



Hill West Computing Curriculum Overview

Year ONE Outcomes

- Knows and recognises what technology is in school and uses it responsibly.
- Can use an iPad to find and select an app, switching between them using appropriate tools independently.
- Can choose appropriate tools in a program to create art and make comparisons with working non-digitally.
- Is able to write short algorithms and programs for floor robots and predict program outcomes.
- Demonstrates their understanding of programming by reviewing, testing and adjusting their code.
- Can group objects together by a determined characteristic. For example, plants/animals, shapes, colours.
- Recognises that information can be known as data and that we can learn things from it.
- Is able to answer questions about a group of items, identifying their characteristics.
- Is able to create and format text within a digital document, before comparing to writing non-digitally.
- Can design and program the movement of a character on screen to tell stories.
- Knows how to manipulate objects within a document e.g move, resize or turn.
- Knows that they should keep their private information safe and not share it with others, even their friends.

1. iPads in Our Classroom

2. Digital Painting

3. Moving a Robot

4. Grouping Data

5. Creating Media (Movie Maker)

6. Programming Animations

Year TWO Outcomes

- Can identify Information Technology around them and how responsible use improves our world in school and beyond.
- Is able to capture and change digital photographs using software for different purposes.
- Knows that sometimes images have been edited or enhanced using digital software.
- Can create and debug programs using logical reasoning to make predictions about their own or the algorithms of others.
- Is able to collect data in tally charts and organise and present data on a computer.
- Demonstrates the ability to analyse data represented on a computer and make comparisons.
- Can use a computer as a tool to explore rhythms and melodies, and create a musical composition.
- Is able to change the pitch and tone of sounds using digital software.
- Demonstrates the ability to write an algorithm for multiple sprites that achieve the intended goal.
- Knows that there are multiple ways to achieve an outcome when coding and that there are often a range of sequences that can be used.
- Knows that they should tell an adult immediately if something doesn't feel right or safe when using a device.



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- Is aware that not everything they see online can be trusted and that sometimes things are 'faked'.

1. Information Technology Around Us	2. Digital Photography	3. Robot Algorithms
4. Pictograms	5. Making Music	6. Programming Quizzes

Year THREE Outcomes

- Can identify that digital devices have inputs, processes, and outputs, and knows how devices can be connected to make networks.
- Knows that people are connected through technology and can list different ways people communicate using technology.
- Is able to capture and edit digital still images to produce a stop-frame animation that tells a story.
- Can create sequences in a block-based programming language to make music.
- Can use a branching database to find out information.
- Can build and use branching databases to group objects using yes/no questions.
- Is able to create documents by modifying text, images, and page layouts for a specified purpose.
- Is able to copy and paste text from documents and the world-wide web.
- Can write algorithms and programs that use a range of events to trigger sequences of actions utilising multiple backdrops and sprites.
- Is able to create algorithms including costume changes for their sprite.
- Is aware that not all content online is appropriate for children and recognises that many apps/game comes with an age restriction.
- Knows that everyone has the right to be treated kindly online and understands the term cyber bullying.

1. Connecting Computers	2. Stop Frame Animation	3. Sequencing Sounds
4. Branching Databases	5. Desktop Publishing	6. Events and Actions in Programming

Year FOUR Outcomes

- Recognises that the internet is a network of networks and that some devices are connected to the internet 24/7 sending and receiving information.
- Recognises that the internet provides many different services.



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- Can use the appropriate software to capture and layer sounds to create a desired outcome.
- Is able to use editing software to enhance and change an audio file to meet the planned outcome.
- Can use a text-based programming language to explore count-controlled loops when drawing shapes.
- Can use a block-based programming language to explore count-controlled and infinite loops when creating a game.
- Is able to modify a complex given code to create their own procedures.
- Is able to evaluate the use of repetition in a project.
- Can recognise how and why data is collected over time, and use data loggers to carry out an investigation.
- Is able to manipulate digital images by recolouring and retouching them for an intended purpose.
- Understands that information online can be intentionally misleading.
- Knows how to respond to cyber bullying or inappropriate content in a variety of ways such as blocking and reporting.

1. The Internet	2. Audio Editing	3. Repetition in Shapes
4. Data Logging	5. Photo Editing	6. Repetition in Games

Year FIVE Outcomes

- Is able to identify and explain how information is shared between digital systems.
- Can use a search engine to find out specific information by using keywords.
- Knows that search engines can be influenced and that they make money from how they present their results.
- Can use technology efficiently to plan, capture, and edit video footage.
- Is able to combine media files to create an original video.
- Understands conditions and selection using a programmable microcontroller.
- Understand variables within coding and when to include them in a project.
- Demonstrates a proficiency when using a database to order data.
- Can use a database to select relevant information to answer questions.
- Is able to create images in a drawing program including layers and groups of objects.
- Can use selection when programming to design and code an interactive quiz.
- Is able to recognise when something online is being advertised.

1. Systems and Searching	2. Vector Drawing (Keynote)	3. Selection in Quizzes
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4. Flat-File Databases	5. Video Editing (Green Screen)	6. Sensing
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Year SIX Outcomes

- Understands that websites and devices have addresses.
- Understands that data is sent over the internet in packets.
- Is able to collaborate with others online safely.
- Can manipulate 3D shapes using appropriate software, resizing, colouring, duplicating and rotating them.
- Recognises that a program variable has a name and value and can be changed (Scratch).
- Is able to create a simple game using all original coding that can be shared and played by others.
- Can understand that information on a spreadsheet is data and can use cell formatting to organise the data effectively.
- Is able to use simple formula within a spreadsheet to solve a problem.
- Can convert data on a spreadsheet into graphs and charts.
- Uses the internet safely and appropriately showing consideration for others and knows that they are responsible for their actions.
- Knows that things shared online can't always be deleted and leave a digital footprint.
- Understands what age-appropriate material is and knows what to do if something is worries them.

1. Communication and Collaboration	2. 3D Modelling	3. Variables in Games
4. Spreadsheets	5. Computers Past, Present and Future	