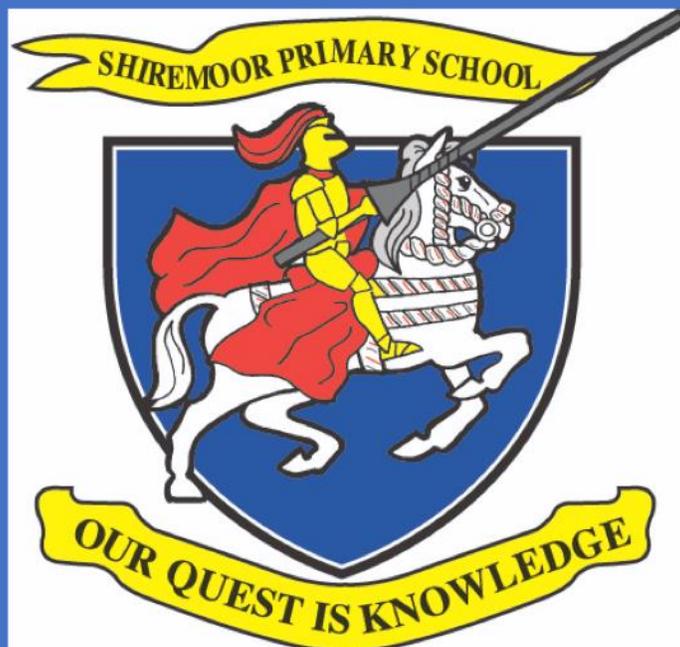# SHIREMOOR PRIMARY SCHOOL COMPUTING POLICY

Rationale

At Shiremoor Primary School we recognise that pupils are living in a rapidly changing world, in which ICT is playing an ever-increasing role. We aim, therefore, to equip children with the skills to adapt to new technology and to give them confidence to use ICT to further their learning and assist them in everyday life. In doing so, all pupils will have access to ICT equipment and resources, according to their ability and age range.

At Shiremoor Primary School we believe that increased ICT skills promote independent learning and gives greater access to a wide range of ideas and experiences. It enhances the quality of children's work across the curriculum and should enhance and enrich the learning process.

Aims

- To develop children's individual ICT capability and understanding
- To ensure all children know how to stay safe online
- To enhance teaching and learning in other areas of the curriculum by cross curricular use of ICT
- To develop ICT as a tool for learning and investigation
- To equip pupils with the confidence and capability to use ICT throughout their education, home and further work life.
- To recognise the potential, and deepen the necessity of ICT in everyday life
- To stimulate interest in new technologies

Implementation of the Policy

At Shiremoor Primary School we use a variety of teaching and learning styles in Computing lessons. Our principal aim is to develop the children's knowledge, skills and understanding in Computing, and we use a variety of teaching and learning styles in our lessons. We believe in whole class teaching methods and combine these with enquiry-based research activities. We believe children learn best when teachers employ a range of strategies including;
 •demonstrating to the whole class/group using the Interactive Whiteboard and/or Apple TV
• discussion with the whole class/group
• individual or paired working
• collaborative group work
• encouraging pupils to demonstrate new skills to others

The objectives of Computing teaching in the school are based on the requirements of the National Curriculum programmes of study for Key Stages 1 and 2. The Computing curriculum of the school will therefore help children to experience the following key aspects of the programme of study.
At Shiremoor Primary School the Computing curriculum provision covers the following topic areas (across all year groups):

- Text and Multimedia
- Images, Video and Animation
- Sound
- Electronic Communication
- Digital Research
- Data Handling
- Data Logging

- Logo and Control
- Simulations and Spreadsheets
- E-safety

All teachers plan sequences of lessons in Computing so that they build on prior learning. Children of all abilities have the opportunities to develop their skills and knowledge in each unit and through planned progression we offer them increasing challenge as they move up through school. Teachers should access the band of objectives relevant to their year group. Teachers may select a context in which the objectives are taught.

Shiremoor Primary School Approach to Computing

At Shiremoor Primary School we teach both discrete Computing lessons to develop knowledge, skills and understanding but also provide a range of opportunities throughout school to employ Computing skills across the curriculum.

Foundation Stage
Technology forms an element of the EYFS goals (Understanding the world) It aims to ensure that:
• children recognise that a range of technology is used in places such as homes and schools
• they select and use technology for particular purposes.

Key Stage 1
Pupils are taught to:
• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
• create and debug simple programs
• use logical reasoning to predict the behaviour of simple programs
• use technology purposefully to create, organise, store, manipulate and retrieve digital content
• recognise common uses of information technology beyond school
• use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key Stage 2
Pupils are taught to:
• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
• use sequence, selection, and repetition in programs; work with variables and various forms of input and output
• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
• understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Assessment

At Shiremoor Primary School we assess the children's work in Computing by making informal judgements as we observe the children during lessons.

Summative assessment is carried out and recorded using Target Tracker each term. All class teachers are responsible for inputting accurate data that is then monitored by curriculum leaders and senior management. At the end of the year a summative judgement is made for each child as to whether they have achieved the school's expected standard for the end of the year.

Evidence for teacher assessments is located in the Topic books when cross-curricular learning has occurred. Staff will store digital evidence including photos and videos on a secure IPad or on the school network.

SMSC
Computing and ICT contributes to our children's SMSC development through:
• Preparing the children for the challenges of living and learning in a technologically enriched, increasingly interconnected world.
• Making clear the guidelines about the ethical use of the internet and how we keep ourselves and others safe e.g. discussing the moral and social implications of cyber-bullying.
• Acknowledging advances in technology and appreciation for human achievement.

Health and Safety

At Shiremoor Primary School equipment is maintained to meet the agreed safety standards. Children will **not** be given the responsibility of plugging in ICT equipment. Age appropriate safety rules are displayed in the learning environment. Food and drink should not be consumed near ICT equipment. It is the responsibility of staff to ensure that classroom ICT equipment is stored securely, cleaned regularly and that their class or themselves leave the ICT Suite clean and tidy after use. Staff should ensure that the children are aware of the dangers of continuous use (e.g. eye/wrist strain etc.).
An adult should always supervise children when they are accessing information via the Internet. Internet filtering is provided by the Local Authority.

Differentiation

At Shiremoor Primary School we aim to encourage all children to reach their full potential through the provision of varied opportunities. We recognise that our curriculum planning must allow children to gain a progressively deeper understanding and competency as they move through our school.

More Able Learners

More able learners will be identified as part of our formative and summative assessment procedures. We will provide for their needs through a framework of high quality first teaching which focuses on ensuring the children are challenged appropriately. In addition, we will focus on developing their learning behaviours, including, greater reflection, problem solving and enquiry, making connections, higher order thinking skills and independent learning. The progress of more able learners will be rigorously tracked to ensure more able children reach their full potential

SEND/Inclusion

Children who are identified as being on the SEND register will be given support as identified on their Individual Provision Map. A variety of support materials are available from SENDCO, Mrs A Irving. Children are supported in the first instance through quality first teaching. Lessons will be differentiated in line with the individual needs of the children. All provision for pupils with SEND is in line with the school's SEND policy.

Equal Opportunities

At Shiremoor Primary School the curriculum for Computing will develop enjoyment of and commitment to stimulating the best possible progress and the highest attainment for all our pupils irrespective of social background, culture, race, gender,

differences in ability and disabilities. All of our pupils have a secured entitlement to participate in Computing Curriculum and our teaching approaches ensure the avoidance of stereotyping when planning work or organising groups. All the teaching staff agree that when using reference materials, they should reflect social and cultural diversity and provide positive images of race, gender and disability.

Resources

At Shiremoor Primary School there is a wide range of resources to support the teaching of Computing across the school. Specialist resources and equipment are stored in the ICT Suite and should be returned after use. Technical Support is available weekly and contact can be made with via an online form if off-site support is needed.

Monitoring and Evaluation

At Shiremoor Primary School the Computing Coordinator monitors planning and assessments – evaluating medium term plans and taking note of annotations, amendments and suggestions made by class teachers. They ensure that the curriculum has been covered and that there are no gaps.

Photographs of completed work and displays may be kept digitally by the Coordinator as a portfolio, in order to monitor and support the raising of standards in Computing within the school. The coordinators take responsibility for addressing any needs or concerns that arise as a result of this monitoring.

To monitor and evaluate Computing the Computing subject co-ordinator does the following:

- Purchases and organises the appropriate Computing resources.
- Supports colleagues in the teaching of Computing.
- Keeps up-to-date on the use of Computing in the curriculum and regularly attend training for subject leaders held by the LA and feedback new information and ideas to staff.
- Conducts work/evidence scrutiny and lesson observations to assess the standards of Teaching and Learning through the children's work.
- Regularly reviews and updates the Computing Policy and contributes to the school's self evaluation programme.
- Analysis of cross school summative assessment data.