

KS3 National Curriculum

Mapping of the Rabbids Coding levels has been completed against the UK National Curriculum for Computing in Key Stages 1, 2 and 3. Further mapping has been carried out against the CAS Progression Pathways to give an indication of the progression of complexity within the levels. Each level is identified as meeting various NC statements at beginner, intermediate, or advanced level. These levels correspond directly to the CAS progression pathways; All key stages have been mapped to pink, yellow and blue strands,

| | |
|----------|--------------------|
| X | General |
| B | Beginner level |
| I | Intermediate level |

| | Progression Pathway Colour | Progression Pathway Strand |
|---|-----------------------------------|---|
| Digital Literacy | | |
| Uses technology safely | B | Understands the importance of communicating safely online |
| | I | Demonstrates use of computers safely |
| Uses technology respectfully | B | Understands the importance of communicating respectfully online |
| Keeps personal information private | B | Understands the need for keeping personal information private. |
| Identifies where to go for help and support when they have concerns about content or contact on the internet or other online technologies | B | Knows what to do when concerned about content or being contacted. |
| | I | Knows a range of ways to report unacceptable content and contact when online. |
| | | |
| Computer Science | | |
| Understand what algorithms are | B | Understands what an algorithm is |

| | | |
|---|----------|---|
| Knows how they are implemented as programs on digital devices | B | <p>Knows that users can develop their own programs</p> <p>Understands that computers have no intelligence and that computers can do nothing unless a program is executed</p> <p>Recognises that all software executed on digital devices is programmed.</p> |
| | I | Understands that algorithms are implemented on digital devices as programs |
| | A | Creates programs that implement algorithms to achieve |
| Knows that programs execute by following precise and unambiguous instructions | B | <p>Understands that computers need precise instructions.</p> <p>Understands that programs execute by following precise instructions. (AL)</p> |
| Create simple programs | B | Can create a simple program in an environment that does not rely on text e.g. programmable robots |
| | I | Uses arithmetic operators, if statements, and loops, within programs. |
| | A | Uses post-tested loop e.g. 'until', and a sequence of selection statements in programs, including an if, then and else statement. |
| Debug simple programs | B | <p>Demonstrates care and precision to avoid errors. (AL)</p> <p>Executes, checks and changes programs</p> |
| | I | Detects and corrects simple semantic errors i.e. debugging, in programs. |

| | | |
|---|----------|---|
| Use logical reasoning to predict the behaviour of simple programs | I | Uses logical reasoning to predict outcomes. Uses logical reasoning to predict the behaviour of |
| | A | Uses logical reasoning to predict outputs, showing an awareness of inputs |
| | | |
| Information Technology | | |
| Use technology purposefully to create digital content | B | Uses software under the control of the teacher to create digital content |
| | I | Uses a variety of software to present digital content: data and information |
| | A | Presents data and information in digital content Creates digital content to achieve a given goal through combining software packages and internet services to communicate with a wider |
| Use technology purposefully to organise digital content | B | Uses software under the control of the teacher to create digital content |
| | I | Recognises that data can be structured in tables to make it useful. Uses technology with increasing independence to purposefully organise digital content |
| | A | Knows why sorting data in a flat file can improve searching for information. Organises data and information |

| | | |
|---|----------|--|
| Use technology purposefully to store digital content | B | Uses software under the control of the teacher to store digital content using appropriate file and folder names. |
| Use technology purposefully to manipulate digital content | B | Uses software under the control of the teacher to edit digital content |
| | I | Appreciates that programs can work with different types of data Uses a variety of software to manipulate and present digital content: data and information |
| | A | Understands the difference between data and information |
| Use technology purposefully to retrieve digital content | B | Obtains content from the world wide web using a web browser |
| | I | Recognises different types of data: text, number. Navigates the web and can carry out simple web searches to collect digital content |
| | A | Uses filters or can perform single criteria searches for information Collects data and information in digital content Shows an awareness for the quality of digital content collected. |

| | | |
|---|----------|---|
| Recognise common uses of information technology beyond school | B | <p>Recognises that digital content can be represented in many forms.</p> <p>Distinguishes between some of these forms and can explain the different ways that they communicate information</p> <p>Understands that people interact with computers.</p> <p>Knows common uses of information technology beyond the classroom.</p> |
| | I | <p>Recognises that a range of digital devices can be considered a computer.</p> <p>Shares their experiences of technology in school and beyond the classroom</p> |
| | | |
| KS2 National Curriculum | | |
| Digital literacy | | |
| Uses technology responsibly | I | Demonstrates use of computers responsibly |
| Recognises acceptable/unacceptable behaviours | a | Recognises what is acceptable and unacceptable behaviour when using |
| | | |
| Computer Science | | |
| Designs programs that accomplish specific goals | b | is able to express simple linear (non-branching) algorithms symbolically |
| | i | Designs simple algorithms using loops, and selection i.e. if statements. |

| | | |
|--|----------|---|
| | a | <p>Designs solutions (algorithms) that use repetition and two-way selection i.e. if, then and else</p> <p>Uses diagrams to express solutions.</p> |
| Uses sequence in programs | x | |
| Uses selection in programs | i | Uses if statements within programs. |
| | a | Uses a sequence of selection statements in programs, including an if, then and else |
| Uses repetition in programs | i | Uses loops, within programs. |
| | a | Uses post-tested loop e.g. 'until', |
| Works with variables | a | Declares and assigns variables |
| Uses various forms of input and output | b | |
| | i | Recognises and can use a range of input and output devices. |
| | a | Knows that computers collect data from various input devices, including sensors and application software. |
| Detects errors in algorithms | i | Detects and corrects errors i.e. debugging, in algorithms. |
| Corrects errors in algorithms | i | Detects and corrects errors i.e. debugging, in algorithms. |
| Understands computer networks including the internet | a | Understands the difference between the internet and internet service e.g. world wide web |
| | | |
| Information Technology | | |
| Evaluates data and information | b | Talks about their work and makes changes to improve it. |
| | i | Talks about their work and makes improvements to solutions based |

| | | |
|--|-----------------|---|
| | <i>a</i> | Makes appropriate improvements to solutions based on feedback received, and can comment on the success of the |
| Uses a range of digital devices | <i>B</i> | |
| | <i>i</i> | Understands how programs specify the function of a general purpose computer |
| | <i>a</i> | Understands the difference between hardware and application software, and their roles within a computer system. |
| Uses a variety of software (including internet services) | <i>a</i> | Shows an awareness of, and can use a range of internet services e.g. VOIP |
| Combines a variety of software (including internet services) | <i>a</i> | Combines software packages and internet services to communicate with a wider audience e.g. blogging. |