scientific understanding of others. They can access their community and feel safe though investigation of the environment and understanding of the world.</p> <p>AQA accreditation units of work following sensory or subject specific learning pathway including specific STEM opportunities where appropriate.</p>		
Equals – functional English and Maths	<p>Functional English</p> <ul style="list-style-type: none"> • Literacy for life and living: social sight and information. 		

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	<ul style="list-style-type: none"> • Literacy for critical questioning and inquiry. • Literacy for life and leisure: signs including shopping and travel, using leisure facilities. • Literacy for information: using a library, magazines and newspapers, bibliography and factual literacy • Sharing information: letters and postcards, people and events • Creating an interest: • Literacy for the future: group discussions and debate, this is me and personal statements <p>Functional Maths</p> <ul style="list-style-type: none"> • Maths for the community • Maths for living • Maths in everyday life • Maths for the future • Maths for design • Maths for life choices
<p>AQA – personalised accreditation</p> <p>Units of work following sensory or subject specific learning.</p> <p>Progressive personalised routes enable learners to develop key life skills and develop interests for post Baytree School.</p>	<p>Sensory learners Yearly completion of AQA units in good health.</p> <p>Subject specific learners Yearly completion of AQA units in good health,</p> <ul style="list-style-type: none"> • <u>Good Health</u> • Keeping healthy with assistance • Healthy lifestyles and healthcare services • Healthy lifestyles and emotional wellbeing • Health and wellbeing: healthy lifestyles
<p>Cross curricular links</p> <ul style="list-style-type: none"> • <i>Physical</i> – physio/hydro/being in control of and understanding my own body • <i>Community champions</i> – actively taking a role in being part of their immediate and wider community, mini-enterprise where appropriate (e.g. Cooking) • <i>Careers</i> – STEM workplace encounters, mini-enterprise 	

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- *Health & Leisure* – making choices and keeping both mentally and physically healthy. Understanding my developing and changing body
- *Community Champions* – actively taking a role in their immediate and wider community: Eco Projects, World Health Day, World Environment Day
- *Independent Living Skills* – Making informed choices based upon evidence
- PSD – Healthy Living, Recycling & Waste Management