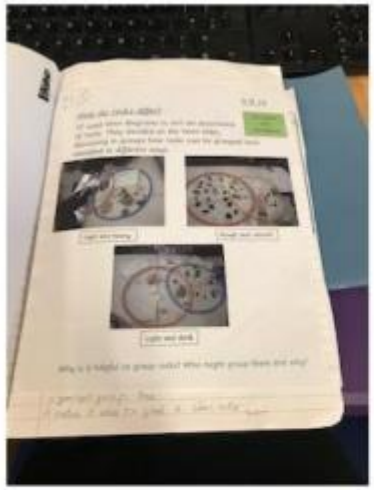
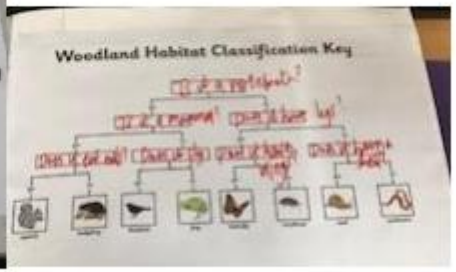
Year 3 and 4

Year 3 – with support

Year 4 – independently

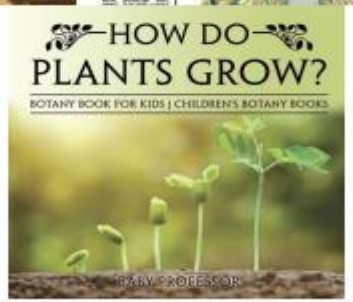
Grouping and classifying	
• Children find out about the world by asking questions building upon what they have learned in KS1. • Children can decide what criteria they will use to sort the objects (by colour, texture, type, weight, size, purpose, material, properties etc.) • Children will be able to explain how objects are sorted. • Children will begin to use very simple classification keys **(Year 4).**	 Chn will begin to group objects based on more than one variable- maybe using a venn diagram. They will start to understand terms such as properties and discuss why an object might belong to more than one group.  By year 4, chn need to be taught how to make a very simple classification key – teach the skill using sweets.



They will start to create simple keys with support.

Research

- Children can think of their own questions based on their prior learning and life experiences.
- They can simple questions about the world based on their own ideas and look in books, newspapers, magazines and the internet to find answers.
- Children will talk to experts and ask them simple questions (STEM workers etc)
- Children think about what they want to find out and ask them scientific questions about what they do.



Pattern Seeking

- Children begin to look for naturally accuring patterns and relationships
- Children will begin to identify changes, similarities and differences, to draw simple conclusions
- Children will begin to answer questions and identify new questions for future questioning.
- **Year 3 – interpret and present data using bar charts, pictorgrams and tables.**
- **Year 4 – interpret and present discrete and continuous data, using bar charts and time graphs.**

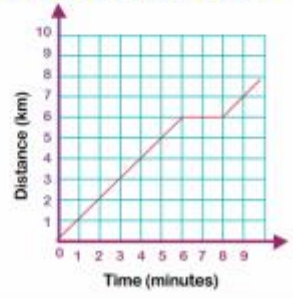
Year 3 could gather data and represent it on a bar graph and then explain what the bar graph shows them.

By Year 4 chn need to being to understand the difference between discrete and continuous data

discrete data - numerical data that cannot be shown in decimals, for example, the number of children in a classroom

continuous data - numerical data that can be shown in decimals, for example, the weights of 10 babies

FAVOURITE SPORT	NUMBER OF CHILDREN
Football	10
Hockey	5
Basketball	20
Rounders	5



Chn could collect and interpret the data using relevant scientific vocab

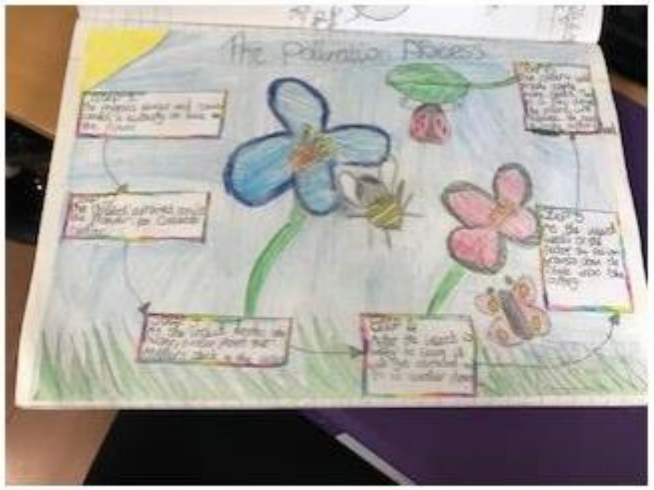
Observation over time

- Make careful observations using simple equipment
- Think about how long to observe for and what equipment to use
- Children can think about how to record what they see and explain using simple scientific vocabulary.



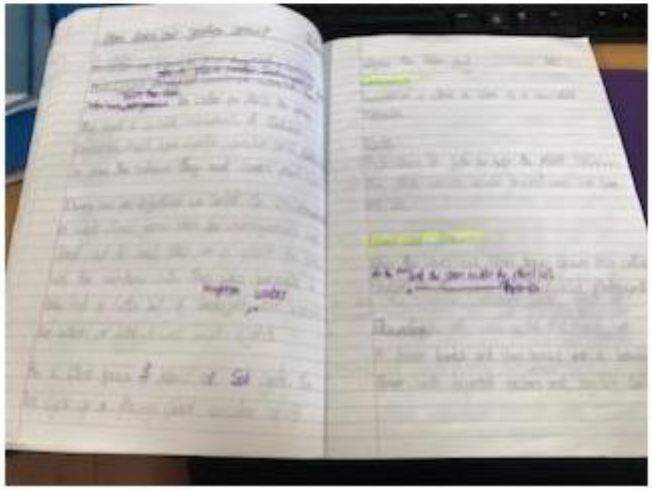






In year 3 and 4 chn will use recording methods such as flow charts with scientific vocabulary to explain processes and changes.

By the end of year 4 chn will have shown that they can use recording techniques such as an explanation text to describe processes in more detail.



Comparative and fair tests

- Children should setup simple, compararive and fair tests with help.
- Children should begin to recognise the dfiference between fair and comparatgive tests and which one is necessary.
- Chidren should take measurements using standard units such as _____
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IN year 3 chn can start to help independently adding variables to the post it note planner. They will help to plan for equipment needed, what to measure, how to measure and what and how to record what they find.

	By the end of year 4 chn should be confidently filling in the post it note planner and helping to identify the variables. – Use frame but let the chn record. Focus again on promoting independence and writing up a really good conclusion