## Pines Primary School Curriculum - Progression of knowledge and skills



Subject: Science

Year	Knowledge	Skills	Vocabulary
Group			
EY	<ul> <li>Help children to notice and discuss patterns around them, e.g. rubbings from grates, covers, or bricks.</li> <li>Examine change over time, for example, growing plants, and change that may be reversed, e.g. melting ice.</li> <li>Use correct terms so that, e.g. children will enjoy naming a chrysalis if the practitioner uses its correct name.</li> <li>Give opportunities to record findings by, e.g. drawing, writing, making a model or photographing.</li> <li>Provide stories that help children to make sense of different environments.</li> </ul>	<ul> <li>Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.</li> <li>Can talk about some of the things they have observed such as plants, animals, natural and found objects.</li> <li>Talks about why things happen and how things work.</li> <li>Developing an understanding of growth, decay and changes over time.</li> <li>Shows care and concern for living things and the environment.</li> <li>Looks closely at similarities, differences, patterns and change.</li> <li>Know about similarities and differences in relation to places, objects, materials and living things.</li> <li>They talk about the features of their own immediate environment and how</li> </ul>	Plants: Root, stem, tree, leaf, flower, water, seed, plant, Animals including humans: Animal, head, legs, arms, knee, elbow, neck, face, feet, hands, bread, potatoes, apples, cereals, rice, meat, fish, milk, running, jumping, swimming, walking, chicken, hen, kitten, cat, puppy, dog, duckling, duck, habitat, insect Materials: material, hard, soft, rough, smooth, Electricity: power, switch, on, off, battery Light and Sound: light, dark, bright, dull, reflect, sound, noise, loud, quiet, Pose carefully framed openended questions, such as

environments might vary from one	"How can we?" or "What
another.	would happen if?".
•They make observations of animals	
and plants and explain why some	
things occur, and talk about changes.	

Year	Skills KS1				
Group					
	Observing closely	Performing Tests	Identifying and Classifying	Recording Findings	
1	-Talk about what they can see, hear, touch, smell or taste Begin to use simple equipment to help make observations.	-Perform a simple testTell other people about what they have done.	-Identify and classify things they observeAnswer some scientific questionsGive simple reasons for their answersExplain findingsBegin to use scientific vocabulary.	-Show work using pictures, labels and captionsRecord findings using standard unitsPut some information into a chart or table.	
2	-Compare several things -Use some scientific vocabulary to describe what they have seen.	<ul><li>-Carry out a simple, fair test.</li><li>-Suggest ways to find out information.</li></ul>	-Organise and sort objects into groupsIdentify animals and plants by a specific	-Use text, diagrams, pictures, charts and tables to record observations.	

	- Use simple equipment to help make observations.	-Describ their tes	oe the findings of st.	criteria e.g. lay eg not, have feather -Consistently read use scientific voca	s or not. d and	-Measure using simple equipment.
			Skills	KS2		
	Planning		_	nd presenting ence	Cor	nsidering evidence and evaluating
3	<ul> <li>-Make and record a predict before testing.</li> <li>-Plan a fair test and explain is fair.</li> <li>-Set up a simple fair test to comparisons.</li> <li>-Collect information to ans questions.</li> </ul>	n why it o make	-Measure using of equipment and under the record observation waysDescribe finding languageAccurately measing standard units.	nits of measure. ions in different s using scientific	answer	findings and use them to questions. Tange of equipment in a rest.
4	-Set up a simple, fair testUnderstand and explain vin a fair test and why they been isolatedSuggest improvements as predictionsDecide on the best way to informationUse their findings to draw simple conclusion.	have nd o collect	-Measure using of equipment and using standard musing standard musings	nits of d record what neasurements	measure -Evaluat languag diagram -Use sci question -Identify changes	entterns in evidence or ements. The findings using scientific ge, drawings, labelled ans, charts and tables. The entific evidence to answer ans or support findings. The differences, similarities or a related to simple scientific to processes.

5	-Plan and carry out a scientific enquiry to answer questions, including recognising and controlling variablesMake a prediction with reasonsUse test results to make predictions to set up comparative and fair testsPresent a report of findings through writing, display and presentation.	<ul> <li>-Measure using a range of scientific equipment with increasing accuracy and precision.</li> <li>-Take repeat readings when appropriate.</li> <li>- Record more complex data and results using scientific diagrams, labels, classification keys, tables and graphs.</li> </ul>	- Report and present findings from enquiries through written explanations and conclusionsUse a graph to answer scientific questions.
6	-Explore different ways to test an idea, choose the best way and give reasonsPlan and carry out an investigation by controlling variables fairly and accuratelyUse information to make a prediction with reasonsUse test results to make further predictions and set up further comparative testsExplain, in simple terms, a scientific idea and what evidence supports it.	-Explain why they have chosen specific equipmentExplain why a measurement needs to be repeatedRecord measurements in different waysMeasure using a range of scientific equipment with increasing accuracy and precision.	-Find a pattern from data and explain what it showsLink findings to other scientific knowledgeSuggest how to improve work and why Record more complex data and results using scientific diagrams, labels, classification keys, tables and graphsReport findings through written explanations and conclusionsReport and present findings from enquiries in oral and written forms such as displays and other presentations.

-Present a report of their findings	
through writing, display and	
presentation.	