Subject: **Computing**

Subject leader / team: **Sasha Garvey**

Subject Leadership

Intent / Implementation / Impact
February 2022

Intent

What we expect the children to learn

- Through our Computing curriculum we aim for children to learn about some of the main uses of ***Information Technology*** (e.g. word processing, creating images, taking and using photographs and videos, creating websites and blogs), ***Digital Literacy*** (e.g. **being safe and responsible online**, both in legal and ethical terms), and ***Computer Science*** (e.g. algorithms and programming, logical reasoning, networking and searches) .
- Children should develop the knowledge and skills which will be **relevant now**, as primary age children and also be important **in the future** as they move into the next stage of their education
- Through the medium of computers children are encouraged to be thinkers, problem solvers, analysts, designers, planners and evaluators, working both independently and with peers to complete briefs in this subject.
- We aim for our Computing curriculum to promote individuality, giving children the opportunity and the freedom to be expressive and creative.

Implementation

How the subject will be taught

- The Computing curriculum through school is planned and delivered by the subject leader; this enables progression to be clearly built in to all experiences, incorporating and building on previous knowledge and learning.
- All aspects of the Computing curriculum involve contextual skills-based learning. Sometimes, the outcomes are directly linked to other areas of the curriculum and the children's class-based topics.
- All learning is underpinned by the National Curriculum, with subject-specific KLIPs (Key Learning Indicators of Performance) being used to structure the experiences.
- Our curriculum gradually builds children's resilience and our programme of learning builds on previous knowledge and skills (sticky learning). Children are explicitly taught to be persistent and resilient. They are actively encouraged to make mistakes and learn that that is OK- we can always reverse a mistake. High expectations are built into all our units of work, with progressive aspiration and differentiation allowing all children to succeed at their own level.
- Problems, dilemmas and challenges are specifically incorporated and are presented to children with the expectation that they find a solution through critical thinking, peer discussion, persistence, and trial and error.
- Each unit has a 'brief' with a targeted 'audience' which encourages, enthuses and motivates children. Children evaluate good and bad end products and use this experience to plan (and later evaluate) their own outcomes.
- Natural curiosity is encouraged and the exploration of that is planned for and allowed (within reason) through trial and error and giving the children opportunities to explore functions and tools.
- All children are encouraged to be active learners, engaging at a level that is appropriate to their age, ability and experience.
- Strategies for teaching involve promoting curiosity, applying skills in context, solution finding and discussion.
- Children will be exposed to a range of experiences, programmes, applications and devices to support their presentations and publications.
- Skills and concepts are continually repeated and practiced, and built on over time, both during the year as well as year on year.

Impact

What children know and remember (and how we know)

- Subject-specific KLIPs for Computing are used to assess children's knowledge and progress within these subject areas; these are referred to explicitly where appropriate, and the evidence stored in electronic folders, individual to each child.
- Evidence in electronic folders reflects an individual's learning – and sometimes a group – and is responded to by children or an adult as appropriate, often continually throughout the teaching and learning process.
- Children will be at least competent users of technology and be able to create complex algorithms, experiencing different programming language (block coding, HTML and Python); be at least competent designers (2D and 3D); be able to create a variety of media for pleasure as well as for purpose.
- Children will know how to use technology safely and responsibly, having a digital conscience and be mindful of how their online behaviours affect themselves and others; they will know how to get support if they find themselves at risk.
- The nature of the lessons and experiences promotes pride and a real sense of achievement, from pushing boundaries to trying new things and working at a level beyond children's usual range of experiences.
- Through exposure to a wide range of interesting, exciting and challenging activities children are prepared for life in a modern world, and will hopefully that they will develop an overall love for the computing, potentially finding things that they can pursue, engage with and enjoy both now and in the future.