# Y1 computing overview 2023-24: Technology around Us, Digital Painting, Programming Animations

| Computing Activity | Building Skills and Disciplinary Knowledge | Approaches to Developing Skills and Disciplinary Knowledge | Building Substantive Knowledge and Understanding | Approaches to Developing Substantive Knowledge and Understanding | Curricula Materials | Assessed through (T1 T2 T3) Exploring Responding Designing Creating Evaluating | | |
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| Algorithms and Programs | • Use sequence in programs<br>• Work with various forms of input and output<br>• Use logical reasoning to predict behaviour of simple programs<br>• Use sequence in programs | • Class/group tuition with technical guidance from the Switched On computing program | • Understand technology and how it can help them in their everyday lives<br>• Develop understanding of the different components of a computer by developing their keyboard and mouse skills.<br>• Develop understanding of how to use technology responsibly.<br>• Pupils develop their understanding of a range of tools used for digital painting and use their own digital paintings.<br>• Understanding how to approach an algorithm through problem solving | • Class teacher showing children existing examples<br>• Group work on creating and developing their own work | **TERM1:**<br>**Technology around Us**<br>• Through investigation, understand the different functions of a device<br>• Locate different forms of technology and explain how they help us<br>• Create and save files<br>• Identify computing rules and understand how they keep us safe | Most children will be able to... (working at) | Some children will not yet be able to...(working towards) | Some children are confidently able to... (exceeding) |
| Databases | • Use internet services to create content that presents information<br>• Use internet services to create and evaluate content that presents information<br>• Design, create, organise, store, manipulate and retrieve digital content | • Class/group tuition with reference to existing databases | | | | | | |
| Using the internet | • Use search technologies effectively<br>• Be discerning in evaluating digital content<br>• recognise common uses of information technology beyond | • Class/group internet browsing, followed by reflective discussion | | • Class teacher talk through programs and algorithms with opportunities to try different programs<br>• Observing algorithms and debugging them | **TERM2:**<br>**Digital Painting**<br>• Use Google Drawing or Paintz.app to create drawings using line, shape and colour tools effectively<br>• Recreating chosen works of Piet Mondrian and Henri Matisse using above applications<br>• Save images of known artists to recreate<br>• Choose appropriate tools to recreate drawings | | | |
| Problem solving | • Solve problems by decomposing them into smaller parts<br>• Design programs that accomplish specific goals<br>• Write programs that accomplish specific goals<br>• Debug programs that accomplish specific goals<br>• Use logical reasoning to detect and correct errors in algorithms and programs | • Class, then group opportunities for problem solving | | | | | | |
| Communicating | • Understand the opportunities networks offer for communication and collaboration<br>• Use a variety of software (including internet services) to present information | • Observational opportunities to work as part of a group | | • Teacher led creating and editing<br>• Observing pre-existing master pieces and masters in the field | **TERM3:**<br>**Programming Animations**<br>• Using Scratch Jr, choose commands to give a purpose and use them to move a sprite<br>• Join commands together to run a series of algorithms<br>• Develop and record sequences of instructions as an algorithm to create their own program | | | |
| SMSC | • Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour<br>• To know how to seek help – where to go, and how to set privacy settings<br>• Recognise acceptable/ unacceptable behaviour<br>• Knowing how to find out about website or game policies | • Teacher guidance on safe internet use and introduction to supportive websites (NSPCC) | | | | | | |