

# Science at Badsley

## Overall Rationale

At Badsley Primary School we believe that a high-quality Science curriculum should be ambitious and designed to give all pupils the knowledge and cultural capital they need to succeed in life. We support children to understand the world with increasing independence through the specific disciplines of biology, chemistry and physics and learn how Science has changed (and continues to change) our lives and is vital to the world's future prosperity.

## Content and Sequencing

Each class covers six units of science per year, taken from the Oxford Owl Mastery science curriculum (in line with the National Curriculum)

EYFS - Understanding the World

Year 1- Materials, Autumn and Winter, Animals, Spring and Summer, Plants

Year 2- Animals, Environment, Materials, Habitats, Plants

Year 3- Animals, Rocks, Plants, Light, Forces

Year 4 –Animals, Electricity, Living Things, States of Matter, Sound

Year 5- Earth and Space, Forces, Properties of Materials, Living Things, Animals

Year 6-Light, Living Things, Evolution, Electricity, Animals

## Meeting the needs of all Learners

Everyone has access to the Science National Curriculum.

Adult support and additional scaffolding are provided for those learners who require it. Paired and group science work also support learners.

Learners who grasp concepts more rapidly will be encouraged to 'dive deeper' into the topic areas and take more leadership over their own lines of enquiry.

## Key Concepts

The following key concepts are threaded and repeated throughout every unit of science, allowing children to embed the skills:

Observe, Identify, use, explore, compare, predict, investigate, explore, demonstrate, explain, recognise.

## EYFS

Science at Foundation Stage is covered in the 'Understanding the World' area of the EYFS curriculum. It is introduced indirectly through activities that encourage every child to explore, problem solve, observe, predict, think, make decisions and talk about the world around them.

## Links to Other Subjects

**Reading** – secondary research sources

**History** - scientific influences from the past

**English** – presenting findings, scientific vocab, writing hypothesis and conclusions

**Maths** – accurate measuring, graphing results, reading tables

**DT** – building bridges in forces/designing electrical games

## Retrieval Practice

Each lesson begins with a knowledge quiz which retrieves the information learned in the previous lesson.

Class teachers use these quizzes to highlight gaps in understanding and possible misconceptions so they can revisit these areas.

## Assessment and Outcomes

Science is assessed by the class teacher at the end of each block using the objective assessment grids. Names of individuals who have exceeded / not met the outcomes will be noted.

Common misconceptions/ difficulties will also be recorded to inform the next year group teacher and to assist science leaders in their evaluation of the topics.

## Subject Leader Responsibility

- Leading regular CPD sessions for class teachers
- Monitoring progression – book scrutiny
- Collecting assessment sheets and analysing whole school areas of weakness.
- 'Open door' support for teachers
- Pupil voice – collecting opinions of the subject