



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year R Topic Unit	All about Me	What the Ladybird Heard	Traditional Tales	We are going on a Bear Hunt	New Life	Walking through the Jungle
<p><b>Knowledge and Skills</b></p> <p>Ongoing To ask questions based on their own fascinations</p>	<p><b>Knowledge</b> Talking about the things they have observed. Talking about why things happen and how things work.</p> <p><b>Skills</b> Describe, recognise and name. Describe what they see. Ask questions based on the world around them. Recording, label simple pictures. To say why things are the same and different. Explore using appropriate senses. Contribute to simple charts.</p> <p><b>Activities</b> Talking about their body. Labelling the body. Keeping healthy, including healthy food. Linked to DT, fruit smoothies.</p>	<p><b>Knowledge</b> Animal sounds Baby animal names Naming farm animals</p> <p><b>Skills</b> Describe what they see. To sort groups of objects and begin to explain reasons for sorting.</p> <p><b>Activities</b> Sorting farm animals in simple ways. Animal' sounds game</p> <p><b>Knowledge</b> Wow science Developing an understanding of growth, decay and change over time.</p> <p><b>Skills</b> Predicting- have an idea about what might happen and discuss. Observe main effects and describe changes they notice. Talk about what they notice in simple terms. To make simple comparisons. Talk about whether they think the test is fair and begin to say why. Can use simple equipment.</p> <p><b>Activities</b> Wow science Decaying bread (Linked to little red hen). Smarties experiment</p>	<p><b>Knowledge</b> Names of materials. Simple properties.</p> <p><b>Skills</b> Identifying and classifying. Can describe items observing simple features. Simple predictions and questioning. Be able to see and touch things which are different.</p> <p><b>Activities</b> Materials for 'Three little pig houses'. Soggy gingerbread toast experiment.</p> <p><b>Skills</b> Have an idea about what might happen and discuss different things that might happen in a small group. Describe what they see happen Observe main effects and describe changes they notice.</p> <p><b>Activity</b> Gingerbread man crossing the river.</p>	<p><b>Knowledge</b> Show care and concern for living things and their environment.</p> <p><b>Skills</b> Exploring and using senses being able to see, hear, touch and smell things. To be able to say why things are the same, different and begin to say why they think this is the case. Use ICT to record observations. Talk about what they notice in simple terms. Can describe items observing simple features.</p> <p><b>Activity</b> Bear hunt journey. Children to feel the grass, mud etc.</p>	<p><b>Knowledge</b> Life cycles Show care and concern for living things and their environment.</p> <p><b>Skills</b> To ask questions based on the world around them. Label simple pictures and diagrams. Use ICT to record observations. Talk about what they notice in simple terms. Describe what they see happen. Observe and describe changes they notice.</p> <p><b>Activities</b> Growing: Seeds Caterpillars Butterflies Chicks Frog spawn Looking closely at life cycles.</p>	<p><b>Knowledge</b> Talking about similarities and differences in relation to places, objects and living things. Rainforest animal names. Rainforest habitat. Characteristics rainforest animals.</p> <p><b>Skills</b> Ask questions based on the world around them. Describe recognise and name. Identifying and classifying. Contribute to different charts eg: Pictogram jungle animals</p> <p><b>Activity</b> Sorting jungle animals by two or three ways different categories. Marwell visit.</p>



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1 Topic Unit	<b>Funny Bones</b>	<b>Man on the Moon</b>	<b>Fabulous Fairy Tales</b>	<b>The Victorians</b>	<b>A Tiny Seed</b>	<b>Sailing the Seas</b>
Knowledge and Skills	<p><b>Knowledge</b> Identify, name, draw and label the basic parts of the human body and say which of the body is associated with each sense. Observe changes across the four seasons. Observe and describe weather associated with the seasons (ongoing).</p> <p><b>Skills</b> Make observations using appropriate senses.</p> <p><b>Activities</b> Labelling body parts, exploring senses through different ways. Comparing changes in bodies. Special class visit from a scientist.</p>	<p><b>Skills</b> Carrying out. Observing closely using simple equipment. Using the correct vocabulary. To say what results mean in simple terms which link cause and effect. Begin to suggest ways to find out more things they want to know.</p> <p><b>Activity</b> WOW science Pump Propeller or Rocket balloon.</p>	<p><b>Knowledge</b> Identifying and naming a variety of everyday materials. Distinguishing between an object and the material from which it is made. Describing the simple, physical properties of a variety of everyday materials.</p> <p><b>Skills</b> To begin to use some features to compare objects, materials to help decide how to sort and group them. Ask simple questions, based on task in-hand. Ask simple questions and to realise they can be answered in different ways.</p> <p><b>Activities</b> Exploring which material is best for the job. WOW science Spoon experiment. Which spoon gets hot the quickest?</p> <p><b>Knowledge</b> Know how seeds and bulbs grow into mature plants</p> <p><b>Skills</b> Observe and describe.</p> <p><b>Activity</b> Growing cress.</p>	<p><b>Knowledge</b> To know how plants drink water.</p> <p><b>Skills</b> Make observations using appropriate sense. Make observations when using equipment. With help suggest some ideas with reasons. Know they need two or more tests in order to compare findings. Predicting and planning. To say what happened is what they expected. Use results to draw conclusions Begin to explain what happened drawing on their knowledge and understanding.</p> <p><b>Activity-</b> WOW science Coloured ink plant experiment- carnation. Begin to use school proforma.</p> <p><b>Skills</b> Use whole class pictograms. Show comparisons using tally charts and pictograms. Make whole class simple tables. Use data on a simple bar graph to ask questions.</p> <p><b>Activity</b> Find out the classes favourite season.</p>	<p><b>Knowledge</b> Identify and name deciduous and ever green trees. Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p><b>Skills</b> Use simple texts to find information Record observations in own way. Communicate findings in simple way. Show comparisons using a tally chart.</p> <p><b>Activity</b> Conservation area walk.</p> <p><b>Knowledge</b> Find out and describe how plants need water, light and a suitable temperature to grow.</p> <p><b>Skills</b> Suggest simple ideas to test. Can use simple equipment related to task. Communicate findings in different ways. Collect evidence to try and answer a question. Predicting and evaluating. Given two options can see which one is better.</p> <p><b>Activity</b> Growing cress experiment.</p>	<p><b>Knowledge</b> Identify and name a variety of common animals, including fish. Identify and name the variety of common animals that are carnivores, herbivores and omnivores. Describe the structure of a variety of common animals. Record observations using a pictogram/bar graph.</p> <p><b>Skills</b> Begin to use features to compare animals. Recording and analysing.</p> <p><b>Activities</b> Fact finding animals and sorting. Simple recordings.</p>



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 2 Topic Unit</b>	<b>Into the Forest Florence Nightgale</b>	<b>Fire! Fire!</b>	<b>Africa</b>	<b>Vehicles Titanic</b>	<b>Islands – Katie Morag</b>	<b>British Wildlife Nocturnal animals</b>
<b>Knowledge and Skills</b> Ongoing -Use the right science skills vocabulary. -Use right science vocabulary to describe thoughts and observations -Use first hand experiences and with help simple information sources to answer questions.	<p><b>Knowledge</b> Notice that animals, including humans have off spring, which grow into adults. <b>Skills</b> Give reasons for classifying in a particular way. Use features to compare living things and decide how to sort and group them. <b>Activity</b> A range of sorting activities.</p> <p><b>Knowledge</b> Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene. <b>Skills</b> Making observations and comparisons using equipment following simple instructions. Suggest what might happen and give a reason for their answer. To begin to think about whether a test is fair or unfair. Use school experiment proforma to record individually. To say what happened was what they expected and why. Use results to draw conclusions. <b>Activity</b> Crisp experiment Washing hands experiment</p>	<p><b>Knowledge</b> Know why a variety of every day materials have particular uses. <b>Skills</b> Use features to compare materials. Give cause and effect evaluations. <b>Activities</b> Naming materials. Design house for Great Fire. Use first hand experiences to answer questions. Burning houses in playground.</p>	<p><b>Skills</b> Making observations and comparisons using equipment following simple instructions. Recording observations in a variety of ways. Use different enquiry to answer a question. Suggest what might happen and give a reason for their answer. To begin to think about whether a test is fair or unfair. Use school experiment proforma to record individually. To say what happened was what they expected and why. Use results to draw conclusions. <b>Activity</b> Wow science Dissolving sugar experiment.</p>	<p><b>Skills</b> Ask simple questions and realise they can be answered in different ways. I can use different ways of enquiry to answer questions. Making observations and comparisons using equipment following simple instructions. Use a range of equipment sensibly and safely. With minimal help choose and use simple equipment to measure volume time and distance. To begin to think about how to collect evidence and whether a test is fair or unfair. Recognise why it is important to collect data to answer questions. Say one way to make the experiment better. Use results to draw conclusions with reasons. Explain observations with recorded measurements. <b>Activity</b> Ramp experiment with vehicles</p> <p><b>Skills</b> As dissolving sugar To begin to identify differences, similarities and change. Give cause and effect explanations. <b>Activity</b> Wow science Ice experiment</p>	<p><b>Skills</b> Record observations in a variety of ways including tally charts and bar graphs. Ask simple questions and realise they can be answered in different ways. Suggest what might happen and give a reason for their answer. Recognise why it is important to collect data to answer questions. Use school experiment proforma to record individually. To say what happened was what they expected and why. Use results to draw conclusions. <b>Activity</b> Wow Science Apple Pip experiment(block graph).</p> <p><b>Knowledge</b> Observe and describe how seeds and bulbs grow into mature plants <b>Skills</b> Begin to identify change Say what happened was what they expected and why. Give cause and effect explanations.</p>	<p><b>Knowledge</b> To know how animals obtain their food (food chains). <b>Skills</b> Use features to compare living things and decide how to sort them. Give reasons for classifying in a particular way. <b>Activity</b> Creating food chains</p> <p><b>Knowledge</b> Know the differences between things that are living, dead and things that have never been alive. <b>Skills</b> Questioning Identifying and classifying. <b>Activity</b> Sorting things into living and non-living.</p> <p><b>Knowledge</b> Identify and name a variety of plants and animals in their habitats. Know how different habitats provide for different animals and plants and how they depend on each other. <b>Skills</b> Use first hand experiences and simple information sources to answer questions. Choose and use equipment and explain their choice. <b>Activities</b> Looking at plants and animals in the conservation area. Pond dipping/Testwood</p>



**Woolston Infant School**

## **Overview of Science Knowledge and Skills**