

APS CURRICULUM – Computing			YEARLY OVERVIEW
	Knowledge, Skills and understanding breakdown		
Year 3			
National Curriculum Links	Algorithms and Programs (Computer Science)	Data Retrieving and Organising (Information Technology)	Communicating (Digital Literacy).
	Can they experiment with variables to control models? Can they give an on-screen robot directional instruction? Can they experiment with events and actions? Can they use hide and wait Can they write more complex programs?	Can they review images on a camera and delete unwanted images? Have they experienced downloading images from a camera into files on the computer? Can they use photo editing software to crop photos and add effects? Can they manipulate sound when using simple recording story boarding?	Can they use the email address book? Can they open and send an attachment?
Coverage	Coding units Spring 1 Summer 2	Autumn 1 – Stop frame animation	Autumn 2 – Connecting computers
	Using the internet	Databases	Presentation
	Can they find relevant information by browsing a menu? Can they search for an image, copy and paste it into a document? Can they use ‘Save picture as’ to save an image to the computer? Can they copy and paste text into a document? Do they begin to use note making skills to decide what text to copy?	Can they input data into a prepared database? Can they sort and search a database to answer simple questions? Can they use a branching database?	Can they create a presentation that moves from slide to slide and is aimed at a specific audience? Can they combine text, images and sounds and show awareness of audience? Do they how to manipulate text, underline text, centre text, change font and size and save text to a folder?
Coverage	Summer 1 – Desktop publishing	Spring 2 – Branching databases	Summer 1 – Desktop publishing
Can they search by keyword using a child friendly search engine?			

Can they search by keyword using a child friendly search engine?
 Can they bookmark a page into your favourites?
 Can they contribute to a class blog?
 Can they use repeat command in logo to create a pattern?

Year 4

National Curriculum Links	Algorithms and Programs (Computer Science)	Data Retrieving and Organising (Information Technology)	Communicating (Digital Literacy).
	Can they use repeat instructions to draw regular shapes on screen, using commands? Can they experiment with variables to control models? Can they make turns specifying the degrees? Can they give an on-screen robot specific directional instructions that takes them from x to y? Can they make accurate predictions about the outcome of a program they have written?	Can they capture images using webcams, screen capture, scanning, visualiser and internet? Can they choose images and download into a file? Can they download images from the camera into files on the computer? Can they copy graphics from a range of sources and paste into a desktop publishing program?	Do they appreciate the benefits of ICT to send messages and to communicate? Can they use the automatic spell checker to edit spellings?
Coverage	Autumn 1 - Programming	Summer 1 – Photo editing	Spring 1 – Networks and the internet
Resources	Using the internet	Databases	Presentation
	Can they use a search engine to find a specific website? Can they use note-taking skills to decide which text to copy and paste into a document? Can they use tabbed browsing to open two or more web pages at the same time? Can they open a link to a new window? Can they open a document (pdf) and view it?	Can they input data into a prepared database? Can they sort and search a database to answer simple questions? Do they recognise what a spread sheet is? Can they use the terms cells, rows and columns? Can they enter data, highlight it and make bar charts?	Can they create a lengthy presentation that moves from slide to slide and is aimed at a specific audience? Can they insert sound recordings into a multi media presentation? Do they know how to manipulate text, underline text, centre text, change font and size and save text to a folder? CAD -
Coverage	Spring 1/ Cross curricular	Spring 2 – Data logging	Summer 1 – Photo editing/ Cross curricular
Year 4 – more challenging.			

- Follow the school's safer internet rules.
- Recognise the difference between the work of others which has been copied (plagiarism) and re-structuring and re-presenting materials in ways which are unique and new.
- Begin to identify when emails should not be opened and when an attachment may not be safe.
- Explain how to use email safely.
- Use different search engines

E-safety

Knowledge & understanding

- Understand the need for rules to keep them safe when exchanging learning and ideas online.
- Recognise that information on the internet may not be accurate or reliable and may be used for bores, manipulation or persuasion.
- Understand that the internet contains fact, fiction and opinion and begin to distinguish between them.
- Use strategies to verify information, e.g. cross-checking.
- Understand the need for caution when using an internet search for images and what to do if they find an unsuitable image.
- Understand that copyright exists on most digital images, video and recorded music.
- Understand the need to keep personal information and passwords private.
- Understand that if they make personal information available online it may be seen and used by others.
- Know how to respond if asked for personal information or feel unsafe about content of a message.
- Recognise that cyber bullying is unacceptable and will be sanctioned in line with the school's policy.
- Know how to report an incident of cyber bullying.
- Know difference between online communication tools used in school and those used at home.
- Understand the need to develop an alias for some public online use.
- Understand that the outcome of internet searches at home may be different than at school.

Skills

- Follow the school's safer internet rules.
- Recognise the difference between the work of others which has been copied (plagiarism) and re-structuring and re-presenting materials in ways which are unique and new.
- Begin to identify when emails should not be opened and when an attachment may not be safe.
- Explain how to use email safely.
- Use different search engines

