

Science Substantive Thread Progression

BIOLOGY

Biology is the study of living things and their interactions with the environment, including life processes, reproduction, inheritance and evolution.

Plants

EYFS / KS1	Lower KS2	Upper KS2
• Recognise that plants are living things. • Identify common wild and garden plants and their basic parts. • Understand that plants grow, change through the seasons and need water, light and suitable conditions to survive.	• Explain the function of roots, stems, leaves and flowers. • Describe how water is transported through plants and explain pollination, seed formation and seed dispersal as part of the plant life cycle.	• Explain reproduction in flowering plants and recognise how plants adapt to different environments. • Understand the role of plants within habitats and ecosystems.

End Point

Pupils understand how plants grow, reproduce and adapt to survive in different environments and can explain the important role plants play within ecosystems.

Animals

EYFS / KS1	Lower KS2	Upper KS2
• Identify and compare common animals. • Recognise that animals have offspring, require food, water and air to survive and are connected through simple food chains.	• Explain that animals require nutrition for growth and survival. • Describe life cycles in mammals, birds, amphibians and insects and recognise that different animals have different adaptations.	• Explain variation, inheritance and evolution. • Recognise that adaptations help species survive and that living things change over long periods of time.

End Point

Pupils understand how animals grow, survive, reproduce and evolve, explaining how adaptations enable species to survive over time.

Human Body

EYFS / KS1	Lower KS2	Upper KS2
- Identify the main parts of the human body and the five senses. - Recognise the importance of healthy eating, exercise and hygiene.	- Explain the functions of the skeleton, muscles and digestive system. - Understand the importance of nutrition and describe the functions of different types of teeth.	- Explain how the circulatory system transports oxygen, nutrients and waste. - Evaluate how diet, exercise, drugs and lifestyle choices affect the health of the human body.

End Point

Pupils understand the structure and function of the major human body systems and explain how healthy lifestyle choices support lifelong wellbeing.

Living Things & Environments

EYFS / KS1	Lower KS2	Upper KS2
- Recognise that living things live in habitats where their basic needs are met. - Identify simple food chains and understand that living things depend upon one another.	- Group living things using observable characteristics and simple classification keys. - Explain how environments change and how these changes affect living things.	- Classify living things into broad groups, including microorganisms, plants and animals. - Give reasons for classifying plants and animals based on specific characteristics.

End Point

Pupils understand that living things are diverse, interconnected and can be classified according to shared characteristics, explaining how environments influence survival and biodiversity.

Biology Curriculum Journey

Across the primary curriculum, pupils move from recognising and naming living things to explaining how organisms grow, function, reproduce, adapt and interact within increasingly complex ecosystems. By the end of Year 6, pupils understand that all living things are connected through shared life processes, inheritance and environmental interactions, providing a secure foundation for secondary Biology.