

Crow Orchard Primary School



End of Term Expectations (End Points)

Computing

		<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>			
Y E A R 5		Unit 5.2 Online safety Unit 5.1 Coding	Unit 5.3 Spreadsheets	Unit 5.4 Databases	Unit 5.5 Game Creator	Unit 5.6 3D Modelling Unit 5.7 Concept Maps	Unit 5.8 Word processing (with Microsoft Word)
		<u>Digital Literacy</u> Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact					
		<u>Unit 5:2</u> <ul style="list-style-type: none"> • I think critically about the information that I share online both about myself and others. • I know who to tell if I am upset by something that happens online. • I can use the SMART rules as a source of guidance when online. • Children think critically about what they share online, even when asked by a usually reliable person to share something. • Children have clear ideas about good passwords. • Children can see how they can use images and digital technology to create effects not possible without technology. • Children have experienced how image manipulation could be used to upset them or others even using simple, freely available tools and little specialist knowledge. • Children are able to cite all sources when researching and explain the importance of this. • Children select keywords and search techniques to find relevant information and increase reliability • Children show an understanding of the advantages and disadvantages of different forms of communication and when it is appropriate to use each. 					
		<u>Information Technology</u> 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.					

Unit 5:3

- Children can create a formula in a spreadsheet to convert m to cm.
- Children can apply this to creating a spreadsheet that converts miles to km and vice versa.
- Children can use a spreadsheet to work out which letters appear most often.
- Children can use the 'how many' tool.
- Children can use a spreadsheet to work out the area and perimeter of rectangles.
- Children can use these calculations to solve a real-life problem
- Children can create simple formulae that use different variables.
- Children can create a formula that will work out how many days there are in x number of weeks or years.
- Children can use a spreadsheet to model a real-life situation and come up with solutions that can be practically applied.

Unit 5:4

- Children understand the different ways to search a database.
- Children can search a database in order to answer questions correctly.
- Children have designed an avatar for a class database.
- Children have successfully entered information into a class database.
- Children can create their own database on a chosen topic.
- Children can add records to their database.
- Children know what a database field is and can correctly add field information.
- Children understand how to word questions so that they can be effectively answered using a search of their database.

Unit 5:6

- Children know what the 2Design and Make tool is for.
- Children have explored the different viewpoints in 2Design and Make whilst designing a building.
- Children have adapted one of the vehicle models by moving the points to alter the shape of the vehicle while still maintaining its form
- Children have explored how to edit the polygon 3D models to design a 3D model for a purpose.
- Children have refined one of their designs to prepare it for printing.
- Children have printed their design as a 2D net and then created a 3D model.
- Children have explored the possibilities of 3D printing.

Unit 5:7

- Children can make connections between thoughts and ideas.
- Children can see the importance of recording concept maps visually.
- Children understand what is meant by 'concept maps', 'stage', 'nodes' and 'connections'.
- Children can create a basic concept map.
- Children have used 2Connect Story Mode to create an informative text.
- Children have used 2Connect collaboratively to create a concept map.
- Children have used Presentation Mode to present their concept maps to an audience.

Unit 5:8

- Children know what a word processing tool is for.

			<ul style="list-style-type: none"> • Children will be able to create a word processing document altering the look of the text and navigating around the document. • Children know how to add images to a word document. • Children can edit images to reduce their file size. • Children know the correct way to search for images that they are permitted to reuse. • Children can edit their images within Word to best present them alongside text. • Children understand wrapping of images and text. • Children can add appropriate text to their document, formatting in a suitable way. • Children can use a style set in Word. • Children can use bullet points and numbering. • Children can add text boxes and shapes. • Children can consider paragraph formatting such as line spacing, drop capitals. • Children can add hyperlinks to an external website. • Children can add tables to present information. • Children can edit properties of tables including borders, colours, merging cells, adding and removing rows and columns • Children can add word art for a heading. • Children can use a Word template and edit it appropriately.
<p style="text-align: center;"><u>Computer science</u></p> <p style="text-align: center;">Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p style="text-align: center;">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.</p>			

Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.

Unit 5:1

- Children can use sketching to design a program and reflect upon their design.
- Children can create code that conforms to their design.
- Children can explain how their program simulates a physical system.
- Children can select the relevant features of a situation to incorporate into their simulation by using decomposition and abstraction.
- Children can reflect upon the effectiveness of their simulation.
 - Children can explain what a variable is in programming. Children can set/change the variable values appropriately.
- Children know some ways that text variables can be used in coding.
- Children can create a game which has a timer and score pad.
- Children can use variables to control the objects in the game.
 - Children can create loops using the timer and If/else statements.
 - Children can include buttons and objects that launch windows to websites and programs.
- Children can code a program that informs others.

Unit 5:5

- Children can review and analyse a computer game.
- Children can describe some of the elements that make a successful game.
- Children can begin the process of designing their own game.
- Children can design the setting for their game so that it fits with the selected theme.
- Children can upload images or use the drawing tools to create the walls, floor and roof.
- Children can design characters for their game.
- Children can decide upon, and change, the animations and sounds that the characters make.
- Children can make their game more unique by selecting the appropriate options to maximise the playability.
- Children can write informative instructions for their game so that other people can play it
- Children can evaluate their own and peers' games to help improve their design for the future.

Kindness

Curiosity

Creativity

Courage

Proud

Honesty

Aspire

Resilience