

Computing Curriculum Progression

Through our computing curriculum at RAB we aim that by the end of year 6 children:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
E-safety	I know not to share my name /address online	I know to tell an adult if I see something I don't like	I know not to talk to strangers online	I know not to share personal information online	I know who to tell if I feel unsafe online	I understand how to stay safe on social media sites/apps	I understand how my online behaviour affects others
Computer Science Computers and the internet		*choose a piece of technology to do a job *recognise that some technology can be used in different ways *identify the main parts of a computer *use a mouse in different ways *use a keyboard to type *use the keyboard to edit text *show how to use technology safely.		*identify input and output devices *explain that a computer system accepts an input and processes it to produce an output *explain how a computer network can be used to share information *identify network devices around me *explain how networks can be connected to each other.	*describe how networked devices, connect to make up the internet *explain how websites can be shared, stored, accessed and added to on the world wide web.	*describe the input and output of a search engine *demonstrate that different search terms produce different results. *evaluate the results of search terms.	

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Programming Programming and algorithms		*enact a given word to predict the outcome of a command on a device *list which commands can be used on a given device *run a command on a floor robot *choose a command for a given purpose *choose a series of words that can be enacted as a program *choose a series of commands that can be run as a program *build a sequence of commands in steps *combine commands in a program *run a program on a device. *choose a series of words that can be enacted as a program. *choose a series of commands that can be run as a program. *run a program on a device.	*choose a series of words that can be enacted as a sequence. *choose a series of instructions that can be run as a program *create a program *trace a sequence to make a prediction. *run a program on a device. *debug a program that I have written. *choose a series of words that can be enacted as a sequence *explain what happens when we change the order of instructions *choose a series of commands that can be run as a program. *track a sequence to make a prediction *test a prediction by running the sequence *create and debug a program that I have written *run a program on a device	*build a sequence of commands *combine commands in a program *order commands in a program *create a sequence of commands to produce a given outcome *build a sequence of commands *combine commands in a program *order commands in a program *create a sequence of commands to produce a given outcome.	*list an everyday task as a set of instructions including repetition *use an indefinite loop to produce a given outcome *use a count-controlled loop to produce a given outcome. *plan a program that includes appropriate loops to produce a given outcome *recognise tools that enable more than one process to be run at the same time (concurrency) *create two or more sequences that run at the same time.	*create a condition-controlled loop - choose a condition to use in a program *use a condition in an 'if...then...' statement to start an action *use selection to switch the program flow in one of two ways. *use 'if...then...else...' to switch program flow in one of two ways. *use a condition in a 'if...then...else...' statement to produce given outcomes.	

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Digital literacy Creating media (and use of tools)		*create a picture using freehand tools *use shape and line tools when precision is needed *use a range of paint colours *use the fill tool to colour an enclosed area *use the undo button to correct a mistake *combine a range of tools to create a piece of artwork. *use letter, number, and space keys to enter text into a computer *use punctuation and special characters *select text *use the backspace key to remove text *position the text cursor in a chosen location *choose options to achieve a desired effect *change the appearance of text on a computer *use undo	*capture a digital image *take photographs in both landscape and portrait format *view photographs on a digital device *decide which photographs to keep *hold the camera still to take a clear photograph *use zoom to change the composition of a photograph *consider lighting before taking a photograph *use simple editing tools to change the appearance of a photograph *improve a photograph by retaking it	*show that page orientation can be changed *add text to a placeholder *organise text and image placeholders in a page layout *add and remove image to and from placeholders *edit text in a placeholder *move resize and rotate images *choose fonts and apply effects to text *review a document		*add an object to a vector drawing *select one object or multiple objects *delete objects *move objects between the layers of a drawing *group and ungroup selected objects *duplicate objects using copy and paste *modify objects *combine options to achieve a desired effect *create a vector drawing for a given purpose.	*review an existing website (navigation bars, header) *create a new blank web page *add text to a web page *set the style of text on a web page *change the appearance of text *embed media in a web page *add web pages to a website *preview a web page (different screen sizes) *insert hyperlinks between pages *insert hyperlinks to another site.

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Digital literacy Data and effective use of tools			*show I can enter data on a computer *recognise that people, animals and objects can be described by attributes *use a computer to view data in different formats *use pictograms to answer single-attribute questions *use a computer to answer comparison questions (graphs, tables)		*use a digital device to collect data automatically *choose an appropriate timeframe when collecting data automatically *use a set of logged data to find information *use a computer program to sort data by one attribute *export information in different formats		*calculate data using a formula for each operation *use functions to create new data *use existing cells within a formula *choose suitable ways to present spreadsheet data
Computer skills	Use of mouse to navigate. Right clicking and double clicking	Beginning to have an awareness of keyboard	Logging on independently	Touch typing (increased fluency)	Learning to save and retrieve work independently	Secure understanding of algorithms and debugging	Using a range of programs for different purposes