



Computing Progression of Skills

Year 5



Year 5 National Curriculum Objectives for Computing: Children will be taught to:

Online Safety (5.2)

- Gain a greater understanding of the impact that sharing digital content can have
- Review sources of support when using technology
- Review children's responsibility to one another in their online behaviour
- Know how to maintain secure passwords
- Understand the advantages, disadvantages, permissions, and purposes of altering an image digitally and the reasons for this
- Show awareness of appropriate and inappropriate text, photographs and videos and the impact of sharing these online
- Learn about how to reference sources in their work
- Search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information
- Ensuring reliability through using different methods of communication.

Spreadsheets (5.3)

- Use formulae within a spreadsheet to convert measurements of length and distance
- Use the count tool to answer hypotheses about common letters in use
- Use a spreadsheet to model a real-life problem
- Use formulae to calculate area and perimeter of shapes
- Create formulae that use text variables
- Use a spreadsheet to help plan a school cake sale.

3D Modelling (5.6)

- Begin to use the 2Design and Make tool
- Explore the effect of moving points when designing
- Design a 3D model to fit certain criteria
- Refine and print a model.

Coding (5.1)

- Review existing coding knowledge
- Begin to be able to simplify code
- Create a playable game
- Understand what a simulation is
- Program a simulation using 2Code
- Know what decomposition and abstraction are in Computer Science
- Take a real-life situation, decompose it and think about the level of abstraction
- Use decomposition to make a plan of a real-life situation
- Understand how to use friction in code
- Begin to understand what a function is and how functions work in code
- Understand what the different variable types are and how they are used differently
- Understand how to create a string
- Begin to explore text variables when coding
- Understand what concatenation is and how it works.

Game Creator (5.5)

- Begin to use the 2DIY 3D tool
- Begin planning a game
- Design the game environment
- Design the game quest to make it a playable game
- Finish and share the game
- Self- and peer evaluate.

Word Processing (5.8)

Microsoft Word / Google Docs

- Know what a word processing tool is for
- Add and edit images to a word document
- Know how to use word wrap with images and text
- Change the look of text within a document
- Add features to a document to enhance its look and usability
- Use tables within MS Word to present information
- Begin to use templates
- Consider page layout including heading and columns

Databases (5.4)

- Learn how to search for information in a database
- Contribute to a class database
- Create a database around a chosen topic.

Concept Maps (5.7)

- Understand the need for visual representation when generating and discussing complex ideas
- Understand the uses of a 'concept map'
- Understand and use the correct vocabulary when creating a concept map
- Create a concept map
- Understand how a concept map can be used to retell stories and information
- Create a collaborative concept map and present this to an audience.

Notes**Children working below objectives listed above****Children who are working above objectives listed above**