IT

Route map 2024/25

Cisco Networking Academy

Acronis Cyber Security Partner School

Computing / IT Route Map

Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7

Rules and responsibilities

Introduction to ICT

Half Term 21 Oct – 1 Nov

Wk8	Wk9	Wk10	Wk11	Wk12	Wk13	Wk14

Cyber crime

Programming

Christmas 23 Dec – 3 Jan

Wk15	Wk16	Wk17	Wk18	Wk19	Wk20	Wk21

Cyber defence

Programming

Half Term 24 – 28 Feb

Wk22	Wk23	Wk24	Wk25	Wk26	wk27

Use of software – photo imaging or web building

Easter 14 Apr – 25 April (in BH)

Wk28	Wk29	Wk30	Wk 31

Use of software – photo imaging or web building

Half Term 26 – 30 May

Wk32	Wk33	Wk34	Wk35	Wk36	Wk37	Wk38

Project or CISCO academy

Half Term 1

	W3	W4	W5	W6	W7
KS3 (5-6)	**Intro to IT suite** **Safe use of PC** **Intro to Office 365** As UKS2 and Students will be able to name the packages and state what they are best used for. They will create a document or presentation and save it. They will file it within a structure and will search for it by name.	**Internet and WWW – functions** As UKS2 and Students will be able to state that the internet can be used for commerce, to collaborate, (Covid) and outline some of the tools and programmes available	**Safe use of IT outdoors** **Collect information** Students will design and create a simple form to capture the data collected.	**General online safety** **Analyse information** As UKS2 and Students will be able to identify risks, identify how to avoid or manage these and state particular strategies and protective factors/programmes. Students will create a range of charts using the set of data they have collected and select the most appropriate to demonstrate their conclusion.	**Safe gaming** **End topic project** Students will be able to state that 'buying' items in an online game can be linked to gambling in adulthood.
Upper KS2 (3-4)	As LKS2 and Students will open the main components of office 365, will load and save a file in each and will rename and refind a file.	As LKS2 and Students will be able to perform searches for given items and select from that returned the most appropriate. They will be able to state that search results can be ranked more highly through advertising	As LKS2 and Students will create their own data sheet using a basic excel sheet.	As LKS2 and Students will be able to name the main risks from using the www and how to manage them. Students will create 2 different charts using the data collected, draw conclusions and select the most appropriate to represent their conclusion.	Students will be able to identify an additional risk of items which are for sale in games. They will be able to state that the items are virtual and of no actual monetary value. Students will research which games do this and the appropriate age for players (results in a table).
Lower KS2(1) (1-2)	Students will adjust their workstation, log on using password and ID and state that they should not share this. Students will log into a pre loaded powerpoint and use the mouse to control the show	Students will be able to state that the www is a service based on the internet which is a communications network of connected computers and other devices and that not all information on the internet is true or accurate. They will be able to perform a search for a simple item.	Use of IT outdoors – briefing Students will be able to complete a data sheet counting specific (outdoor) data in excel. Internet search repeat Link to maths, PSHE	Students will be able to state basic rules for staying safe online; They will construct a simple chart in excel based on the data previously collected, and draw a simple conclusion (more/most/least/bigger etc.) Link to maths, PSHE	Students will be able to identify the main risk of online gaming as online chat from a stranger and that there are controls that players and parents can put in place. Students will explore a small number of games and research which code they are based on and who created them. (Results in a table using excel) Link to maths, PSHE

Half Term 2

	Wk8	Wk9	Wk10	Wk11	Wk12	Wk13	Wk14
				Cyber crime (theory)			
				Programming basics (practical)			
KS3 (5-6)	Cyber crime facts Programming introduction	Scamming Programming introduction	Introduction to Phishing Introduction to algorithms	Introduction to spoofing Code inputs and outputs	Introduction to identity theft Sequencing and repetition	Introduction to ransomwear Logic in programming	Introduction to viruses Create a simple programme
Upper KS2 (3-4)							
Lower KS2(1) (1-2)							

Half Term 3

	Wk15	Wk16	Wk17	Wk18	Wk19	Wk20	Wk21

Cyber defence- theory

Programming basics – practical

	Wk15	Wk16	Wk17	Wk18	Wk19	Wk20
KS3 (5-6)	Parental controls Protective software Coding	Information sharing and privacy Coding	Common sense and logic Coding	Guidance for others project Coding	Guidance for others project Debugging	Guidance for others project Review, peer evaluation and improve
Upper KS2 (3-4)						
Lower KS2(1) (1-2)						

Half Term 4

	Wk22	Wk23	Wk24	Wk25	wk26	Wk27
	Big Question - What is AI and how does it affect me (theory)					
	Use of software – photo imaging or web building (practical)					
KS3 (5-6)	Intro to AI Intro to package Links to art	Intro to AI Basic techniques Layering	Places AI is used Basic techniques Colour and tone	Places AI is used Basic techniques Direct editing	Ethics of AI Extended techniques Shadows and shapes	Ethics of AI Extended techniques Cloning
Upper KS2 (3-4)						
Lower KS2(1) (1-2)						

Half Term 5

	Wk29	Wk29	Wk30	wk31
	Big Question - What is AI and how does it affect me (theory)			
	Use of software – photo imaging or web building (practical)			
KS3 (5-6)	Positive impact of AI	Positive impact of AI	Risks of AI	Photograph and project **Links to DofE** **Art**
Upper KS2 (3-4)	Extended techniques Background removal/green screen	Extended techniques Airbrush	Combined techniques	
Lower KS2(1) (1-2)				

Half Term 6

Wk32	Wk33	Wk34	Wk35	Wk36	wk37	Wk38

Software Project- from one of the two disciplines covered (KS2)
Three disciplines (KS3)

KS3 (5-6)						
Upper KS2 (3-4)						
Lower KS2(1) (1-2)						

Key vocabulary

	HT1&2	HT3	HT4	HT5	HT6
KS3 (5-6) As UKS2 AND	Data breach Identity theft			Software specific	
Upper KS2 (3-4) As LKS2 AND	Phishing Scamming Virus Cloning Spoofing Ransomware	Parental controls Privacy Data		Software specific	
Lower KS2(1) (1-2)	IT PC Computer Printer Wifi Internet Gaming Crime Cyber Safe Software User ID Virus World wide web Spreadsheet Document Presentation Database AI	Debug Algorithm Logic Input Output Rule Sequence Command Boolean Scrip	Edit Layer Clone Airbrush Select Paint Tools Exclude Format Cisco	Software specific	