**Amy King – Science Subject Lead**

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**Intent**

At Byley Primary School and Nursery, we are committed to providing our children with a Science curriculum that has a clear intention and impacts positively upon their needs. We will ensure that all pupils develop scientific knowledge, skills and understanding through the appropriate teaching of biology, chemistry and physics. Effective teaching and learning will help them develop an understanding of the nature, processes and methods of Science.

The work is taught through the units of work identified in our whole school Science long term plan (Curriculum Map).

At Byley our aims are as follows;

1. To promote and develop children’s enjoyment and enthusiasm for science through exciting, practical, first-hand learning and opportunities to experiment, explore and investigate.

2. To ensure that the statutory requirements of the National Curriculum (2014) for science are taught well and that where appropriate their scientific knowledge skills and understanding are applied across all subjects of the curriculum.

3. To ensure that the guidelines for science are taught, thoroughly, systematically and progressively to all pupils by all staff.

4. To help pupils to become scientists by developing their problem solving and reasoning skills so that they can apply their scientific thinking across the curriculum.

5. To ensure that from the EYFS onwards, pupils are confident in their understanding and application of their basic skills in science and that they build upon their prior learning.

6. To encourage children to use their increasing knowledge, skills and understanding of science to investigate, ask questions and solve challenging problems.

7. To develop pupils’ confidence and skill in scientific methods as they explore the areas of science and address increasingly complex problems.

8. To bring science to life and make it real so that children understand the importance of science in the world and in their everyday day lives.

9. To teach pupils to work with proper regard for their own safety and that of others, using safety equipment where necessary.

**Implementation**

During all science lessons an appropriate range of teaching and learning strategies will be used to capture pupils’ interest and to promote effective learning and progress. All teachers will use the NC guidelines, supported by an appropriate range of teaching and learning resources, to develop the knowledge, skills and understanding of every child, ensuring that all pupils, including those with SEND, achieve high standards for their ability and make appropriate progress. Children will be encouraged to ask questions, solve problems, apply and consolidate their skills and understanding through first-hand experience, investigations and practical work. Teachers will set challenging work, tasks and problems to increase children’s’ knowledge, skills and understanding, to extend their thinking and build their self confidence. Teachers will assess children’s work in science through formative and summative judgements by; asking questions, observing learners during lessons, observing pupils solving practical problems and listening to pupils’ discussions. Work will be marked regularly and frequently and pupils will be given appropriate, clear feedback which tells them how well they have done and what they need to do next to improve.

**Resources and Location:** Most science lessons will take place in the child’s class along with their class teacher. However, some children will have the opportunity to work in groups away from the main class if needed. Children will have the opportunity to use the outside environment to support their learning too.

Science resources can be found in the shelving outside the Y1&2 classroom and in the Y5&6 classroom cupboard. Additional resources can be sourced from the Education Library service in Winsford (online requests can be made to them).

**Where is pupil’s work recorded?** Science work is mainly recorded in pupil’s exercise books. Books contain evidence in the form of written investigations, written explanations, worksheets, drawings, photographs, post its, teacher notes etc. Teachers have ‘working walls’ in their classrooms and Science is celebrated through displays around the school.

**Health and Safety considerations:** Children are taught to consider their own safety and that of others at all times. They are expected to follow the school rules at all times and be responsible for their own learning. Children have access to quality equipment including ICT. Equipment used in class is regularly checked and replaced when damaged.

**Impact**

**Assessment:** Through our teaching we continuously monitor pupils’ progress against expected attainment for their age, making formative assessment notes where appropriate and using these to inform our planning and teaching. At Byley we will ensure that all pupils become confident scientists. Effective teaching will ensure that they can solve problems by applying their knowledge, understanding and skills in science with increasing confidence.