



End of Year Group Expectations Key Skills

Subject	Science
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Below are the **skills** that children in each year group need to have acquired by the end of each academic year to ensure teachers can decide whether children are working at:

- Age related
- Above
- Below

Working Scientifically Skills for EYFS	Working Scientifically Skills for KS1
Show curiosity and ask questions	Asking questions
Make observations using their senses and simple equipment	Observing closely using simple equipment
Make direct comparisons	Performing Simple Tests
Identify, sort and group	Identifying and Classifying
Record their observations by drawing, taking photographs, using sorting rings or boxes and on simple tick sheets	Gathering and recording data to help in answering questions
Talk about what they have done and found out	Using their observations and ideas to suggest answers to questions
Use their observations to help them to answer their questions	

FS	YR1	YR2
Show curiosity and ask questions	Asking Questions	
- While playing and exploring, the children ask 'I wonder...' questions. - With support, the children develop their ideas for answering their questions.	- When prompted, start to ask simple questions. - Use a range of given question stems, such as: what; what if; why; when; who; and how; to ask questions about the objects, living things and processes they are exploring. - Suggest ways of answering a question.	- Ask simple questions about the world around us. - Use a range of given question stems, such as: what; what if; why; when; who; and how; to ask questions about the objects, living things and processes they are exploring. - Recognise that questions can be answered in different ways.
Make observations using their senses and simple equipment	Observing closely using simple equipment	
Explore the natural and made world using their senses.	- Begin to observe closely, using simple equipment. - To say what I am looking for, or comparing, and	Observe closely, using simple equipment.

- The children use magnifying glasses to make observations. - The children use smaller pieces of equipment such as syringes and pipettes. - With support, make comparisons, using hands and feet and other non-standard measures e.g. building blocks and beakers.	what I am measuring, with increasing confidence. - Use simple measurements and equipment with support (eg hand lenses and egg timers). - Begin to take measurements, initially by making comparisons, then using non-standard units.	- To say what I am looking for, or comparing, and what I am measuring. - Use simple measurements and equipment with increasing independence (eg hand lenses and egg timers). - Begin to take measurements using non-standard units.
Make direct comparisons	Performing simple tests	
- While playing and exploring, the children try out using resources to answer a question. - The children test things out to make comparisons e.g. Does the red car go further than the blue car?	- Use simple observations and ideas to suggest answers to questions. - To observe simple changes over time and, with guidance, begin to notice patterns and relationships. - Perform simple tests with support. - To begin to discuss their ideas about how to find things out.	- Use observations and ideas to suggest answers to questions. - To observe changes over time and, with guidance, begin to notice patterns and relationships. - Perform simple tests. - To discuss their ideas about how to find things out.
Identify, sort and group	Identifying and Classifying	
- They identify and name objects by matching them with pictures. - The children sort and group objects, sometimes using their own criteria.	- Identify and classify with some support, using simple prepared tables and sorting rings. - To begin to observe and identify, compare and describe. - To begin to use simple features to compare objects, materials and living things and, with help, decide how to sort and group them.	- Identify and classify, using simple prepared tables, venn diagrams and sorting rings. - Observe and identify, compare and describe. - Use simple features to compare objects, materials and living things and, with help, decide how to sort and group them.
Record their observations by drawing, taking photographs, using sorting rings or boxes and on simple tick sheets	Gathering and recording data to help in answering questions	
The children, sometimes, draw and write simple	Begin to record and communicate their observations in a range of	Record and communicate their observations in a range of ways, eg photos,

labels to record their observations. With support, they record their observations and comparisons e.g. using simple prepared tables, taking photographs, using sorting rings and boxes.	ways, eg photos, videos, drawings, labelled drawings. Begin to record their measurements, eg using prepared tables or pictograms.	videos, drawings, labelled drawings or in writing). Record their measurements, eg using prepared tables, pictograms, tally charts and block graphs.
Talk about what they have done and found out. Use their observations to help them to answer their questions	Using their observations and ideas to suggest answers to questions	
- The children talk about what they have observed. - The children demonstrate and talk about what they have found out. - They, sometimes, talk about what they have found out from secondary sources, including non-fiction texts. - The children notice and talk about how they made a difference to an outcome e.g. "My car went further when I pushed it harder." - The children make direct comparisons or use their recorded observations to communicate what they have found out and answer the question, where appropriate.	- Use their observations and simple secondary sources (e.g. identification sheets) to name living things they find in the local area. - Recognise 'biggest and smallest', 'best and worst' etc. from their data. - With support, can give an answer to their scientific enquiry question that is consistent with the data they have gathered either through observations, measurements or from research.	- Talk about what they have found out and how they found it out. - To say what happened in their investigation. - To say whether they were surprised at the results or not. - To say what they would change about their investigation. - They are supported to use these experiences and their evidence (eg observations made, measurements taken, information acquired) to suggest appropriate answers to questions.