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| <p>Year 3</p> | <p>Technology in our lives – <u>Understanding and access key learning platforms: Teams, OneNote, TT Rockstars, Accelerated reader, Century Online</u> Technology in our lives & Multimedia text and images - <u>Desktop publishing</u> Coding and programming - <u>Programming Turtle logo</u> Multimedia text and images - <u>Stop frame animation</u> Coding and programming - <u>Scratch</u></p> |
| <p>Year 4</p> | <p>Coding and programming – <u>Scratch – Events and actions</u> Coding and programming – <u>Repetition in shapes</u> Multimedia text and images- <u>Photo editing</u> Multimedia text and images & Handling Data – <u>Branching databases</u> Coding and programming – <u>Sensing movement (Micro:bit)</u></p> |
| <p>Year 5</p> | <p>Coding and programming - <u>Scratch-Repetition in games</u> Coding and programming - <u>Scratch-Selection in quizzes</u> Technology in our lives & Multimedia text and images - <u>3D modelling: Sketch up</u> Handling Data – <u>Flat file database</u></p> |
| <p>Year 6</p> | <p>Coding and programming - <u>Variables in games</u> Handling Data – <u>Spreadsheets</u> Technology in our lives & Multimedia text and images- <u>Web page creation</u> Multimedia sound and Motion – <u>Video production</u></p> |



Year 3

Technology in our lives –Understanding and access key learning platforms: Teams, OneNote, TT Rockstars, Accelerated reader, Century Online

- Embed the use of MS Teams and OneNote through targeted lessons in class and for homework.

• Desktop publishing

- Use a computer to write
- Add and remove text on a computer
- Changing the look of text and identifying which tools achieve the most appropriate outcome
- Creating documents by modifying a text, images and page layouts for a specified purpose.
- Cut, copy and paste text.
- Format the font.
- Insert images.
- Copy a screenshot into another application.
- Use a secure password.
- Use <ctrl> keyboard shortcuts
- produce a written piece of work using the skills taught through the lessons. Using 'green screen' children can deliver their piece of work using backgrounds to support their ideas. Example – write weather/news report.

Programming Turtle Logo

- Write a program which accomplishes a specific goal.
- Create a program that includes a logical sequence.
- Debug a program they have written

Stop frame animation

- select, use and combine a variety of 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
- 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

Scratch

- Choose relevant backdrops and costumes
- Create an algorithm for each sprite

- Explain what sequence means and demonstrate it in an algorithm
- Introduce programming extensions, through the use of **Pen** blocks
- Describe the purpose of the project, for example, to create sounds when keys are pressed

Year 4

Scratch – Events and actions

- Begin by moving a sprite in four directions (up, down, left, and right).
- Explore movement within the context of a maze
- Introduce programming extensions, through the use of **Pen** blocks
- Draw lines with sprites and change the size and colour of lines.

Designing and coding their own maze-tracing program.

Repetition in shapes

- 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
- 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
- Draw shapes using setpos or setxy.
- Fill shapes in different colours.
- Draw arcs of different sizes as required.

Photo editing

- How digital images can be changed and edited
- How they can then be resaved and reused
- Add to the composition of an image by cloning
- Combine images for a purpose
- The impact editing images can have
- Evaluate the effectiveness of their choices

Branching databases

- create an identification tool using a branching database
- select, use and combine a variety of software 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
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- consider real-world applications for branching databases

Sensing movement (Micro:bit)

- Designing and coding a project that captures inputs from a physical device.
- Design, write and debug programs that accomplish specific goals.
- Use sequence, selection and repetition in programs; working 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.
- 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.
- Introduced to the micro:bit as an input, process, output device that can be programmed.

Explore how if, then, else statements are used to direct the flow of a program.

Year 5

Scratch – Repetition in games

- Move and edit blocks as part of an algorithm
- Program an algorithm as a sequence of game instructions with actions and consequences
- Add additional effects and features, such as sound or point scoring, to enhance the appeal of a game

Scratch- Selection in quizzes

- 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
- Move and edit blocks to create an algorithm
- Explore conditions and how they are used to control actions in a program
- Identify the conditions and outcomes in an 'if... then... else...' statement
- Design a program which uses selection

3D modelling: Sketch up

- Draw 2D shapes or lines
- Draw simple 3D models
- Manipulate 2D shapes into 3D shapes. • Import 3D models from the 3D warehouse
- Use a range of SketchUp tools including: shape, push, pull, orbit, pan, zoom, erase and fill
- Draw and manipulate 3D models independently
- Use inference points to draw lines and shapes
- Use a wide range of SketchUp tools and concepts including: the dimensions toolbar and guides, tape measure, zoom extents and the 3D warehouse

Flat file database

- Use a form to record information
- Compare databases (paper and computer based)
- 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

Year 6

Scratch: Variables in games

- Identify examples of information that is changeable
- Choose how to improve a game by using variables
- 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
- 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

Spreadsheets

- Enter text and numbers into a spreadsheet
- Identify and refer to cells by row and column
- Begin to enter formulae with the SUM function
- Edit data and discuss the effect on results.
- Use further functions including AVERAGE, MIN and MAX
- Create graphs
- Design their own spreadsheet for a specific purpose

Web page creation

- Explore and review existing websites and consider the structure
- Explore common features of a web page
- Consider the ownership and use of images
- 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.

Video production

- Plan additional elements for film-making such as locations and props
- Evaluate whether information is reliable or not – cross-check information using different sources
- Speak clearly into the camera when being recorded
- Frame an appropriate filming shot when interviewing
- Arrange video files to form a complete film
- Structure the timing of sections to meet a given running time
- Use a variety of camera angles and shots to record