

Pioneer Federation
Medium term plan
Cycle 1, Term 5
Science



Subject: Science
Key Concept/ Theme: Living Things and their habitats
Prior Learning links: KS1 – During the plant topic, children will have learnt to describe the basic structure of various common flowering plants. They will have to compare the differences between living and non-living things. LKS2 – Children will have learnt to identify and describe the function of various parts of a plant. They will explore the role flowers play in the life cycle, including pollination, seed fertilisation, and seed dispersal
Vocabulary: fertilisation – the point at which the sperm from the pollen meets the egg in the ovary pollination – the process by which the pollen reaches the stigma pollen – granule that delivers the male genetic material to the female seed stamen – the male part of the flower, comprising of the anther and filament pistil – the female part of the flower consisting of the stigma, style and ovary seed dispersal – the method used by a plant to spread out its seeds (usually by wind, water or animals) reproduction – the combining of genetic material from two individuals to produce new life
Scientific enquiry: Scientific questioning, method and equipment, fair test, safely using equipment, make predictions, record results, explain conclusions, So What?
School specific areas to cover (Add in any local areas of study, trips and people)

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CP consider links with Forest School	EH Looking at plants in their growing area	SMV Consider links with Forest school	PM consider links with Forest School
<p>1. Prior learning reconnection (year group, cycle & term): LKS2 - Cycle 1 - Term 2 and Cycle 2 - Term 5</p> <p>Animal reproduction</p> <p>LO: To describe the life process of reproduction in some animals; mammals, amphibians, insects and birds.</p> <p><i>Activity ideas to achieve the LO:</i></p> <p>Match different animal groups to their offspring- mammals, amphibians, insects and birds</p> <p>https://www.bbc.co.uk/bitesize/topics/zy24xg8/articles/zsq9r2p</p> <p>Do a rotation of activities to look at different animal reproduction:</p> <p>Mammal reproduction activity:</p> <p>Humans are pregnant for 9 months or 40 weeks. It takes this long for a human foetus to develop fully. We call this time the 'gestation period'.</p> <p>Your task today is to research on the internet or in books to find the answer to this question. Are all mammals pregnant for the same amount of time?</p> <p>Amphibian, reptiles birds and fish activity:</p> <p>Fertilisation</p> <p>This big egg belongs to an ostrich. Some animals, like lizards, lay much smaller eggs and much more of them. During sexual reproduction a sperm from the male joins with an egg from the female. This is called fertilisation. After fertilisation females of the following living things will lay eggs:</p> <p>fish</p> <p>reptiles, like snakes</p> <p>birds</p> <p>amphibians, like frogs</p> <p>Sorting animals:</p> <p>Cut out fifteen squares of paper.</p> <p>Write three examples of fish on three separate pieces of paper, then do the same for reptiles, birds, amphibians and mammals.</p> <p>Mix all the pieces of paper up.</p> <p>Try to sort them into two piles as quickly as you can – those that lay eggs and those that have live babies.</p> <p>Try again until you get a record time!</p> <p>What other groups could you sort these animals into?</p> <p>All animal groups:</p> <p>Create a poster about reproduction in animals. You must write about the five different animal groups and write about the differences and similarities.</p> <p>End point: Describe the life processes of reproduction in some animals</p>			

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2.	<p>Animal life cycles</p> <p>LO: To describe the differences in life cycles of different animal groups and give reasons for this. To know how animals have an impact on each other.</p> <p><i>Activity ideas to achieve the LO:</i></p> <p>https://www.bbc.co.uk/bitesize/topics/zy24xg8/articles/zdvhxbk</p> <p>Go through the life cycles of: a butterfly, frog and duck.</p> <p><i>Activities</i></p> <ul style="list-style-type: none"> - Draw the life cycle of a frog - Create a neat, labelled diagram in your books to show the life cycle of a frog and then compare this life cycle with the life cycle of a duck, writing three differences and three similarities. - Choose two of the life cycles we looked at today. Create neat, labelled diagrams in your books of both and then compare them, writing similarities and differences. <p>End point: Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p>
3	<p>Plant reproduction and plant life cycles</p> <p>LO: To describe the life process of reproduction in some plants.</p> <p><i>Activity ideas to achieve the LO:</i></p> <p>For this lesson you will need:</p> <p>A geranium plant (to take cuttings from)</p> <p>Clear plastic cups/glass jars</p> <p>Go through the parts of a flower</p> <p>Explain what pollination is and the process of it</p> <p>Then go through seed dispersal</p> <p>After explain asexual reproduction of plants</p> <p><i>Activity:</i></p> <p>You are going to work with a partner to try to make new plants from one parent plant. If you are successful, each plant that grows will be a clone of the parent plant! This means it will be genetically identical to the parent plant. Take a photo of your plant to stick in!</p> <p>End point :Describe the life processes of reproduction in some plants.</p>
4	<p>Assessment lesson</p>

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1. What is a **life cycle**?

2. Match the animal group to how it **produces offspring**.

bird

reptile

fish

amphibian

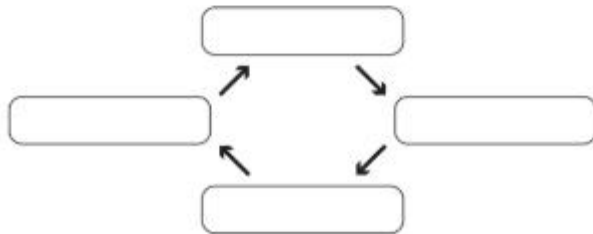
mammal

eggs are laid in water

offspring develop in the
womb of the mother

eggs are laid but
not in water

3 Put this **life cycle** in order. (egg, butterfly, caterpillar, cocoon)



Things to note:

For a 6 week term 4 lessons and an assessment

For a 7/8 week terms 5 lessons and an assessment

Adaptions:

- Consider recording of learning to include pictures of how children display their learning
- When doing life cycles use photos of the life cycles for the children to order

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- When typing learning and doing researching using clicker to record findings