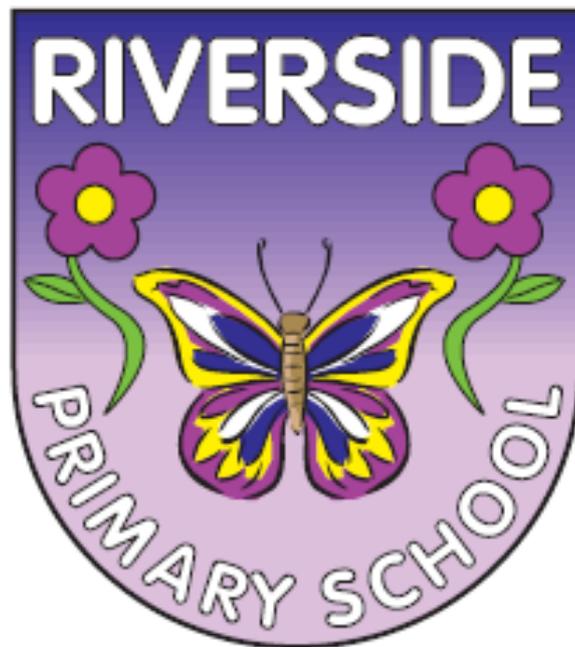


Riverside Primary School

Science Policy

September 2025

Updated



RIVERSIDE PRIMARY SCHOOL
Science POLICY
2025-26

Aims

At Riverside we aim to provide opportunities for all pupils to develop their natural curiosity, knowledge and understanding of the world in which they live and their place in it.

- We aim to promote a 'questioning' attitude to change in both living and non-living systems through investigation.
- We aim to help the children use their senses to develop and increase their powers of observation, to describe and record accurately and systematically their findings and to relate Science to everyday life.

Objectives

Pupils should –

- Be given opportunities to observe, explore, investigate and experiment leading to the excitement of discovery.
- Suggest explanations and devise fair tests and experiments to check their predictions or ideas.
- Be encouraged to evaluate data, measure and interpret results.
- Develop a variety of skills and techniques to communicate their findings to others i.e. charts, graphs, drawings.
- Apply their experiences in other contexts, e.g. by learning that different materials have different properties, through understanding about adaptation and change.
- Be aware of the achievements in Science over time and the effect which these achievements have made on mankind.
- Be helped to develop appropriate and positive attitudes to the subject.
- Cover a broad, balanced, relevant scientific curriculum which matches their ability and takes into account our schools equal opportunities policy.

Science Programmes of Study

Learning Objectives

All year groups will study the objectives covered in the 2014 National Curriculum.

Working Scientifically

Every year group must cover the objectives of 'Working Scientifically'. This should be done throughout the year and incorporated into every unit of work.

Scientific content (Curriculum 2014)

Year 1

- Animals, including humans
- Everyday materials

- Plants
- Seasonal Changes

Year 2

- Living things and their habitats
- Plants
- Animals, including humans
- Uses of everyday materials

Year 3

- Forces and magnets
- Rocks and Soils
- Light
- Plants
- Animals and Humans

Year 4

- Living things and their habitats
- Animals, including humans
- Sound
- Electricity
- Properties and changes of materials

Year 5

- Earth and Space
- Animals, including humans
- Properties and changes of materials
- Separation of mixtures
- Forces
- Living things and their habitats

Year 6

- Living things and their habitats
- Light
- Evolution and Inheritance
- Animals including Humans
- Electricity

Curriculum Planning

Science is a core subject which contributes to the whole curriculum and, by its practical and enquiring nature, is related to other subjects in the curriculum.

English

The language of Science. Children should understand what is meant by a force, evaporation, solution, eco-system, process etc.

Maths

Measurement is important, especially in KS2. Pupils should be able to record data in a variety of ways and interpret results.

Geography

The processes involved in e.g. the water cycle, weather patterns.

History

The contributions made by scientists of the past – discoveries, inventions etc to improve our lives

Music

Exploration of sound and instruments.

Computing

CD Roms, Internet, databases.

P.E.

Movements and forces.

Art and Design

Colour wheel for a study on light. Chromatography shows the colours of the spectrum.

To ensure skills are transferrable across the curriculum, the vast majority of Science units of work include both a Maths and an English link.

Equal Opportunities

All children will be able to use a variety of equipment to undertake any aspect of investigations in Science.

Special Needs

Children with special needs will be encouraged in all aspects of Science appropriate to their ability. Teachers will plan tasks to match their ability and additional support may be given by a support teacher to enable pupils to progress and demonstrate achievement.

Provision will be made for pupils who need to use –

- Means of communication other than speech, including computers.
- Non-sighted methods of reading.
- Technological aids.
- Aids to allow access to practical activities within and beyond school

Visits

The Science curriculum will be enhanced through educational visits as well as visitors into classes. This will improve children's understanding and enjoyment of a unit of work. Pupils will either attend a venue or welcome a visitor at least once every term.

Groupings and Teaching Methods

Science is taught in flexible groupings. The school's 'Teaching and Learning' policy should be referred to for teaching methods.

Assessment

Teachers administer an end of unit assessment to their class at the end of each unit of work. This is used to assess children's learning from distance as well as to ensure robust judgements are inputted on Sonar.

As of January 2025, teachers use Sonar in order to assess attainment and progress. This is in line with other core subjects, namely English and Maths. Pupils will be assessed as either working at or achieved depending on their attainment in their unit of work as well as in the working scientifically strands.

Recording

Pupils progress and attainment within the unit of work will be recorded on a half termly basis using Sonar. This will show attainment in the unit of work completed during the half term. Progress in 'working scientifically' will be recorded every term.

Reporting

Children's attainment in Science will be reported at the end of Key Stage 2 in accordance with Government legislation.

Differentiation

The promotion of scientific ideas needs to be planned carefully so that tasks match the ability of pupils and allows them to demonstrate what they can do and understand.

Adaptation of tasks can be organized –

- By task – where specific tasks are matched to the pupils ability.
- By outcome – where all pupils undertake a common task and differentiation comes about in the quality of responses or outcome.
- By planned teacher support to individual pupils.
- By resources – to match the pupil's ability in understanding their use.

Guidelines For Practice

- Pupils should work in a safe environment.
- Pupils should work with a wide variety of materials.
- Science is a subject in its own right with opportunities for cross curricular work.
- A balance of teaching and learning styles should be used depending on the new skills or concepts being taught e.g. individual/small groups/whole class.
- Resources should be made available to the children so that they will manage themselves in an independent manner.
- Much of the learning can be based on direct experience, practical activities and exploration.
- Community links and outside visits should be encouraged to involve the children in active investigative learning.
- The teacher's role will be one of interacting with the children so that children can summarise and rationalise.
- Child initiated experiments are used so that children take control of their learning and develop skills to work independently, choosing what they would like to investigate and the resources they need to use in order to conduct the experiment.
- Pupils should use a range of ways to communicate and present findings to an audience.

- Where possible, lessons should involve practical activities eg having examples of solids and liquids so that children can investigate them thinking about their properties or using sweets or natural resources to demonstrate lifecycles.
- Lessons should be contextualised where appropriate. This gives lessons a purpose and allows children to make the connection between Science and the wider world. Careers linked to Science should also be made explicit where appropriate in the units of work.
- Every half term, the homework set links to Science.

Scheme of Work

No official scheme of work is used at Riverside, although teachers use Sonar to identify key objectives and then questions for the lesson. Teachers ensure that the objectives taught are appropriate for the year group. Teachers ensure that coverage is not repeated from the previous year and units are not covered from year groups further up the school. The objectives from Sonar are very clear and aid teacher's planning and delivery of the unit of work studied.

At the end of each key stage all programmes of study have been covered.

This has been reviewed and updated by Alice Ready. The next review date is September 2026.