

Lomeshaye Junior School Science 3i Statement



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Lomeshaye Junior School



Lomeshaye Junior School Curriculum Overview

Aspire – Believe – Achieve



Curriculum Vision

"A vibrant, inclusive learning community coupled with an ethos of high expectations and challenges are paramount to Lomeshaye's success. Aspirations are raised in a learning climate that is engaging and fun.

Our ambitious and aspirational curriculum provides individuals with a basis for learning a breadth of knowledge and development of skills across a broad range of contexts. We offer opportunities for learning about and through rights, sustainable development, creativity and cultural aspects. Our creative and extended curriculum which incorporates clubs, trips, partners working in school, sporting events and residential visits, will endeavour to develop our children and help to instil a sense of responsibility for the wider world whilst maximizing learning and enjoyment for all. An enriched curriculum provides a full entitlement for all learners including those with SEND and addresses social disadvantage. Our curriculum allows teachers to teach with freedom in innovative and creative ways. The quality of learning and teaching in every classroom - and the inspiration, challenge and enjoyment comes from our teacher's commitment and enthusiasm and is critical in achieving our goals as we Aspire – Believe – Achieve." – Vision developed by staff

Purpose

This document reflects the school values and philosophy in relation to the teaching and learning of National Curriculum Subjects and the locally agreed syllabus for Religious Education. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment. Our curriculum is shaped by all the planned activities that we organise in order to promote learning and personal growth and development. It includes not only the statutory requirements of the National Curriculum but the range of extra-curricular activities that enrich the children's life experiences. In addition, it includes the 'hidden curriculum' whereby the children learn from the way they are treated and expected to behave. We aim to teach our pupils to become positive, responsible and resilient, so that they can work and collaborate with others whilst developing knowledge, understanding and skills in order to reach their true potential.

The National Curriculum Aims

'The national curriculum provides pupils with an introduction to the essential knowledge that they need to be educated citizens. It introduces pupils to the best that has been thought and said; and helps engender an appreciation of human creativity and achievement.

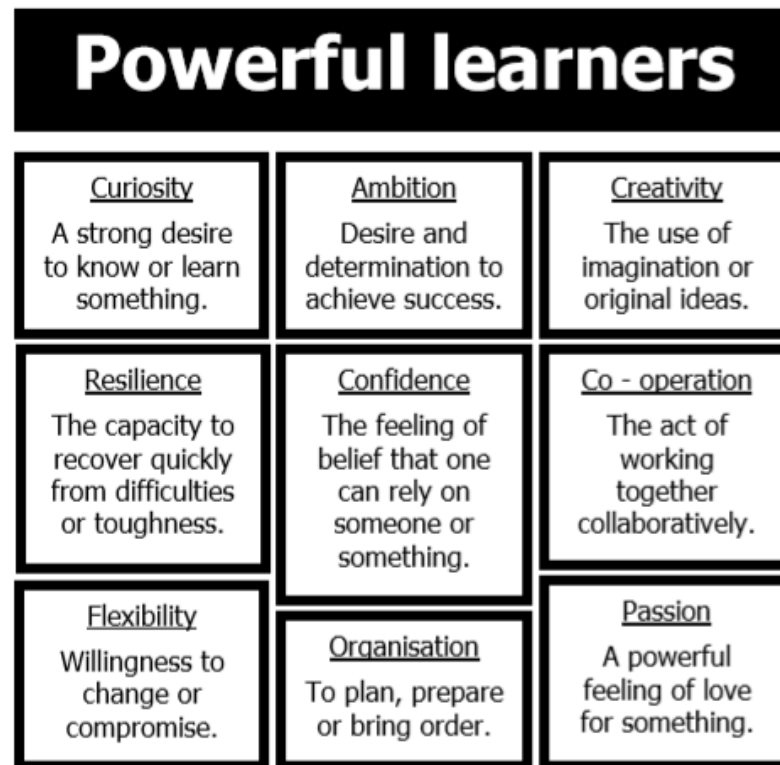
The national curriculum is just one element in the education of every child. There is time and space in the school day and in each week, term and year to range beyond the national curriculum specifications. The national curriculum provides an outline of core knowledge around which teachers can develop exciting and stimulating lessons to promote the development of pupils' knowledge, understanding and skills as part of the wider school curriculum.'

Aspire - Curriculum Intent:

At Lomeshaye Junior School our rationale is to deliver a challenging curriculum that builds on prior knowledge and develops cultural capital, is rich in written and spoken language, deepens understanding, and enables children to develop the powerful learner attributes which allow them to Aspire-Believe-Achieve.

We aim to be a school where:

- we provide a rich and varied curriculum which helps to develop a sense of self and a respect for the local area and wider world.
- staff and pupils have high expectations and strive for excellence in all subjects
- pupils acquire and develop a good level of skills in reading, writing and mathematics.
- children have opportunities to be curious, creative and have cultural experiences.
- we learn about and through rights and provide opportunities for children to be advocates for sustainable change
- children develop the knowledge, skills and powerful learner attributes needed to flourish in life, learning and work now and in the future.
- we support pupils to become responsible citizens with excellent behaviour and the ability to self regulate.



At Lomeshaye Junior School, the curriculum is designed coherently in order that children in KS2 build knowledge, skills and understanding across all NC subjects taught through creative curriculum themes. Subjects are taught individually with relevant and meaningful connections made to other subjects under the same overarching theme so that the core skills and knowledge are not diluted through the thematic approach. Each foundation subject is taught through a progression model adapted from the NC and Lancashire KLIPS and End of Year Expectations which outlines the intended curriculum skills, knowledge and core vocabulary for each year group and the 4 writing purposes are linked to this, along with opportunities for Maths across the curriculum. Long term plans are formed with logical progression in mind, building on previous years' learning, and Medium Term planning includes the Lancs EOYE and KLIPS with opportunities for them to be revisited over the year. The language of rights is used to learn about and advocate for change and children are provided with opportunities to work with specialist teachers to develop their talents and receive an education which celebrates the whole child.

Believe - Curriculum Implementation:

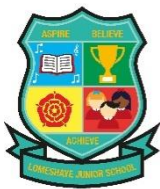
Our pedagogies, created and agreed by Lomeshaye staff, outline how the curriculum is implemented. The long term and medium term planning comes to life in the classroom when the pedagogies inform planning, teaching and learning. Kagan cooperative learning is used to promote collaboration and oracy is enhanced through use of talk roles. Learning revisits prior knowledge and is scaffolded appropriately to allow children to recall previous learning and make connections. Subject specific vocabulary, knowledge and skills, and links to powerful learner attributes, rights and SDG's are made explicit throughout so that pupils can integrate new knowledge and build on their prior understanding of concepts. Knowledge and learning organisers are in the early stage of implementation and are used for pre teaching, to support home learning and to form part of the reviewing of learning. These scaffold children with key facts and vocabulary and support the retention of knowledge into long term memory. Each leader sets out the specific intent for their subject and how its implementation will look in the planning and delivery of teaching and learning.

Achieve - Curriculum Impact:

We believe that our curriculum intentions have an impact when the children can remember their learning, recall knowledge and make connections. The learning environment, planning and pupil's work demonstrates how children are exposed to the curriculum but the true impact is revealed when the children are able to articulate their knowledge and understanding through a range of written, creative and oral outcomes. To achieve our curriculum goals, subject leaders closely scrutinise all aspects of teaching and learning in their subjects to monitor that the curriculum is coherent and well-sequenced, and that children have opportunities to consolidate and embed knowledge. Impact is measured through summative assessments, focus week observations and scrutiny, curriculum evaluations and pupil voice. In addition, external recognition through achieved awards such as RRS Gold and the SENDIA award show that the curriculum we provide is of a high standard.

Lomeshaye Pedagogies: Highly effective teaching and learning is dependent on...

<p>Building on what pupils already know Planning engaging pre-learning tasks to assess current knowledge. Using talk partners to explore and share knowledge. Adapting lessons to reflect current attainment. Looking back to previous year group's coverage and KLIPS to ensure appropriate challenge. Pre and post home learning tasks - deepen and embed.</p>	<p>High quality questions from pupils and adults Use of questioning dice. Planned opportunities for pupils to ask questions (pupil choice). Starting lessons with a learning question. Planned use of HOT questions during lessons from teacher and TA. Regular audit of adult questions within the classroom. Pupil questioning tools - 'see, think, wonder' Questions on plans for TA's. Prompts in resilience boxes.</p>	<p>Regular and effective feedback Individual and whole class feedback. Peer to peer feedback - collaborative learning pro forma. Self-evaluation and reflection tools. Planned time to respond to feedback. 1-1 time to give and discuss feedback. Children feeding back to adults their personal strengths and weaknesses. Fluid intervention trackers to support regular and effective feedback.</p>
<p>Higher order activities that challenge thinking Record a thinking grid for the half term. Ensure all pupils have a balance of HOT (Higher Order Thinking) activities through careful planning. Include HOT in all curriculum lessons. Pupils highlight their learning of the day.</p>	<p>Pupils being clear on the 'what' and 'why' Presenting the big picture at the start of a term. Clear curriculum overviews for parents. Regular reminders during lessons. Use of working walls. Linking learning to real life when appropriate. Assertive discussions during mentoring.</p>	<p>Explicit development of metacognition Identify, display and teach the learning power of the month. Explicit planning for how the behaviour will be developed. Reflection tools within lessons which focus on 'how'. Learning behaviour working wall. Learning behaviours celebrated in assembly.</p>
<p>Variation of inputs during the process and different outputs for learning 2nd and 3rd input to be different to the first. Vary the emphasis on visual and auditory. Use pupils who have mastered to provide input to those who haven't. Effective use of resources including TAs, ICT and the outdoor environment.</p>	<p>A pupil centred learning process Building elements of choice within all lessons (chilli challenge, science experiments etc.) Development of group roles. Pupil lesson evaluation forms. Planning for different types of learner. Involving pupils in curriculum evaluations. Pupil choice planned for all activities when appropriate. Home learning.</p>	<p>Worthwhile classroom dialogue Identify, display and discuss dialogic behaviours. Development of structured sharing strategies (Kagan) Carefully planned opportunities for talk to enhance learning.</p>



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Aspire-Believe-Achieve



Science

'Equipped with his five senses, man explores the universe around him and calls the adventure Science.' - Edwin Powell Hubble (American Astronomer - 1889-1953)

Intent	Implementation	Impact
What will take place before teaching in the classroom?	What will this look like in the classroom?	How will this be measured?
<p>The school's senior leadership team will:</p> <ul style="list-style-type: none"> Lead the school staff to develop a clear overarching curriculum intent which drives the ongoing development and improvement of all curriculum subjects. Ensure that the curriculum leaders have appropriate time to develop their specific curriculum intent through careful research and development. Provide sufficient funding to ensure that implementation is high quality. 	<p>Our planned teaching sequence will show:</p> <ul style="list-style-type: none"> Lomeshaye agreed pedagogies used as basis for teaching and learning. Building on prior learning and reviewing and revisiting to build recall and retention of knowledge. WOW used to introduce new unit of Science. Opportunities given for children to be curious and generate questions to direct their own learning. Specific key vocabulary to be used and its meaning. Opportunities to use and develop oracy skills as well as scientific vocabulary. Opportunities to plan and carry out investigations using the different types of scientific enquiry. Kagan cooperative learning used to structure learning. Evaluate and reflect on learning. 	<p>Pupil voice will show:</p> <ul style="list-style-type: none"> A developed understanding of the methods and skills of scientists at an age appropriate level A secure understanding of scientific concepts, knowledge and skills. A progression of understanding, with appropriate vocabulary which supports and extends knowledge acquisition. Confidence in discussing science, their own work and identifying their own strengths and areas for development. An enthusiasm for Science. How Science and related subjects/areas are relevant to real life.
<p>The Science leader will:</p> <ul style="list-style-type: none"> Understand and articulate the characteristics of high quality teaching in the subject and the main strengths for improving and sustaining high standards of teaching and learning for all pupils Ensure an appropriate progression of knowledge is in place which supports pupils in knowing more and remembering more as scientists. Ensure an appropriate progression for vocabulary is in place for each phase of learning, which builds on prior learning. The relationship of their subject to the curriculum as a whole. Keep up to date with current science research and subject development through an appropriate subject body or professional group. Share examples of good practice. 	<p>Our classrooms will:</p> <ul style="list-style-type: none"> Provide appropriate quality equipment for each area of the curriculum. Have developed learning walls which include high quality WAGOLLS, including actual pieces of work and known scientists, and carefully chosen vocabulary, which are regularly updated. Be organised using Kagan cooperative learning so that pupils can work in small groups or whole class as appropriate to support pupils in their development of their skills. Provide Science talk cards in order to support children with their vocabulary development and oracy skills. Will promote and encourage children's curiosity. 	<p>Children's work in books and displays will show:</p> <ul style="list-style-type: none"> A varied and engaging curriculum which develops a range of scientific skills and depth of knowledge. Clear progression in line with expectations set out in the progression grids developed from Lancashire EOYE, KLIPS and National Curriculum. Developed and final pieces of work which showcase the skills and knowledge learned. Sustained improvement in their subject knowledge, understanding and skills A strong understanding of the key ideas of the subject Deep thinking in relation to the subject matter Children are enthusiastic and highly motivated about science. Evidence of children thinking for themselves, generating questions and planning their own enquiries and investigations.

<p>The class teacher will, with support from year group colleagues and the Science leader:</p> <ul style="list-style-type: none"> • Create a long term plan which ensures appropriate coverage of knowledge, skills and vocabulary from the progression grid. • Personally pursue support for any particular subject knowledge and skills gaps prior to teaching. • Ensure that resources are appropriate, of high enough quality and are plentiful so that all pupils have the correct tools and materials. • Work well together as a team; • Apply policy and plans consistently in the classroom; • Promote and develop independence. • Have high expectations of the pupils; • Reinforce the motivation of the pupils; • Facilitate deep learning within the subject; • Make good use of support, training and guidance. • Celebrate the successes and learning of pupils through classroom displays. 	<p>Our children will be:</p> <ul style="list-style-type: none"> • Engaged because they are challenged by the curriculum which they are provided with. • Resilient learners who overcome barriers and understand their own strengths and areas for development. • Independent and able to think for themselves, raise their own questions and think about the type of enquiry needed to answer them. • Able to critique their own work as a scientist because they know how to be successful. • Safe and happy in science lessons which give them opportunities to explore their own creative development. • Encouraged and nurtured to overcome any barriers to their learning or self-confidence because feedback is positive and focuses on science skills and knowledge • Develop scientific knowledge, skills and confidence over time because of careful planning, focused delivery and time to practice and hone skills. 	<p>The Science leader will:</p> <ul style="list-style-type: none"> • Encourage participation in national events such as British Science week. • Deliver whole school assemblies relating to important science events and/or celebrating children's development/learning in Science. • Collate appropriate evidence over time which evidences that pupils know more and remember more. • Monitor the standards in the subject to ensure the outcomes are at expected levels. • Provide ongoing CPD support based on the outcomes of subject monitoring to ensure that the impact of the curriculum is wide reaching and positive.
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Make sure that the information above tallies with subject policy

The detailed progression of knowledge and skills in Science can be accessed from the Lancashire KLIPS and End of Year Expectations documents which provide statutory coverage of the National Curriculum.

[Key Learning in Science Year 3](#)

[Key Learning in Science Year 4](#)

[Key Learning in Science Year 5](#)

[Key Learning in Science Year 6](#)

[Working Scientifically](#)

Notes: