



CORPUS CHRISTI Whole School Curriculum Map – Science and Technology

(Updated November 2019)



In 2018 we will teach Digital Technologies separate while we familiarise ourselves with the new syllabus. Each of the 4 sciences will therefore be taught for 7 to 8 weeks.

Science Early Stage 1 ALL YEARS	Science Stage 1 EVEN YEARS	Science Stage 1 ODD YEARS	Science Stage 2 EVEN YEARS	Science Stage 2 ODD YEARS	Science Stage 3 EVEN YEARS	Science Stage 3 ODD YEARS
All Strands of Science STe-1WS-S A student observes, questions and collects data to communicate ideas. STe-2DP-T A student develops solutions to an identified need.	All Strands of Science ST1-1WS-S A student observes, questions and collects data to communicate and compare ideas ST1-2DP-T A student uses materials, tools and equipment to develop solutions for a need or opportunity		All Stands of Science ST2-1WS-S A student questions, plans and conducts scientific investigations, collects and summarises data and communicates using scientific representations ST2-2DP-T A student selects and uses materials, tools and equipment to develop solutions for a need or opportunity		All Strands of Science ST3-1WS-S A student plans and conducts scientific investigations to answer testable questions, and collects and summarises data to communicate conclusions ST3-2DP-T A student plans and uses materials, tools and equipment to develop solutions for a need or opportunity	
Earth & Space Science How's the Weather? STe-6ES-S A student identifies how daily and seasonal changes in the environment affect humans and other living things. <u>Changes in the environment</u> <i>Inquiry question: How do daily and seasonal changes affect the environment?</i>	Physical World Science Forces and Energy in Products ST1-9PW-ST A student investigates how forces and energy are used in products <u>Forces and energy in products</u> <i>Focus question: How are forces used for a purpose?</i>	Physical World Science Let's Get Loud ST1-8PW-S A student describes common forms of energy and explores some characteristics of sound energy <u>Energy comes in different forms that can be detected</u> <i>Inquiry question: What are the different forms of energy around us and how can we detect them?</i>	Physical World Science Marble Magic ST2-9PW-ST A student describes how contact and non-contact forces affect an object's motion <u>Contact and non-contact forces</u> <i>Inquiry question: How can objects affect other objects with or without touching them?</i> <u>Forces and energy in products and systems</u> <i>Focus question: How can we use forces and energy in a product or system</i>	Physical World Science Energy Makes Things Happen ST2-8PW-ST A student describes the characteristics and effects of common forms of energy, such as light and heat <u>Energy makes things happen (heat, light and electricity)</u> <i>Inquiry question: How do heat, light and electrical energy make things happen?</i>	Physical World Science Transfer and Transformation of Energy ST3-8PW-ST A student explains how energy is transformed from one form to another <u>Transfer and transformation of energy</u> <i>Inquiry question: What types of energy transformations can be observed?</i> <u>Forces and energy in products and systems</u> <i>Focus question: How can electricity be used in a product or system?</i>	Physical World Science Describing and Exploring Specific Forces ST3-9PW-ST A student investigates the effects of increasing or decreasing the strength of a specific contact or non-contact force <u>Describing and exploring specific forces</u> <i>Inquiry question: How can we make a force stronger or weaker?</i> <u>Transfer and transformation of energy</u> <i>Inquiry question: What types of energy transformations can be observed?</i>
Physical World Science Let It Roll STe-5PW-SA student observes the way objects move and relates changes in motion to push and pull forces. <u>Movement of objects</u> <i>Inquiry question: What causes objects to move in different ways?</i>	Material World Science Food for Our Future ST1-7MW-S A student describes how the properties of materials determine their use <u>Materials can be combined and changed</u> <i>Inquiry question: What changes occur when materials are combined?</i> <u>Materials are used for a specific purpose</u> <i>Focus question: How do the properties of materials determine their use?</i>	Material World Science Bend, Twist, Stretch! ST1-6MW-S A student identifies that materials can be changed or combined <u>Materials can be combined and changed</u> <i>Inquiry question: What changes occur when materials are combined?</i>	Material World Science Don't Break It ST2-7MW-SA student investigates the suitability of natural and processed materials for a range of purposes <u>Materials are used for a specific purpose</u> <i>Focus question: How do you decide upon which material to use for a particular purpose?</i>	Material World Science Changes of State ST3-6MW-S A student describes how adding or removing heat causes a change of state <u>Changes of state</u> <i>Inquiry question: How do materials change when heated and cooled?</i>	Material World Science States of Matter ST3-6MW-S A student explains the effect of heat on the properties and behaviour of materials <u>States of matter</u> <i>Inquiry question: How can the state of materials be changed and manipulated?</i> <u>Mixtures</u> <i>Inquiry question: What is the result of combining materials?</i>	Material World Science Properties of Materials Determine Their Use ST3-7MW-S A student explains how the properties of materials determine their use for a range of purposes <u>Properties of materials determine their use</u> <i>Focus question: Why are the characteristics of materials important when designing and producing?</i>
Living World Science Living Detectives STe-3LW-ST A student explores the characteristics, needs and uses of living things. <u>Characteristics and basic needs of living things</u> <i>Focus question: What do you notice about living things?</i> <i>How can living things meet our needs?</i> <u>Using living things as food and fibre</u> <i>How can living things be used to meet our needs?</i>	Earth & Space Science Changes in the Sky and Land ST1-10ES-S A student recognises observable changes occurring in the sky and on the land and identifies <u>Changes in the sky and on the land</u> <i>Inquiry question: How can we investigate the observable changes that occur in the sky and on the land?</i>	Earth & Space Science Caring for Our Earth ST1-10ES-S A student recognises observable changes occurring in the sky and on the land and identifies Earth's resources <u>Earth's resources</u> <i>Inquiry question: What are Earth's resources and how do we use and care for them?</i>	Earth & Space Science Earth's Surface and its Changes ST2-10ES-S A student investigates regular changes caused by interactions between the Earth and the Sun, and changes to the Earth's surface <u>How the Earth's surface changes over time</u> <i>Inquiry question: How do natural processes and human actions change the Earth's surface over time?</i>	Earth & Space Science Earth's Relationship with The Sun ST2-10ES-S A student investigates regular changes caused by interactions between the Earth and the Sun, and changes to the Earth's surface <u>Earth's relationship with the Sun</u> <i>Inquiry question: What occurs as a result of the interactions between the Earth and the Sun?</i>	Earth & Space Science Changes to The Earth's Surface ST3-10ES-S A student explains regular events in the solar system and geological events on the Earth's surface <u>Changes to Earth's surface</u> <i>Inquiry question: How do sudden geological changes and extreme weather events affect the Earth's surface?</i>	Earth & Space Science Earth's Place in Space ST3-10ES-S A student explains regular events in the solar system and geological events on the Earth's surface <u>Earth's place in our solar system</u> <i>Inquiry question: How does the Earth compare to other planets in the solar system?</i>
Material World Science Materials – Where from and What For STe-4MW-ST A student identifies that objects are made of materials that have observable properties. <u>Properties of materials can be observed</u> <i>Inquiry question: What are some of the observable properties of materials?</i> <u>Materials are selected to suit specific purposes</u> <i>Focus question: How do the properties of materials affect their use?</i>	Living World Science Human Development & Digital Systems ST1-4LW-S A student describes observable features of living things and their environments <u>Living things change</u> <i>Inquiry question: How do living things change as they grow?</i> <u>Plants and animals used for food and fibre</u> <i>Focus question: How do humans use plants and animals?</i>	Living World Science Living Things ST1-4LW-S A student describes observable features of living things and their environments <u>External features of living things</u> <i>Inquiry question: What are the external features of living things?</i> <u>Living things live in different places</u> <i>Inquiry question: How can we improve a local environment to encourage living things to thrive?</i>	Living World Science The World's Living Things ST2-4LW-S A student compares features and characteristics of living and non-living things <u>Classification of living things</u> <i>Inquiry question: How can we group living things?</i> <u>Life cycles of living things</u> <i>Inquiry question: What are the similarities and differences between the life cycles of living things?</i> <u>Survival of living things</u> <i>Inquiry question: How are environments and living things interdependent?</i>	Living World Science From Plant to Pizza ST2-4LW-S A student compares features and characteristics of living and non-living things <u>Producing food and fibre from living things</u> <i>Focus question: How do we create food and fibre products from animals and plants?</i>	Living World Science Growth and Survival of Living Things ST3-4LW-S A student examines how the environment affects the growth, survival and adaptation of living things <u>Growth and survival of living things</u> <i>Inquiry question: How do physical conditions affect the survival of living things?</i> <u>Adaptations of living things</u> <i>Inquiry question: How do the structural and behavioural features of living things support survival?</i>	Living World Science Food, Fibre and Sustainability ST3-5LW-S A student explains how food and fibre are produced sustainably in managed environments for health and nutrition <u>Sustainably managing environments to source food and fibre</u> <i>Focus question: Why is it important for food and/or fibre to be produced sustainably?</i>
Digital Technologies STe-7DI-T A student identifies digital systems and explores how instructions are used to control digital devices. <u>Digital systems</u> <i>Focus question: How are digital technologies used in everyday life?</i> <u>Sequencing instructions</u> <i>Focus question: How does following steps help to achieve a goal?</i>	Digital Technologies ST1-2DP-T A student uses materials, tools and equipment to develop solutions for a need or opportunity ST1-3DP-T A student describes, follows and represents algorithms to solve problems ST1-11DI-T A student identifies the components of digital systems and explores how data is represented <u>Representation and analysis of data</u> <i>Focus question: What is data and how can we store and represent it?</i> <u>Writing and recording sequences and instructions</u> <i>Focus question: How can we record instructions for others to follow and understand?</i>		Digital Technologies ST2-2DP-T A student selects and uses materials, tools and equipment to develop solutions for a need or opportunity ST2-3DP-T A student defines problems, describes and follows algorithms to develop solutions ST2-11DI-T A student describes how digital systems represent and transmit data <u>Digital Systems and the transmission of data</u> <i>Focus question: How do digital systems share information and instructions?</i> <u>Representation and analysis of data</u> <i>Focus question: Why do we represent data in different ways?</i> <u>Visual Programming</u> <i>Focus question: How are algorithms used to develop digital systems?</i>		Digital Technologies ST3-2DP-T A student plans and uses materials, tools and equipment to develop solutions for a need or opportunity ST3-3DP-T A student defines problems, and designs, modifies and follows algorithms to develop solutions ST3-11DI-T A student explains how digital systems represent data, connect together to form networks and transmit data <u>Using and Interpreting Data</u> <i>Focus question: How do components of digital systems interact with each other to transmit data?</i> <u>Digital Systems and Networks</u> <i>Focus question: How do the components of digital systems connect together to form networks?</i> <u>Digital Solutions</u> <i>Focus question: How do we represent decision-making in an algorithm?</i>	