



Bleak Hill Primary School





SCIENCE POLICY

SUMMER 2022

Bleak Hill Primary School

Science

Date	Review Date	Subject Leader	Nominated Governor
May 2022	May 2025	Charlotte Darroch Sophie Jones	

<u>Vision</u> 	<p>At Bleak Hill, we aim to deepen children's understanding of the world in which we live and everything around them. Through our Science curriculum, we hope that this will produce curious, excited and motivated life-long learners, who will be able to understand how science can be used to explain, predict and analyse in line with the National Curriculum (2014) (for more detail, please see our subject specific policy).</p>
<u>Intent</u> 	<p>We believe that science education 'provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics.' Science changes our lives and is vital to the world's future. As a result of this, all pupils will be taught essential aspects of the subject in terms of knowledge, understanding, methods, processes and the ability to apply each of these to the real world. Through building up knowledge and by developing a range of progressive skills, children at Bleak Hill will be challenged to explore scientific theories through practical activities.</p>
<u>Implementation</u> 	<p>Following the National Curriculum as a basis, with statutory content, with a minimum of 1 and a half hours discrete science teaching a week throughout school. Independent learning is encouraged, misconceptions are addressed and discussed as key teaching points. Scientific enquiry is promoted at the core of the subject and referred to every lesson building on skills progression across year groups. Topics build systematically on previous topics which contain over-arching transferable concepts. Our science curriculum builds our children's science capital and allows them to experience science in the real world.</p>
<u>Impact</u> 	<p>Retrieval based learning techniques for every lesson in the sequence.</p> <p>Evaluations for each lesson to provide formative assessment</p> <p>Exit tasks to gain a summative judgment (alongside teaching assessment of scientific enquiry skills).</p>

Bleak Hill Primary School

We believe this policy should be a working document that is fit for purpose, represents the school ethos, enables consistency and quality across the school and is related to the following legislation:

- Education Act 1996
- Education Act 1997
- Standards and Framework Act 1998
- Education (National Curriculum) (Temporary Exceptions for Individual Pupils (England) Regulations 2000
- Education Act 2003
- Equality Act 2010

The following documentation is also related to this policy:

- Teaching a broad and balanced curriculum for education recovery (DfE)
- The Education Inspection Framework (Ofsted 2019)
- An investigation into how to assess the quality of education through curriculum intent, implementation, and impact (Ofsted 2018)
- Designing and Timetabling the Primary Curriculum - a practical guide for Key Stage 1 and 2 (Qualifications and Curriculum Authority 2002)
- Equality Act 2010: Advice for Schools (DfE)
- The National Curriculum in England Framework Document (DfE) 2014
- Race Disparity Audit - Summary Findings from the Ethnicity Facts and Figures Website (Cabinet Office)

We believe science education 'provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.' (The National Curriculum in England Framework Document (DfE) 2014)

We have a duty to ensure compliance with the revised National Curriculum and with the application of the new programmes of study and attainment targets. We understand that 'the National Curriculum provides pupils with an introduction to the core knowledge that they need to be educated citizens.'

Our well-balanced curriculum promotes the spiritual, moral, cultural, cultural, mental and physical development of pupils and prepares them for the opportunities, responsibilities and experiences of later life. We will develop pupils' spoken language, reading and writing in all subjects and will develop pupils' mathematical fluency.

Bleak Hill Primary School

We strive to provide a curriculum that all pupils will find enjoyable with them understanding the relevance of their lessons. This can only be achieved by using the experience, enthusiasm and specialism of individual teachers who provide interesting, relevant, purposeful and differentiated lessons based on real-life experiences, wherever possible, in a structured well-ordered classroom environment.

Annually we undertake a subject evaluation that is based on the following questions:

- How do we design and provide a curriculum that is broad and balanced for all pupils? (Curriculum Intent)
- How do we deliver our curriculum through teaching, assessment and feedback? (Curriculum Implementation)
- How do we assess pupil achievement through external tests/exam results and by our own school data? (Curriculum Impact)

We wish to work closely with the School Council and to hear their views and opinions as we acknowledge and support Article 12 of the United Nations Convention on the Rights of the Child that children should be encouraged to form and to express their views.

We as a school community have a commitment to promote equality. Therefore, an equality impact assessment has been undertaken and we believe this policy is in line with the Equality Act 2010.

We all have a responsibility to ensure equality permeates into all aspects of school life and that everyone is treated equally irrespective of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. We want everyone connected with this school to feel safe, secure, valued and of equal worth.

We believe it is essential that this policy clearly identifies and outlines the roles and responsibilities of all those involved in the procedures and arrangements that is connected with this policy.

Aims

- To ensure that all pupils develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- To ensure that all pupils develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.
- To ensure that all pupils are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

(The National Curriculum in England Framework Document (DfE) 2014)

- To promote the teaching of numeracy and literacy within all subjects.
- To evaluate the school curriculum by focusing on curriculum intent, implementation and impact.

Bleak Hill Primary School

- To share good practice within the school.
- To work with other schools to share good practice in order to improve this policy.

Roles and Responsibility for the Policy

Role of the Governing Body

The governing body has:

- appointed a member of staff to be responsible for the curriculum leadership of Science;
- delegated powers and responsibilities to the Headteacher to ensure all school personnel and stakeholders are aware of and comply with this policy;
- responsibility for ensuring compliance with the legal requirements of the national curriculum;
- responsibility for ensuring that the school complies with all equalities legislation;
- nominated a designated equalities governor to ensure that appropriate action will be taken to deal with all prejudice related incidents or incidents which are a breach of this policy;
- responsibility for ensuring funding is in place to support this policy;
- responsibility for ensuring this policy and all linked policies are maintained and updated regularly;
- responsibility for ensuring all policies are made available to parents;
- the responsibility of involving the school council in:
 - ☐ determining this policy with the governing body;
 - ☐ discussing improvements to this policy during the school year;
 - ☐ organising surveys to gauge the thoughts of all pupils;
 - ☐ reviewing the effectiveness of this policy with the governing body
- nominated a link governor to:
 - ☐ visit the school regularly;
 - ☐ work closely with the headteacher and the coordinator;
 - ☐ ensure this policy and other linked policies are up to date;
 - ☐ ensure that everyone connected with the school is aware of this policy;
 - ☐ attend training related to this policy;
 - ☐ report to the governing body every term;
 - ☐ annually report to the governing body on the success and development of this policy.
- responsibility for the effective implementation, monitoring and evaluation of this policy.

Role of the Headteacher

The Headteacher will:

- work in conjunction with the senior leadership team to ensure all school personnel, pupils and parents are aware of and comply with this policy;
- ensure teachers:

Bleak Hill Primary School

- ☐ 'have good knowledge of the subject(s) and courses they teach;
- ☐ have effective support for those teaching outside their main areas of expertise;
- ☐ present subject matter clearly, promoting appropriate discussion about the subject matter they are teaching;
- ☐ check learners' understanding systematically, identify misconceptions accurately and provide clear, direct feedback and in doing so, they respond and adapt their teaching as necessary, without unnecessarily elaborate or differentiated approaches;
- ☐ design their teaching to help learners to remember in the long term the content they have been taught and to integrate new knowledge into larger concepts;
- ☐ use assessment well in order to help learners embed and use knowledge fluently or to check understanding and inform teaching;
- ☐ create an environment that allows the learner to focus on learning;
- ☐ develop a rigorous approach to the teaching of reading in order to develop learners' confidence and enjoyment in reading;
- ☐ use reading materials at the early stages of learning to read that are closely matched to learners' phonics knowledge'.

(Amended from the 'Education Inspection Framework' (Ofsted 2019))

- work closely with the curriculum leader, subject leaders and the link governor;
- ensure compliance with the legal requirements of the National Curriculum;
- consider disapplying a pupil from all or part of the National Curriculum for a period of time if this will benefit the child;
- encourage parents to take an active role in curriculum development;
- provide leadership and vision in respect of equality;
- provide guidance, support and training to all staff;
- monitor the effectiveness of this policy by:
 - ☐ observing teaching and learning
 - ☐ planning scrutinies and work trawls
 - ☐ discussions with pupils and members of the school council
- annually report to the governing body on the success and development of this policy.

Role of the Curriculum Leader

The curriculum leader will:

- provide strategic leadership and direction;
- provide a curriculum that provides pupils with the essential knowledge they need to be educated citizens in democratic Britain;
- coordinate a number of working parties in order to explore ways of improving the curriculum and the way in which we deliver it with a view of ensuring the highest standards of delivery and

Bleak Hill Primary School

consistency in pupil's learning and teaching experiences and opportunities throughout the school;

- provide an environment that is fun, stimulating and challenging to all pupils;
- promote an awareness of and respect for a diversity of cultures, values, beliefs and abilities;
- equip children with a range of skills and a desire for lifelong learning;
- ensure appropriate coverage of the curriculum;
- provide support and advice;
- monitor pupil progress;
- ensure sufficient and up to date resources are in place.

Role of the Subject Leader

The Subject Leader will:

- lead the development of this policy throughout the school;
- work closely with the Headteacher, curriculum leader, the nominated governor and SENCO;
- promote the teaching of numeracy and literacy within all subjects;
- be accountable for standards in this subject area;
- monitor standards by:
 - ☐ auditing the subject area
 - ☐ review of the scheme of work
 - ☐ monitoring teachers planning
 - ☐ lesson observations
 - ☐ scrutinising children's work
 - ☐ discussions with pupils
- work in conjunction with the Headteacher, Senior Leadership Team, the Curriculum Leader, Subject Leaders, teaching and support personnel to provide statements on each of the following:

We ...		Evidence
Intent	▪ have constructed a 'curriculum that is ambitious and designed to give all learners the knowledge and cultural capital they need to succeed in life' by:	Long Term Plans Significant Individuals Trips and Visits Science Day
	▪ provide a curriculum that is 'coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning and employment' by:	Long Term Plans Medium Term Plans Bespoke Knowledge Organisers

Bleak Hill Primary School

Implementation	<ul style="list-style-type: none"> have the 'same academic, technical or vocational ambitions for almost all learners and we have designed an ambitious curriculum to meet the needs of some learners with high levels of SEND' by: 	Access for all documents
	<ul style="list-style-type: none"> ensure 'learners study the full curriculum 'specialising' only when necessary' by: 	Following the National Curriculum Building sequenced lessons
	<ul style="list-style-type: none"> ensure 'teachers have good knowledge of the subject(s) and courses they teach' by; 	Access to National College CPD Staff made aware of 'Reach Out' CPD
	<ul style="list-style-type: none"> provide 'effective support for those teaching outside their main areas of expertise' by: 	Access to National College CPD Staff made aware of 'Reach Out' CPD Support from Curriculum Leaders
	<ul style="list-style-type: none"> ensure 'teachers present subject matter clearly, promoting appropriate discussion about the subject matter they are teaching' by: 	Subject portfolios Book evaluations Progression of knowledge and skills documents
	<ul style="list-style-type: none"> ensure teachers 'check learners' understanding systematically, identify misconceptions accurately and provide clear, direct feedback' by: 	Misconceptions box on Medium Term Plans Feedback policy
	<ul style="list-style-type: none"> ensure teachers 'respond and adapt their teaching as necessary, without unnecessarily elaborate of differentiated approaches by: 	Access for All documents

Bleak Hill Primary School

	<ul style="list-style-type: none"> ensure 'over the course of study, teaching is designed to help learners to remember in the long term the content they have been and to integrate new knowledge into larger concepts' by: 	Review and Do REACH approach Retrieval tasks Knowledge Organisers Exit Tasks Staff CPD on Science of Learning
	<ul style="list-style-type: none"> ensure assessment is used well in order to 'help learners embed and use knowledge fluently or to check understanding and inform teaching' by: 	Exit Tasks Assessment spreadsheet Access for All Documents
	<ul style="list-style-type: none"> 'understand the limitations of assessment and do not use it in a way that creates unnecessary burdens for staff or learners' by: 	Exit Tasks Assessment Spreadsheet format
	<ul style="list-style-type: none"> ensure 'teachers create an environment that allows the learner to focus on learning' by: 	REACH approach High expectations across school Working Walls Whole School Displays
	<ul style="list-style-type: none"> ensure 'the resources and materials that teachers select reflect the provider's ambitious intentions for the course of study and clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment' by: 	Lessons planned around key knowledge, not activities Progression of knowledge and skills documents
	<ul style="list-style-type: none"> ensure 'a rigorous approach to the teaching of reading develops learners' confidence and enjoyment of reading' by: 	Reading spine with books allocated to each topic
Impact	<ul style="list-style-type: none"> ensure 'learners develop detailed knowledge and skills across the curriculum and, as a result, achieve well' by: 	Exit tasks End of unit assessments Continuous questioning
	<ul style="list-style-type: none"> ensure 'learners are ready for the next stage of education, employment or training' by: 	Exit tasks End of unit assessments Continuous questioning

(Quotes taken from the Education Inspection Framework (Ofsted 2019))

Bleak Hill Primary School

- ensure continuity and progression throughout the school;
- devise a subject improvement plan;
- provide guidance and support to all staff;
- provide training for all staff on induction and when the need arises regarding;
- attend appropriate and relevant INSET;
- keep up to date with new developments;
- undertake an annual audit and stock take of resources;
- purchase new resources when required and in preparation for the new academic year;
- manage the subject budget effectively;
- undertake risk assessments when required;
- review and monitor;
- annually report to the governing body on the success and development of this policy.

Role of Teachers

Teachers will:

- comply with all aspects of this policy;
- work closely with the subject leaders and Curriculum Leaders to develop this policy;
- devise medium/short term planning (following the key knowledge identified on Long Term Plans);
- develop mathematical fluency, numeracy and mathematical understanding in all subjects;
- develop pupils' spoken language, reading, writing and vocabulary in all subjects;
- plan and deliver high quality, accessible lessons;
- plan differentiated lessons which are interactive, engaging, of a good pace and have a structure which encompasses the REACH principles;
- have high expectations for all children and will provide work that will extend them;
- assess, record and report on the development, progress and attainment of pupils;
- achieve high standards;
- celebrate the success of pupils in lessons;
- implement the school's equalities policy and schemes;
- report and deal with all incidents of discrimination;
- attend appropriate training sessions on equality;
- report any concerns they have on any aspect of the school community.

Role of Pupils

Pupils will:

- be aware of and comply with this policy;
- be encouraged to work in partnership with the school by making decisions and exercising choice in relation to their educational programme;
- listen carefully to all instructions given by the teacher;
- ask for further help if they do not understand;
- participate fully in all lessons;
- participate in discussions concerning progress and attainment;
- treat others, their work and equipment with respect;

Bleak Hill Primary School

- support the school Code of Conduct and guidance necessary to ensure the smooth running of the school;
- liaise with the School Council and Subject Ambassadors
- take part in questionnaires and surveys.

Role of Parents/Carers


Parents/carers will:


- be aware of and comply with this policy;
- be encouraged to take an active role in the life of the school by attending:
 - ☐ parents and open evenings
 - ☐ parent-teacher consultations
- be encouraged to work in school as volunteers;
- be encouraged to respond to curriculum information newsletter;
- be informed via half-termly newsletters of their child's topics;
- asked to provide suggestions and ideas for improving this subject;
- be asked to take part periodic surveys conducted by the school on curriculum development;
- be invited to make presentations to pupils on aspects of this subject area;
- encourage effort and achievement;
- join the school in celebrating success of their child's learning.

Policy Procedure


Teaching and Learning Style

We use a variety of teaching and learning styles in order to develop children's knowledge, skills and understanding.






principles at Bleak Hill



<p>What is it?</p> <p>The REACH principle outlines the key parts underpinning every lesson taught at Bleak Hill. We use these steps to ensure consistent teaching and learning which is adapted to meet each child's needs.</p> <p>Why is it important?</p> <p>The REACH principle was created based on evidence informed research and was developed to include key aspects which can be drawn upon in every lesson.</p> <p>Children are encouraged to develop their knowledge of not just their learning, but HOW we learn and how to improve.</p> <p>At Bleak Hill we give every child the opportunity to REACH their full potential.</p>	<p>R Retrieval of previous learning</p> <p>E Explain and explore new concepts and knowledge</p> <p>A Access new vocabulary</p> <p>C Complete task</p> <p>H How much have you learnt?</p>	<p>Recently, a growing body of research has shown that the practice of remembering previously studied information (i.e., retrieval practice) is more advantageous for long-term retention.</p> <p>'Knowledge is power'. Knowledge does much more than just help hone their thinking skills: it actually makes learning easier. Knowledge is not only cumulative, it grows exponentially. Those with a rich base of factual knowledge find it easier to learn more — the rich get richer. The more you know, the easier it is to learn.</p> <p>Vocabulary is critical to a child's success. Vocabulary growth is directly related to school achievement. Vocabulary helps children to think and learn about the world and expanding a child's knowledge of words provides unlimited access to new information.</p> <p>Children apply their previous and new knowledge, skills and understanding to a different situation. Children are encouraged to utilise their broader knowledge, work collaboratively, use their problem solving skills and be creative.</p> <p>'What have you learnt?' 'How much have you learnt?' 'What do you know now that you didn't before?'... allows pupils to reflect on what they have just done and how what they have done fits into a broader context.</p>
---	---	---



for all...

Science teaching focuses on enabling children to think as scientists, see below for Each Key Stage:

In EYFS, science is included within the Understanding the World area of learning. As with other learning in Reception and Nursery children will mainly learn about science through games and play – which objects float and sink during water play, for example. Activities such as these will help children to develop important skills such as observation, prediction and critical thinking. In this phase, children are often introduced to individuals, concepts and ideas, building firm foundations for progressive learning in Key Stage 1.

Key Stage 1 (Years 1 and 2) and Key Stage 2 (Years 3 to 6) The content of science teaching and learning is set out in the 2014 National Curriculum for primary schools in England. Within this, certain topics and areas are repeated across year groups, meaning that children may revisit a particular topic in each year of primary school but with increasing difficulty and with a different focus each time.

For example, the area of animals, including humans is examined in every single year group, with a very clear progression of knowledge and understanding over the six years: In Year 1 this involves: looking at the human body, recognising animal groups and sorting these animals. By Year 6, this will have developed into knowing the internal structure of the human body in relation to circulation, classifying living things based on more complex characteristics and exploring scientific research into this classification.

The more detailed content for each year group is as follows:

Year 1

- Plants (basic structure)
- Animals including humans (basic knowledge of parts of human body and comparing animals)
- Everyday materials (describing properties)
- Seasonal changes.

Year 2

- Plants (what plants need to grow)
- Animals including humans (needs for survival, food and hygiene)
- Use of everyday materials (explore and compare materials for uses)
- Living things and their habitats (explore variety of habitats, simple food chains).

Year 3

- Plants (life cycles)
- Animals including humans (nutrition, skeleton and muscles)
- Rocks (fossils and soils)

Bleak Hill Primary School

- Light (reflection and shadows)
- Forces and magnets (magnetic materials, attracting and repelling).

Year 4

- Animals including humans (digestive system, teeth and food chains)
- Living things and habitats (classification keys)
- States of matter (changes of state, evaporation and condensation)
- Sound (vibration, pitch and volume)
- Electricity (simple circuits, insulators and conductors).

Year 5

- Animals including humans (human development from birth to old age)
- Living things and their habitats (life cycles and reproduction in humans and plants)
- Properties and changes of materials (dissolving, separating materials, reversible and irreversible changes)
- Forces (gravity, air resistance, water resistance, friction)
- Earth and Space (Earth, Sun and Moon, the solar system).

Year 6

- Animals including humans (circulatory system, diet and exercise, healthy living)
- Living things and their habitat (classification, characteristics of plant and animal groups)
- Light (how it travels, how we see, shadows)
- Electricity (voltage and power in circuits, circuit components, symbols and diagrams)
- Evolution and inheritance (how living things have changed over time, fossils, dinosaurs, adaptation o environment).

Bleak Hill Primary School

Our curriculum is driven by key concepts that run through the school from Reception to Year 6. One of these concepts is Working Scientifically. This element focuses on the skills the children need to become accurate, careful and confident practical scientists. Children are expected to master certain skills in each year group and there is a very clear progression of these set out for each school to refer to. For example: In Year 1 a child may have to ask questions, carry out a simple test, record simple data and then try to answer questions. By Year 6, they should be able to plan and carry out a fair test by using equipment accurately and taking exact readings or measurements. They are also expected to be able to draw conclusions from their results and record them using a range of graphs and charts.

We recognise that there are children of a wide range of academic ability within every class and we aim to provide suitable and beneficial learning opportunities by matching the challenge of the task to the ability of the child. We achieve this in a number of ways:

- Setting common tasks which are open-ended and can have a variety of responses.
- Setting tasks of increasing difficulty. Not all children complete every task.
- Grouping children by ability within the classroom and setting different tasks for each ability group – provision should be in place to both support the children with special educational needs and of a lower ability and stretch the more able and gifted and talented children.
- Providing resources of different complexity depending upon the ability of the child.
- Using classroom assistants, when available, to support groups.

Curriculum Planning and Organisation

Teachers collaborate on the planning of the subject to ensure parity in provision and to share expertise. Curriculum planning is managed in two phases:

Long Term Planning

- details what is to be taught over the year
- key stage end points
- key vocabulary
- cross curricular links
- lesson sequences
- objectives for working scientifically

Medium Term Planning

- organises the subject into termly or half-termly sections

Bleak Hill Primary School

- is more detailed and the objectives are more specific in nature
- is developed by the teachers, who respond to the needs of their pupils
- ensures a balanced distribution of work is undertaken across each term
- key knowledge identified
- misconceptions
- previous learning
- future learning
- evaluation of learning
- details the subject curriculum over the unit of work
- plans lessons in detail with specific class objectives
- sets individual learning goals for each pupil

Links with ICT

The use of information and communication technology will promote, enhance and support the teaching of this subject area.

Inclusion

We believe that we are an educationally inclusive school as we are concerned about the teaching and learning, achievements, attitudes and well-being of all our pupils. We aim to provide places for all pupils who express a preference to join this school.

We work hard to offer equality of opportunity and diversity to all groups of pupils within school such as children:

- from both sexes;
- who have Special Educational Needs;
- who are looked after;
- from minority faiths, ethnicities, travelers, asylum seekers, refugees;
- who are gifted and talented;
- who are at risk of disaffection;
- who are young carers;
- who are sick;
- who have behavioural, emotional and social needs;
- from families who are under stress

We believe we have a duty to ensure that all children have equal rights to the opportunities offered by education and that all children will be encouraged to fulfil their potential in their academic, physical and creative achievements.

We want to give all children the right to access high quality educational experiences, to take part in a broad and balanced curriculum and to be part of the social life of the school.

We recognise that within the school we have more able, gifted and talented children. We believe that:

Bleak Hill Primary School

- more able children demonstrate a higher ability than average for the class and often require differentiated tasks and opportunities to learn through challenges;
- gifted children are those who have the ability to do well in more than one subject;
- talented children demonstrate an innate talent or skill in creative, cultural or sporting fields

We have an even greater obligation to plan and deliver well-structured lessons with appropriate assessment plus ambitious targets for pupils who have low levels of prior attainment or come from disadvantaged backgrounds.

Also, we have a duty to cater for pupils whose first language is not English by planning teaching opportunities to help them develop their English and to gain full access to the National Curriculum.

Differentiation

Differentiation is best defined as 'the process by which differences between learners are accommodated so that all students in a group have the best possible chance of learning.' (Geoff Petty)

The main purpose of differentiation is to challenge and raise standards of learning by ensuring that curriculum objectives are accessible to all our children despite their backgrounds or abilities. We see differentiation as a form of integration and not exclusion.

Differentiation must reflect the learning objective and can be achieved in a variety of ways either by task, by support or by outcome and should be chosen by fitness for purpose. See access for all documents.

We want all children to achieve success, therefore we will ensure they are given differentiated tasks that are matched to their level of attainment so that they can demonstrate successfully what they know, understand and can do.

The main feature of effective differentiation is good planning resulting in effective teaching and learning with children making good progress. Also we expect to see in all classes interested well motivated children responding to challenges, children working productively on task and being aware of their own progression.

Special Educational Needs

We want pupils with identified special educational needs to have full access to all subjects of the National Curriculum with teachers planning lessons that have no barriers to pupils achieving and with appropriate targets relating to the subject, have an .

Assessment for Learning

Teachers will:

- carry out continuous assessment;
- use short-term assessments matched to the teaching objectives to adjust their planning;

Bleak Hill Primary School

- acknowledge if children have fully, partially or not understood the learning question (following the marking and feedback policy);
- carry out medium-term assessments to measure progress against key objectives to adjust planning;
- inform parents and carers of their child's progress and targets.

Monitoring and Review of the Subject

Monitoring of standards of children's work and the quality of teaching is the responsibility of the subject coordinator supported by the Headteacher and the SLT.

Standards will be monitored by:

- ☐ looking at pupils work
- ☐ subject observations
- ☐ pupil discussions
- ☐ audit of subjects
- ☐ scrutiny of planning
- ☐ general curriculum discussions
- ☐ subject portfolio
- ☐ Subject Ambassador discussions

Contribution of the Subject to other Areas of the Curriculum

Science contributes to many subjects within the primary curriculum and every opportunity is sought to draw scientific experience out of a wide range of activities. This allows children to begin to use and apply scientific skills and knowledge in real contexts.

Resources

The school has a full range of resources to support the teaching of this subject throughout all year groups. Resources are upgraded and replenished when the need arises. An annual stock take and audit is undertaken by the subject coordinator in the summer term in preparation for the next academic year.

Raising Awareness of this Policy

We will raise awareness of this policy via:

- | | |
|---|--|
| ▪ School handbook/prospectus; | ▪ Headteacher reports to the governing body; |
| ▪ School website; | ▪ Subject displays around the school; |
| ▪ Staff handbook; | ▪ Text messages |
| ▪ Meetings with parents such as introductory, transition, parent-teacher consultations; | ▪ Email |
| ▪ School events; | ▪ Tapestry |
| ▪ Meetings with school personnel; | |

Bleak Hill Primary School

- Written communications with home such as weekly newsletters and half termly year group overviews;
- Annual report to parents;

Training

We:

- have in place appropriate training for this policy that is undertaken by a registered training provider that covers:
 - ☐ All aspects of this policy
 - ☐ National Curriculum programmes of study and attainment targets for all subjects
 - ☐ Curriculum
 - ☐ Teaching and learning
 - ☐ Planning
 - ☐ Differentiation
 - ☐ Assessment
 - ☐ Monitoring and Evaluation
 - ☐ Special Educational Needs
 - ☐ Academically More Able, Gifted and Talented Pupils
 - ☐ Key skills
 - ☐ Equal opportunities
 - ☐ Inclusion
- ensure the content of all training is correct, delivered well and engages staff as we believe that the more engaging training is, the better the outcomes that we need to measure;
- can provide data that evidences staff understanding by using a simple short multiple-choice test through one of the following applications such as Google Forms, Microsoft Forms, Kahoot or SurveyMonkey;
- have in place evidence for all staff:
 - ☐ that highlights the knowledge gaps in the training;
 - ☐ that shows how those knowledge gaps were corrected

Equality Impact Assessment

Under the Equality Act 2010 we have a duty not to discriminate against people on the basis of their age, disability, gender, gender identity, pregnancy or maternity, race, religion or belief and sexual orientation.

This policy has been equality impact assessed and we believe that it is in line with the Equality Act 2010 as it is fair, it does not prioritise or disadvantage any pupil and it helps to promote equality at this school.

Race Disparity Audit

Bleak Hill Primary School

We acknowledge the findings of the Race Disparity Audit that clearly shows how people of different ethnicities are treated across the public services of health, education, employment and the criminal justice system.

The educational section of the audit that covers: differences by region; attainment and economic disadvantage; exclusions and abuse; and destinations, has a significant importance for the strategic planning of this school.

Monitoring the Implementation and Effectiveness of the Policy

The practical application of this policy will be reviewed annually or when the need arises by the coordinator, the Headteacher and the nominated governor.

A statement of the policy's effectiveness and the necessary recommendations for improvement will be presented to the governing body for further discussion and endorsement.

Linked Policies

- Academically More Able, Gifted and Talented Pupils
- Assessment
- Curriculum
- Curriculum Intent, Implementation and Impact
- Differentiation
- English as an Additional Language (EAL)
- Monitoring and Evaluation
- Self-Evaluation and School Improvement
- Special Educational Needs
- Teaching and Learning

See Appendices Documents section on Policies for Schools Website

- Frequency of Policy Monitoring
- Monitoring Implementation and Policy Effectiveness Action Plan
- Initial Equality Impact Assessment
- Policy Evaluation
- Policy Approval Form

We believe this school policy:

- is an essential part of the school;
- supports staff in managing certain situations;
- forms an important framework that will ensure consistency in applying values and principles throughout the establishment;
- provides guidance, consistency, accountability, efficiency, and clarity on how the school operates;
- provides a roadmap for day-to-day operations;

Bleak Hill Primary School

- ensures compliance with laws and regulations, gives guidance for decision-making, and streamlining internal processes;
- is designed to influence and determine all major decisions, actions and all activities taking place within the boundaries set by them;
- stems from the school's vision and objectives which are formed in strategic management meetings

Headteacher:		Date:	
Chair of Governing Body:		Date:	

Addendum

We acknowledge the recent DfE non-statutory guidance 'Teaching a broad and balanced curriculum for education recovery' which offers suggestions:

- to teachers and leaders in reception and key stages 1 to 3;
- to help decide how to prioritise elements within their curriculum for education recovery;
- based on the good practice evident in many schools;
- to continue to teach a broad and balanced curriculum in all subjects including what pupils learn from educational visits and visitors to the school;
- to prioritise teaching missed content that will allow pupils to make sense of later work in the curriculum which includes key knowledge, skills, vocabulary, concepts and the links between concepts;
- to take a subject-specific approach when prioritising what to teach;
- that when making curriculum adjustments they should be informed by:
 - ☐ an understanding of the critical content for progression in each subject
 - ☐ what pupils do and do not know
- that questioning and discussion will reveal pupils gaps, misconceptions and insecure knowledge, so that effective can be implemented

(Amended from 'Teaching a broad and balanced curriculum for education recovery' (DfE))

We must adjust the science curriculum to identify the content in biology, chemistry and physics that is most for enabling pupils to build up their knowledge of key scientific concepts.

Key stage 1 Focus is on:

- content that will support future study is knowledge about herbivores that allows pupils to learn about food chains in key stage 2, which in turn enables them to understand ecosystems in key stages 3 and 4

Bleak Hill Primary School

Key stage 2 Focus is on:

- teaching concepts that are beneficial to future study such as:

- | | |
|--|---|
| <input type="checkbox"/> forces | <input type="checkbox"/> reactions |
| <input type="checkbox"/> electricity | <input type="checkbox"/> nutrition |
| <input type="checkbox"/> magnetism | <input type="checkbox"/> ecosystems |
| <input type="checkbox"/> materials and substance | <input type="checkbox"/> properties |
| <input type="checkbox"/> evolution and inheritance | <input type="checkbox"/> changes of materials |

(Amended from 'Teaching a broad and balanced curriculum for education recovery' (DfE))