

Year 3

Plants Summer term 1

Plants Mid term plan



Science coverage

Working scientifically: lower key stage 2

Lower Key Stage 2 pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings



Year 3

Working scientifically overview for unit

Plants

<p><u>Classifying</u> (Identify and classify. Use appropriate scientific language to communicate idea)</p>	
<p><u>Observing over time</u> (Make systematic and careful observations and where appropriate take accurate measurements using standard units, using a range of equipment including thermometers and data loggers)</p>	<p>What happens to celery when it is left in a glass of coloured water?</p>
<p><u>Pattern seeking</u> (Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables)</p>	
<p><u>Comparative/fair testing</u> (Set up simple practical enquiries, comparative and fair tests Ask relevant questions and use different types of scientific enquiries to answer them Use their observations and ideas to suggest answers to questions)</p>	<p>Which conditions help seeds germinate faster?</p> <p>How does the length of the carnation stem affect how long it takes for the food colouring to dye the petals?</p>
<p><u>Researching</u> (Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables)</p>	<p>What are all the different ways that seeds disperse?</p>

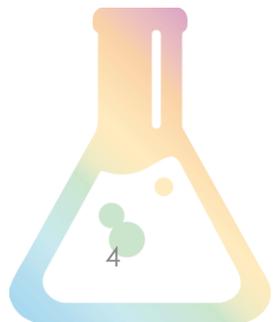
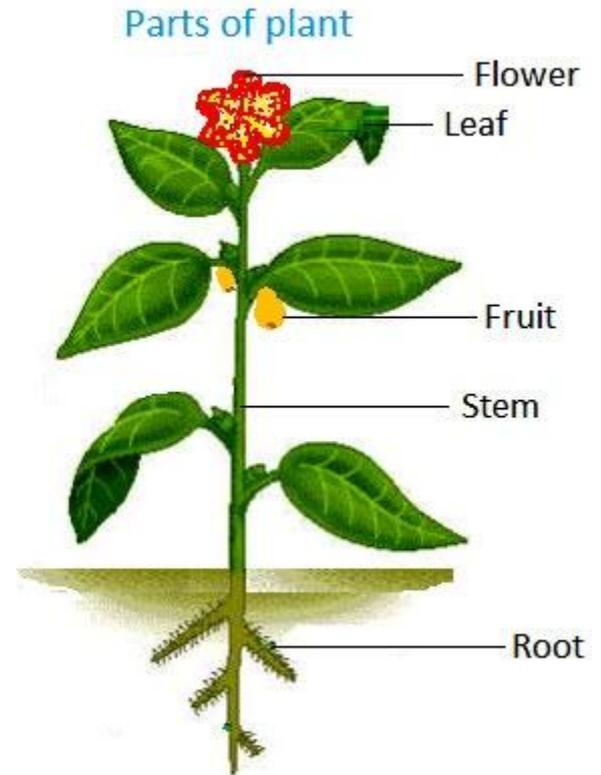
Evaluating: Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Use straight forward scientific evidence to answer questions or to support their findings.



Year 3: Plants and animals (National curriculum requirement)

Pupils should be taught to:

- identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- investigate the way in which water is transported within plants
- explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.



Year 3: Plants

What are we aiming for pupils to know?

By the end of this science unit pupils should:

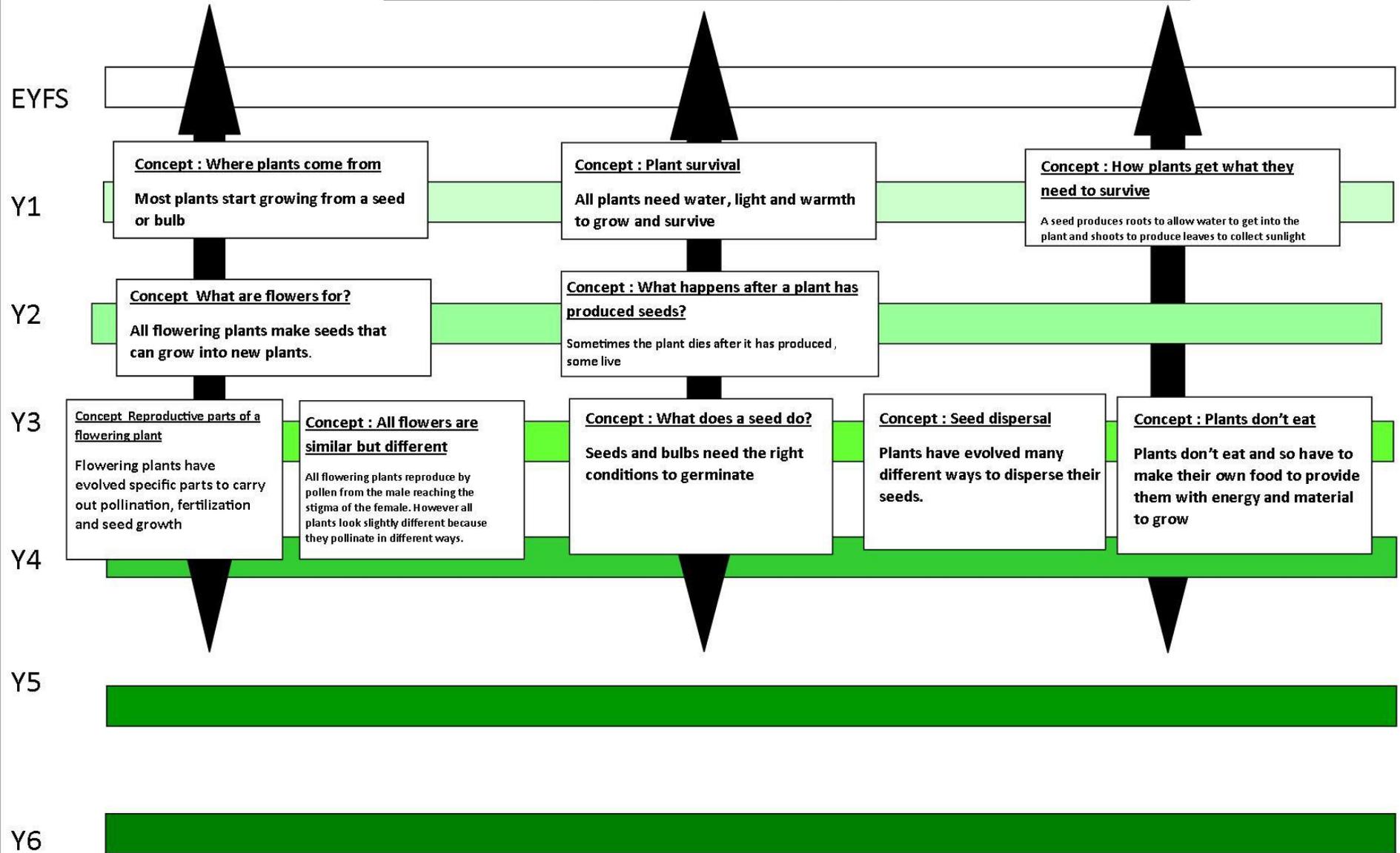
- know the function of different parts of flowering plants and trees.
- know what different plants need to help them survive.
- know how water is transported within plants.
- know the plant life cycle, especially the importance of flowers.

By the end of this science unit pupils be stronger at:

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| • asking relevant scientific questions. | • using observations and knowledge to answer scientific questions. |
| • setting up a simple enquiry to explore a scientific question. | • setting up a test to compare two things. |
| • setting up a fair test and explain why it is fair. | • making careful and accurate observations, including the use of standard units |
| • using equipment, including thermometers and data loggers to make measurements | • gathering, recording, classifying and presenting data in different ways to answer scientific questions |
| • using diagrams, keys, bar charts and tables; using scientific language. | • using findings to report in different ways, including oral and written explanations, presentation. |
| • drawing conclusions and suggest improvements. | • making a prediction with a reason. |
| • identifying differences, similarities and changes related to an enquiry. | |

Where does this fit in?

Science Progression at Upton Heath—Plants



Concept 1: reproductive parts of a flowering plant

(flowering plants have evolved specific parts to carry out pollination, fertilisation and seed growth)

Concept 2: All flowers are similar but different

Concept 3: What does a seed do?

(Seeds and bulbs need the right conditions to germinate)

Concept 4: Seed dispersal

(Plants have evolved many different ways to disperse seeds)

Concept 4: Plants don't eat

(Plants make their own food to provide them with energy and material to grow)