

**Milestone 3**  
**Computing Year 5**



By the end of Year 5 pupils should have a 'Expected' understanding, whilst some will have a 'Deep' understanding.

	Basic:	Expected:	Deep:
<b>Computer skills (spans across all units)</b>			
Locate and open any necessary files required			
Know the different buttons on the keyboard and their names (for example enter button, space bar, tab, backspace, shift, control and alt)			
Use some keyboard short cuts for tasks (for example ctrl + V, ctrl + p, ctrl + S, ctrl + a, ctrl + c, etc)			
Type with a fluent speed and reasonable accuracy			
Use both hands to speed up typing skills			
<b>Information Technology</b>			
<b>Unit 5.3 - Spreadsheets</b>			
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.			
<b>Unit 5.4 - Databases</b>			
Learn how to search for information in a database.			
Contribute to a class database.			
Create a database around a chosen topic.			
<b>Unit 5.5 - Game Creator</b>			
Introduce 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.			
<b>Unit 5.6 - 3D Modelling</b>			
Introduced to 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.			
<b>Unit 5.7 - Concept Maps</b>			
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.			

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	Basic:	Expected:	Deep:
<b>Computer Science</b>			
<b>Unit 5.1 - Coding</b>			
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.			
<b>Digital Literacy / Online Safety</b>			
<b>Unit 5.2 - Online Safety</b>			
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.			
Be aware 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.			
Ensure reliability through using different methods of communication.			