



Stanbridge Learning Journey Annual Overview of Skills Year 4 SCIT – Science and Technology



Science – Skills	Science – Programme of Study	ICT
<p>Living things and their habitats</p> <ul style="list-style-type: none"> To be able to gather, record, classify and present data in a variety of ways to help in answering questions. To be able to report on findings from enquiries, including oral and written explanations. <p>Animals, including humans</p> <ul style="list-style-type: none"> To be able to record findings using labelled diagrams. To be able to use written explanations to report on findings from an enquiry. To be able to identify the correct type of enquiry to answer a question. To be able to set up a comparative test. To be able to use evidence to support findings. <p>States of matter</p> <ul style="list-style-type: none"> To be able to set up a fair test. To be able to set up a simple test. To be able to use results to draw simple conclusions. To be able to use a data logger to take accurate measurements. To be able to use a thermometer to take accurate measurements. To be able to provide a written explanation. To be able to use straightforward scientific evidence to answer questions or to support their findings. <p>Sound</p> <ul style="list-style-type: none"> To be able to use a scientific enquiry to answer a question. To be able to set up a simple practical enquiry. To be able to make systematic and careful measurements with a data logger. 	<p>living things and their habitats</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> identify and name a variety of living things (plants and animals) in the local and wider environment, using classification keys to assign them to groups recognise that environments can change and that this can sometimes pose dangers to living things. <p>Animals, including humans</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> describe the simple functions of the basic parts of the digestive system in humans identify the different types of teeth in humans and their simple functions construct and interpret a variety of food chains, identifying producers, predators and prey. <p>States of matter</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> compare and group materials together, according to whether they are solids, liquids or gases observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. <p>Sound</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> identify how sounds are made, associating some of them with something vibrating find patterns between the pitch of a sound and features of the object that produced it find patterns between the volume of a sound and the strength of the vibrations that produced it. <p>Electricity</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> identify common appliances that run on electricity 	<p>Acceptable Use/Online Safety</p> <ul style="list-style-type: none"> Know that filtering systems have limitations and that they need to search safely Know how to identify personal information relating to others and keep it safe Check online sources against printed sources and identify some reasons why people might publish content that is not accurate Be able to describe some ways that people can re use published content on web sites Know some ways to identify trusted web sites Describe how to stay safe when contacting people on line including reporting and protecting personal information Know that sites may be published to make money and identify advertising on web pages <p>Media</p> <ul style="list-style-type: none"> Create pictures by choosing from a range of tools and effects and by copying and pasting sections of a picture. Take digital images, edit using camera effects and crop them Edit sound and music files using copy and paste and adding effects. Create text based documents using appropriate layout for a purpose including use of bullet points, numbering, indenting and columns and selecting appropriate fonts. Use right click to correct spellings, look up words and find synonyms Script and plan a film considering shot types and then film it. Contribute to a blog and know how information in a blog is organised. <p>Handling Data</p> <ul style="list-style-type: none"> Ask questions about a population and identify data to be collected to answer them Plan and create a database Distinguish between different types of data in a database field such as numerical, text, list Search and sort data in a database to answer questions Know how to identify inaccurate data Present data appropriately for a purpose and audience Use a data logger and analyse the findings. <p>The impact of technology</p> <ul style="list-style-type: none"> Describe the features of a search engine that help you to search. Know how to select an appropriate search tool. Describe how to use a search engine effectively (to get best results).

<ul style="list-style-type: none"> To be able to report on findings from an enquiry. To be able to identify differences, similarities or changes related to simple scientific ideas. To be able to set up simple fair tests. <p>Electricity</p> <ul style="list-style-type: none"> To be able to set up a simple practical enquiry. To be able to record findings using drawings. To be able to use results to make predictions. 	<ul style="list-style-type: none"> construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit recognise some common conductors and insulators, and associate metals with being good conductors. 	<ul style="list-style-type: none"> Know why search results are ranked differently. Know how to check the reliability of a web site. Know about file structure, naming and organisation and the implications for finding resources. Know about the different places data can be stored and the benefits and issues of this. <p>Programming</p> <ul style="list-style-type: none"> Test and improve given programs. Improve efficiency in programs by comparing different solutions and by using repeat. Write and edit programs using logo commands. Write procedures using logo e.g. to draw letters, polygons and other shapes. Use procedures as part of a program. Define variables e.g. to draw shapes on screen with logo and to create a score in a game. Plan and write a program using a flow chart structure. Use sensors to 'trigger' an action e.g. touching a wall. Write an algorithm and then create a program that will use a simple selection command for a game.
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HUMS – Geography, History, RE

Geography	History	RE
<p><u>Location knowledge</u></p> <p>name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time</p> <p>ge34 Describe similarities and differences.</p> <p>ge35 Describe, compare and offer reasons for their views.</p> <p>ge36 To use appropriate geographical vocabulary in communicating findings</p> <p>ge40 To use ICT to help in geographical investigations.</p> <p>See also Year 3 skills</p> <p><u>Place knowledge</u></p> <ul style="list-style-type: none"> Understand geographical similarities and differences through the study of human and physical geography of a country in South America – links with History Mayan topic <p>ge34 Describe similarities and difference</p> <p>ge36 To use appropriate geographical vocabulary in communicating findings.</p> <p>See also Year 3 skills</p>	<p><u>The Roman Empire and its impact on Britain.</u></p> <p>This could include:</p> <ul style="list-style-type: none"> Julius Caesar's attempted invasion in 55-54 BC the Roman Empire by AD 42 and the power of its army successful invasion by Claudius and conquest, including Hadrian's Wall British resistance, e.g. Boudica "Romanisation" of Britain: sites such as Caerwent and the impact of technology, culture and beliefs, including early Christianity <p>Within this, the pupils will undertake a local history study linked with Bath.</p> <p>hi24 Place events, people and changes into correct periods of time.</p> <p>hi25 Develop their understanding that the past can be divided into different periods of time.</p> <p>hi26 Use dates and vocabulary relating to the passing of time.</p> <p>hi27 Identify and describe reasons for and results of historical events, situations and changes in the period studied.</p> <p>hi28 Begin to give reasons for and results of the main events and changes</p> <p>hi29 Identify different ways in which the past is represented and interpreted.</p>	<p>Founders and Leaders</p> <ul style="list-style-type: none"> Who founded the world's great religions? How have religious leaders influenced their faith tradition? Who are our heroes and heroines? What makes a leader worth following? <p>Religions to be covered: Christianity, Islam, Hinduism, Sikhism</p> <p>Use of Sacred Texts</p> <ul style="list-style-type: none"> How and why do believers show respect for sacred texts? What different genres make up sacred texts? What can I learn from sacred texts? What inspires/ guides me? <p>Religions to be covered: Christianity, Islam, Judaism</p> <p>Showing Commitment</p> <ul style="list-style-type: none"> How do people show commitment to the values of their faith? What commitments and values are important to me? <p>Religions to be covered: Christianity, Sikhism, Hinduism, Judaism</p> <p>Christmas</p> <p>Key Question – How does God Communicate?</p> <p>The children will be able to:</p> <ul style="list-style-type: none"> Identify aspects of faith which might cause people to wonder and ask questions

<p><u>Human and physical geography</u></p> <p>describe and understand key aspects of:</p> <ul style="list-style-type: none"> •physical geography - rivers and the water cycle •Human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water – link with Place knowledge <p>ge36 To use appropriate geographical vocabulary in communicating findings</p> <p>ge34 Describe similarities and differences.</p> <p>ge40 To use ICT to help in geographical investigations.</p> <p>See also Year 3 skills</p> <p><u>Geographical skills and fieldwork</u></p> <ul style="list-style-type: none"> •use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied •use the eight points of a compass, to build their knowledge of the United Kingdom and the wider world •use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies. <p>ge40 To use ICT to help in geographical investigations.</p> <p>ge41 Continue to develop decision making skills</p> <p>ge36 To use appropriate geographical vocabulary in communicating findings</p> <p>ge39 To use secondary sources of information to draw plans and maps.</p> <p>ge35 Describe, compare and offer reasons for their views.</p> <p>See also Year 3 skills</p>	<p>hi31 Ask and answer questions.</p> <p>hi32 Communicate knowledge and understanding in a variety of ways.</p> <p><u>A non-European society that provides contrasts with British history - Mayan civilization c. AD 900</u></p> <p>hi24 Place events, people and changes into correct periods of time.</p> <p>hi26 Use dates and vocabulary relating to the passing of time.</p> <p>hi29 Identify different ways in which the past is represented and interpreted.</p> <p>hi31 Ask and answer questions.</p> <p>hi32 Communicate knowledge and understanding in a variety of ways.</p>	<ul style="list-style-type: none"> • Identify how people of faith understand God communicating with them • Identify what peace means to them • Identify what might make for a more peaceful and harmonious school community <p>Consider- Why do people believe in angels? What message would angels have for today?</p> <p>Lent and Easter Learning Objectives</p> <p>Pupils should learn:</p> <ul style="list-style-type: none"> • about the betrayal of Jesus by Peter. • about Gethsemane, the arrest, the courtyard scene, the crucifixion and the forgiveness of Peter by Jesus. • that forgiveness and restoration are key concepts of the Christian faith and are expressed every week in Christian worship (confession and absolution). • that we all do things that require forgiveness. • that we need to forgive others.
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Creative Development – Art, Music, DT

Art			Music	DT
Drawing	Painting	3D		
Focus: Foreground and	Focus: Colour.	Focus: Form, technique in	Play and perform in	<u>2D shape to 3D modelling</u>

<p>background, shading with different types of pencil. Build on previous skills, using a variety of media.</p> <p>Select and use different pencil types appropriately for shading. Understand depth, foreground, background and middle distance. Review, reinforce and explore techniques.</p> <p>Improved control, appropriate selection of medium.</p> <p>Portray observations accurately and sensitively.</p> <p>Review and change work if necessary to develop ideas.</p> <p><u>Art and Design over arching focus:</u></p> <p>Create sketch books to record observations and use to review and revisit ideas.</p> <p>Great artists, architects and designers in history.</p>	<p>How they work together.</p> <p><i>Working with a range of shades linking colour and mood, e.g. warm colours/ cool colours.</i></p> <p><i>The use of colour created by illusion. e.g. pointillism using dots of selected colour. Also building on Step 4.</i></p> <p>Improved control and appropriate selection of tools and equipment. Using textured paints.</p> <p>Compare ideas, methods and approaches in their own and others work and say what they think and feel about them. Discuss possible improvements.</p>	<p>joining component parts. Painting pattern onto 3D object. Plaster casting. Clay.</p> <p>Understanding methods of joining component parts. Painting onto 3D objects, selecting appropriate paint types.</p> <p>Learn how to plaster cast. Become more sophisticated in using clay.</p> <p>Model making. Focus on joining component parts. Selecting appropriate paint types e.g. will it need to be mixed with PVA glue?</p> <p>To put into practise new skills. Become more adventurous and confident with clay.</p> <p>Discussing techniques used. Which were successful? Which other techniques would be appropriate?</p> <p>Compare ideas and discuss possible improvements.</p>	<p>solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control & expression.</p> <ul style="list-style-type: none"> • Sing songs in a variety of styles with confidence • Sing an increasing number from memory • Sing with awareness of phrasing • Sing call and response • Make up words and actions to go with well-known songs • Understand that posture, breathing and diction are important • Show increasing accuracy of pitch and awareness of the shape of melody • Convey the mood or meaning of the song • Demonstrate an awareness of character or style in performance • Adapt and improve a musical performance • Understand and perform a steady beat • Understand the difference between rhythm and pulse • Explore accompaniment devices <p>Improvise and compose music for a range of purpose using inter-related dimensions of music</p> <ul style="list-style-type: none"> • Consolidate the concepts of using long-short/fast-slow/high-low/, loud and quiet sounds when exploring and creating music using voices or instruments • Compose short pieces of music in groups – 	<p>Designing</p> <ul style="list-style-type: none"> • Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. • Produce annotated sketches, prototypes, final product sketches and pattern pieces. <p>Making</p> <ul style="list-style-type: none"> • Plan the main stages of making. • Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing. • Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern. <p>Evaluating</p> <ul style="list-style-type: none"> • Investigate a range of 3-D textile products relevant to the project. • Test their product against the original design criteria and with the intended user. • Take into account others' views. • Understand how a key event/individual has influenced the development of the chosen product and/or fabric. <p><u>Levers and Linkages</u></p> <p>Designing</p> <ul style="list-style-type: none"> • Generate realistic ideas and their own design criteria through discussion, focusing on the needs of the user. • Use annotated sketches and prototypes to develop, model and communicate ideas. <p>Making</p> <ul style="list-style-type: none"> • Order the main stages of making. • Select from and use appropriate tools with some accuracy to cut, shape and join paper and card. • Select from and use finishing techniques suitable for the product they are creating. <p>Evaluating</p> <ul style="list-style-type: none"> • Investigate and analyse books and, where available, other products with lever and linkage mechanisms. • Evaluate their own products and ideas against criteria and user needs, as they design and make. <p><u>Simple circuits and switches</u></p> <p>Designing</p> <ul style="list-style-type: none"> • Gather information about needs and wants, and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. • Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams. <p>Making</p> <ul style="list-style-type: none"> • Order the main stages of making. • Select from and use tools and
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			<p>exploring and using the elements of music – texture, tempo & structure</p> <ul style="list-style-type: none"> • Create simple compositions combining rhythm and melody • Explore rhythmic ostinato patterns • Explore pitch notes moving by step and by leap in songs and music • Explore timbre and identify percussion and orchestral instruments • Explore making music to represent pictures/stories or create mood, e.g. tense or calm sounds • Improvise short simple musical pieces using tuned and untuned instruments • Combine sounds, movements and words (narrative) • Use a range of IT to sequence, compose, record and share work. <p><u>Listen with attention to detail and recall sounds with increasing aural memory</u></p> <ul style="list-style-type: none"> • Listen to and recall a short musical sequence • Describe the main features of longer pieces of music • Identify, where appropriate: A steady beat, a specific rhythm pattern, the speed (tempo) the volume (dynamics) and the melody (pitch) • Explore more abstract use of sounds • Listen to and talk about musical features within music 	<p>equipment to cut, shape, join and finish with some accuracy.</p> <ul style="list-style-type: none"> • Select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities. <p>Evaluating</p> <ul style="list-style-type: none"> • Investigate and analyse a range of existing battery-powered products. • Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.
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			<p>which picture a character or scene, e.g. peter and the wolf, carnival for the animals etc.</p> <ul style="list-style-type: none"> • Listen for the verse and chorus structure of songs <p><u>Use and understand staff & other musical notations</u></p> <ul style="list-style-type: none"> • Explore graphics notation • Explore rhythm patterns using standard notation to record using crotchets, quavers, minims and semi-breves • Follow simple hand directions from a leader indicating pitch and tempo • Use music technology to record or compose <p><u>Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions & from great composers and musicians</u></p> <ul style="list-style-type: none"> • Listen and discuss the style of music from around the british isles – Scotland, Wales, Ireland and England. What makes this music sound <i>Scottish</i>? <p><u>Develop an understanding of the history of music</u></p> <ul style="list-style-type: none"> • Listen with concentration to longer pieces/extracts of music • Explore the music that was being played at the time of a history topic being studied in class 	
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Personal, Emotional & Physical Development – PE, PSHE

PSHE & Citizenship	REAL PE					Swimming Activities and Water Safety Years 3, 4, 5 & 6
	Unit 1 – Personal Skills	Unit 2 – Social Skills	Unit 3 – Cognitive Skills	Unit 4 – Creative Skills	Unit 6 – Health and Fitness	
Developing confidence and	1. Combine Side	1. I can jump	1. Walk forwards	1. Throw and	1. From a seated	Term 4:

<p>responsibility and making the most of their abilities</p> <p>4a) that their actions affect themselves and others, to care about other people's feelings and to try to see things from their points of view;</p> <p>4d) to realise the nature and consequences of racism, teasing, bullying and aggressive behaviours, and how to respond to them and ask for help.</p> <p>2e) to reflect on spiritual, moral, social and cultural issues, using imagination to understand other people's experiences;</p> <p>4c) to be aware of different types of relationships, including marriage and those between friends and families, and to develop the skills to be effective in relationships;</p> <p>Getting on and Falling out</p> <p>1a) to talk and write about their opinions, and explain their views, on issues that affect themselves and society;</p> <p>1c) to face new challenges positively by collecting information, looking for help, making responsible choices, and taking action;</p> <p>2a) to research, discuss and debate topical issues, problems and events;</p> <p>2c) to realise the consequences of antisocial and aggressive behaviours, such as bullying and racism, on individuals and communities;</p> <p>2e) to reflect on spiritual, moral social and cultural issues, using imagination to understand other people's experiences;</p> <p>2f) to resolve differences by looking at alternatives, making decisions and explaining choices;</p> <p>4a) that their actions affect themselves and others, to care about other people's feelings and to try to see things from their points of view;</p> <p>2c) to realise the consequences of anti-social and aggressive behaviours, such as bullying and racism, for individuals and communities;</p>	<p>steps with reverse pivots</p> <p>2. Skip with high elbows and high knees</p> <p>3. Hopscotch forwards and backwards</p> <p>4. Hopscotch to alternative feet, forwards and backwards.</p> <p>5. I can do 3 step zigzag forwards and backwards</p>	<p>from 2 feet to 2 feet with a quarter turn in both directions</p> <p>2. I can jump from 2 feet to 1 foot (either leg) on a line with freeze on landing</p> <p>3. I can jump from 2 feet to 2 feet with 180 degree turn in one direction and land in balance.</p> <p>4. I can perform a tucked jump and land in balance.</p> <p>5. I can perform a tucked jump with a 180 degree turn in both directions and land in balance.</p> <p>6. I can jump from 2 feet to 2 on a line, forwards, backwards and side to side, landing in balance.</p>	<p>and backwards lifting your knees to 90 degree angle and swimming opposite arms to legs.</p> <p>2. I can walk forwards and backwards, lifting my heels up to my bottom and swinging opposite arms to leg</p> <p>3. Perform a marching action forwards and backwards, lifting knees up and elbows to a 90 degree angle.</p> <p>4. Walk fluidly forwards with heel to toe landing</p> <p>5. Walk fluidly forwards lifting knees with heel to toe landing</p> <p>6. Walk fluidly forwards and backwards lifting my heels to my bottom bringing my knees up and using heel to toe landing</p>	<p>catch a tennis ball with either hand, catching after one bounce</p> <p>2. Catch a tennis ball with one hand and throw it with the other after 1 bounce</p> <p>3. Catch a tennis ball with one hand and throw it with the other after without a bounce</p> <p>4. I can strike a large soft ball along the ground with my hand, 5 times in a rally</p> <p>5. I can kick a ball with the same foot and alternate feet</p> <p>6. I can alternatively roll 2 balls (using both hands" sending one as the other returns.</p>	<p>position, throw a bouncing ball, chase and collect it facing the opposite direction</p> <p>2. From a lying position, react and chase a bouncing ball thrown by a partner and collect it facing forwards</p> <p>3. Roll a ball, chase it, let it roll through my legs and then collect it facing forwards</p> <p>4. React and chase a ball thrown by a partner, let it roll through my legs and then collect it facing forwards</p> <p>5. React and chase a ball thrown by a partner, let it roll through my legs and then collect it facing the opposite direction</p> <p>6. I can roll a tennis ball, chase it, let it roll through my legs and then collect it facing forwards.</p>	<p>Mondays</p>
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<p>2e) to reflect on spiritual, moral, social and cultural issues, using imagination to understand other people's experiences;</p> <p>3f) that pressure to behave in an unacceptable or risky way can come from a variety of sources, including people they know, and how to ask for help and use basic techniques for resisting pressure to do wrong;</p> <p>3g) school rules about health and safety, basic emergency aid procedures and where to get help;</p> <p>4a) that their actions affect themselves and others, to care about other people's feelings and to try to see things from their points of view;</p> <p>4d) to realise the nature and consequences of racism, teasing, bullying, and aggressive behaviours and how to respond to them and ask for help;</p> <p>4e) to recognise and challenge stereotypes.</p> <p>Good to be me</p> <p>1a) to talk and write about their opinions, and explain their views, on issues that affect themselves and society;</p> <p>1b) to recognise their worth as individuals, by identifying positive things about themselves and their achievements, seeing their mistakes, making amends and setting personal goals;</p> <p>2e) to reflect on spiritual, moral, social and cultural issues, using imagination to understand other people's experiences;</p> <p>4a) that their actions affect themselves and others, to care about other people's feelings and to try to see things from their points of view;</p> <p>4c) to be aware of different types of relationships, including marriage, and those between friends and families, and to develop the skills to be effective in relationships.</p> <p>Going for goals</p> <p>1b) to recognise their worth as individuals, by identifying positive things about themselves and their achievements, seeing their mistakes, making amends and setting personal goals;</p> <p>1c) to face new challenges</p>						
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<p>positively by collecting information, looking for help, making responsible choices and taking action;</p> <p>3e) to recognise the different risks in different situations and then decide how to behave responsibly;</p> <p>4a) to recognise that their actions affect themselves and others, to care about other people's feelings, and to try to see things from their points of view.</p> <p>Changes</p> <p>1a) to talk and write about their opinions, and explain their views, on issues that affect themselves and society;</p> <p>1c) to face new challenges positively by collecting information, looking for help, making responsible choices and taking action;</p> <p>2e) to reflect on spiritual, moral, social and cultural issues, using imagination to understand other people's experiences;</p> <p>4a) that their actions affect themselves and others, to care about other people's feelings and to try to see things from their points of view;</p> <p>4c) to be aware of different types of relationships, including marriage, and those between friends and families, and to develop the skills to be effective in relationships.</p> <p>Relationships</p> <p>1c) To face new challenges positively, by collecting information, looking for help, making responsible choices, and taking action.</p> <p>1d) To recognise as they approach puberty, how people's emotions change at that time and how to deal with their feelings towards themselves, their family and others in a positive way.</p> <p>2c) To realise the consequences of anti-social behaviour and aggressive behaviours, such as bullying, racism, on individuals and communities.</p> <p>4a) That their actions affect themselves and others, to care about other people's feelings and to try and see things from their point of view.</p> <p>SRE (To be covered in Term 3)</p>						
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<p>Begin to make choices about issues affecting health and well being including hygiene and diet.</p> <p>Identify main parts of the body. (Using terms: penis, vagina, testicles, breasts and pubic hair.)</p> <p>Develop strategies for dealing with risky situations. (Including inappropriate touching with a peer/adult.)</p> <p>Develop understanding of health and safety within school and public areas.</p>						
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