Our Intent is: To develop inquisitive children who are excited about investigating with curiosity, "How can scientific enquiry explain the world?" Exploring answers by gathering and analysing evidence.

Forton Primary School
Science

Pendle Class Spring 1 Year B	N.C. LINKS: Living Things Pupils should be taught to: • describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • describe the life process of reproduction in some plants and animals.
Etymology – metamorphosis – from the word metamorphose from greek 'meta' or change.	
Life Cycles – Everything from the Start to the Finish By Dorling Kingsley	
Key Concept: Living Things Key Question: How do humans change during their lifetime?	

Unit Overview:	Vocabulary:	
Stages of human growth		

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<table>
<tr>
<td>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.

Describe the life process of reproduction in some plants and animals</td>
<td>Subject Specific:

Fertilise

Cutting

Metamorphosis

Runner
Sexual reproduction
Asexual reproduction</td>
<td>Working Scientifically:

Plan Variables

Measurements Accuracy

Precision Repeat reading

Labels Classification

Scatter Key graphs

Predictions Bar graphs

Line graphs Patterns

Quantitative Interpret

Measurements Systematic</td>
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<tr>
<td>New Knowledge Progression:
Describe the changes as humans develop to old age.
Animals are alive; they move, feed, grow, use their senses, reproduce, breathe/respire and excrete.</td>
<td colspan="2">Building on Prior learning when B follows A:
Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
The heart is a major organ and is made of muscle.
The heart pumps blood around the body through vessels and this can be felt as a pulse.</td>
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	• The heart pumps blood through the lungs in order to obtain a supply of oxygen. • Blood carries oxygen/essential materials to different parts of the body. • During exercise muscles need more oxygen so the heart beats faster and our breathing and pulse rates increase. • Animals are alive; they move, feed, grow, use their senses, reproduce, breathe/respire and excrete. • An adequate, varied and balanced diet is needed to help us grow and repair our bodies (proteins), provide us with energy (fats and carbohydrates) and maintain good health (vitamins and minerals). • Tobacco, alcohol and other 'drugs' can be harmful. • All medicines are drugs, not all drugs are medicines.

Key Skills (Disciplinary)

- Suggest reasons for similarities and differences.
- Compare and contrast things beyond their locality and use these similarities and differences to help to classify

(e.g. features of animals, life cycles of different living things, melting compared with dissolving, etc).

- Use secondary sources of information to identify and classify.
- Articulate and explain findings from their research using scientific knowledge and understanding.
- Check the clarity of each other's suggestions *e.g. are you saying you think this one is a herbivore?*

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- Use correct scientific knowledge and understanding and relevant scientific language to discuss their observations and explorations.
- Recognise the importance of classification to the scientific world and form a conclusion from their sorting and classifying.
- Compare and contrast more complex processes, systems, functions (e.g. sexual and asexual reproduction).
- Construct a classification key / branching database using more than two items.
- Use *research** to identify and classify things.
- Use classification systems, keys and other information records [databases] to help classify or identify things.
- Propose their own ideas and make decisions with agreement in a group.
- Support, listen to and acknowledge others in the group.
- Check the clarity of each other's suggestions.
- Build on / add to someone else's idea to improve a plan or suggestion.
- Understand that it is okay to disagree with their peers and offer reasons for their opinion.

Sequence of Lessons:

1. To explain the lifecycles of different animals (including mammals, amphibians, insects and birds).
2. To understand what asexual reproduction is.
3. To understand what sexual reproduction is.
4. To explain how reproduction occurs in plants and animals.

Enhancements:	End of Unit Outcome:

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Butterfly house visit – Lancaster. Local area walk – identifying signs of reproduction. Blackpool zoo.	To create a leaflet explain the different types of reproduction in plants and animals.

Oral Assessments:

Can you explain the lifecycles of different animals (including mammals, amphibians, insects and birds)?
What is asexual reproduction?
What is sexual reproduction?
Can you explain how reproduction occurs in plants and animals?