Pinewood Infant and Nursery school



The roots to grow and the wings to fly

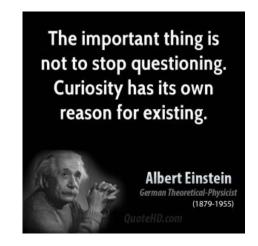
Responsibility Resilience Independence Curiosity Respect Kindness Honesty Self-belief

Our vision for Science for our children is to:

- enable our children to experience and observe phenomena, looking closely at the natural and human constructed world around them
- encourage our children to be curious and ask questions about what they notice
- help them to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information
- enable them to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways
- ensure they learn about science through the use of **first-hand practical experiences** and that the outdoors is used as much as possible
- help them to understand that they can use **secondary sources**, such as books, photographs and videos to discover more about science
- give them opportunities that encourage a true love of science and the world around them











We are so lucky to have such an outstanding outdoor environment in which children can develop their scientific skills and knowledge. When planning for science staff make use of our outdoor area as much as possible and where appropriate, to provide children with a wide variety of stimulating learning experiences. We have a school gardener who supports our children with planting and growing and our own school pond where we can observe life cycles and habitats.



What does Science at Pinewood look like?

- Hands-on and practical
- First hand experiences
- Visits and visitors
- Science days
- Outdoor learning
- School pond
- Planting and growing
- Knowledge and skills document
- I can... statements for children
- Use of explorify
- IWB as introduction to sessions
- Key vocabulary
- Working scientifically symbols
- Floor books
- Cross-curricular links



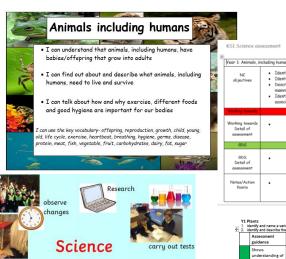










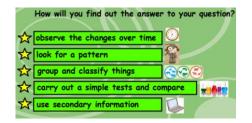




	These apportunities for working scientifically should be provided access years 1 and 2 so that the expectations in the programme of study can be met by the end of year 2. Pupils are not expected to cover each support for every area of study.			
Coverage & Progression	12	- 1	12	12 exceeding
Florit Tay Sills	Rose simbarities and differences in- relation to long theps: "Make characterism of plants and copilin why same things recover, and talk about change.	tionelly and same a variety of common wild saff got too place, including features are energian trace. Identify and describe the basic structure of a variety of common flowering place, including trace.	Observe and describe how seeds, and falling your viter returns plant and control for the plant and seeds about his how plants, need seem, light and so stable transposition to give and stay healthy.	Identify and describe the functions of effective part of florening places. The place of florening places in Explace the mounteresson of places in life and growth (art. light, water, nations flores said, and come to grea- and how they vary from places to go to be a supported within places. Topics of the way in which water is transported within places. Topics of the part that florens play is the life cycle of florening places, the child graditation, used treation and oned dispersal.
NSS		Right should sur the local servirument throughout the year to right and animar contribu- ation splants growing in their should observe the growth of flowers and segmation that they have planted become familiar with common sames of flowers.	Pupils thould use the local continuous throughout the para to observe how different placts grow. Pupils should be introduced to the requirements of plants for generication, provide and provide, as well as to the processor of repensitation and growth in plants. Note: Seeds and both one of the provide and most continuous to grow but most do not need laying.	

| Very Examination | Very Examin

	Assessment guidance	Key learning	Possible Evidence
SECURE	Shows understanding of a concept using scientific vocabulary correctly	Sowing Locky from with the seat arrange of paints which all have qualified assessment them can be including of the sky presentations of the amount of paints of the paints of the sky presentation of the configuration of the sky present the	Can make these and other plants that they see regularly can describe some of the law features of these trees and plants e.g. the shape of the leaves, the scions of the flower/features and plants e.g. the shape of the leaves, the scions of the flower/features and those that see the science which flost their features and those that see plants and are the parts of a plant, are seen that the parts of a plant, are required to the parts of a plant, are seen that the parts of a plant, are seen and them may not be green.
SE	Applying knowledge in familiar related contexts, including a range of enquiries	Make date observations of lawes, such, flower etc. Cargare has leaves, social, flower etc. Cloudy flowers, seeks, flowers etc. voice go zange of discretaristics control plants by evaluate them to seemed energy and energy description of the seeks of the seeks of the seeks which the seeks of the seeks of the seeks of the seeks When further sheld, specified that we the same as those in the local area shelder regularly, describing the key fratures that helped them	Can set and group parts of plants song similarities and differences. Can use simple clasmic sets, to identify plants! Can callect information on features that change during can callect information on features that change during can use photographs to talk about how plants change over time.





Science in the EYFS

Science in the Foundation Stage comes under the Understanding the World (mostly the natural world). Children engage in both incidental science learning through their play both inside and outside and also adult led STEM sessions. We make crosscurricular links where appropriate.

















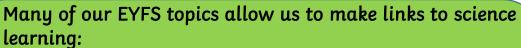












- Pets
- Keeping healthy
- Our bodies
- Birds
- Seasons
- Minibeasts
- Life cycles- caterpillars, frogs and chicks
- Farms

Science in KS1

In KS1 we follow the Science National Curriculum and our knowledge progression document. Our children engage in science lessons which are cross curricular where appropriate.



In year 1 we go on seasonal walks to the Hobbucks.

We adopt a tree and visit each season to see how it changes.





Seasonal changes

In Year 1 classes visit the local area called the Hobbucks each season. Each class adopts a tree and the children observe changes to it throughout the year.











Growing and planting at Pinewood.

We are so lucky to have a fantastic gardener in Ron who works regularly with our children on growing and planting in our schools grounds. We have won various rewards through Arnold in Bloom for our outdoor area. Growing and planting is an important part of our curriculum. Sometimes we eat or sell what we have grown, there is nothing yummier than freshly boiled potatoes with butter.





























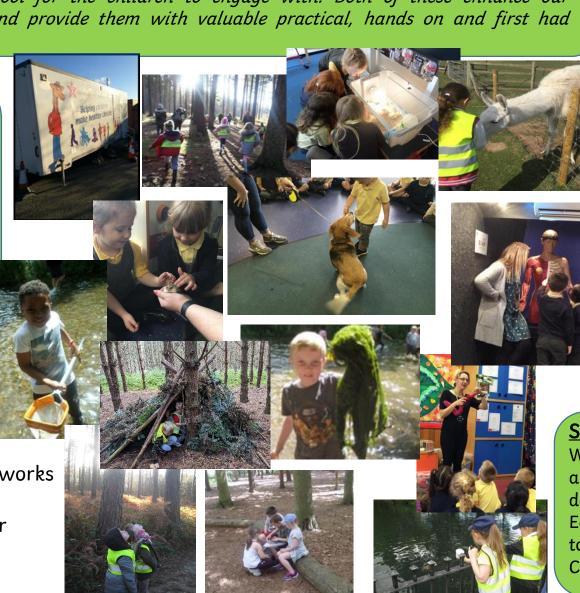
Trips and visitors

We have many trips for the children throughout the year and across the year groups. We also have many visitors into school for the children to engage with. Both of these enhance our children's science learning and provide them with valuable practical, hands on and first had experiences.

- Sherwood Pines
- White Post Farm
- Brackenhurst
- Hobbucks local woods
- Space centre
- Pets
- Wonderful worms
- Life Education bus
- RSPCA
- Unusual pet visits –
 African snail, tortoise



- Science co-ordinator networks termly
- Staff meetings termly for updates and moderation
- Informal discussions



Special events

We are an eco school and have many events around this. We also have whole school science days and take part in the RSPB bird watch. Each year we also have Living Eggs in school to observe the life cycle of a chicken and also Caterpillars.