purple mash

Year 6
Skills Check

Progression Overview
&
'I can' skills
statements

2 simple

Contents

Introduction

The purpose of this document is to provide a mechanism for children to identify the progress they are making against core skills.

The skills have been mapped against the National Curriculum and the Purple Mash Scheme of Work. We have provided helpful reference codes to each statement and the unit(s) this most explicitly relates to.

This document has been separated into year groups containing a skills progression overview for teachers and individual child friendly 'I can' statements for each computing strand.

Layout and Use

Teachers have a handy year group progression overview to refer to throughout the year. Each progression overview is sectioned into strands, national curriculum objectives and outcome statements.

Strands

N.C Statements

Pupil Outcomes

	Computer Science			Information Technology	Digital Literacy	
Statement	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	Create and debug simple programs.	Use logical reasoning to predict the behaviour of simple programs.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Recognise common uses of information technology beyond school.	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.
Outcome	Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program.	Children can work out what is wrong with a simple algorithm when the steps are out of order, e.g. The Wrong Sandwich in Purple Mash and can write their own simple algorithm, e.g. Colouring in a Bird activity. Children know that an unexpected outcome is due to the code they have created and can make logical attempts to fix the code, e.g. Bubbles activity in 2Code.	When looking at a program, children can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. Children can, for example, interpret where the turtle in 2Go challenges will end up at the end of the program.	Children are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work and follow simple instructions to access online resources, use Purple Mash 2Quiz example (sorting shapes), 2Code design mode (manipulating backgrounds) or using pictogram software such as 2Count.	Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can make a distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair.	Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons. Children take ownership of their work and save this in their own private space such as their My Work folder on Purple Mash.

Pupils have 'I can' progression statements. For each term they can colour code the monkey, self-assessing at either: Sometimes, mostly, or always.

There is also space for teachers to add additional information against each progression statement.

Y1 Pupil 'I Can' Statements for Computing SOW Skills - Computer Science

Name: **Class:**

= Sometimes   = Mostly   = Always

	Unit Theme	'I can'	Aut	Spr	Sum	Teacher Comments
Computer Science	1.4-Lego Builders	I can explain that an algorithm is a set of instructions.				
		I know that an algorithm written for a computer is called a program.				
	1.5-Maze Explorers	I can work out what is wrong when the steps are out of order in instructions.				
		I can say that if something does not work how it should it is because my code is incorrect.				
	1.7-Coding	I can try and fix my code if it isn't working properly.				
		I can make good guesses of what is going to happen in a program. For example, where the turtle might go.				

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Y6 Teacher Progression Overview: N.C. Statements & skills

	Computer Science				Information Technology		Digital Literacy
Statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	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.	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.	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.	Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact.
Outcome	Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction) and then decomposing them in a logical way using their knowledge of possible coding structures and applying skills from previous programs. Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.	Children translate algorithms that include sequence, selection and repetition into code and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures, including nesting structures within each other. Coding displays an improving understanding of variables in coding, outputs such as sound and movement, inputs from the user of the program such as button clicks and the value of functions.	Children are able to interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the program as a whole.	Children understand and can explain in some depth the difference between the internet and the World Wide Web. Children know what a WAN and LAN are and can describe how they access the internet in school.	Children readily apply filters when searching for digital content. They are able to explain in detail how credible a webpage is and the information it contains. They compare a range of digital content sources and are able to rate them in terms of content quality and accuracy. Children use critical thinking skills in everyday use of online communication.	Children make clear connections to the audience when designing and creating digital content. The children design and create their own blogs to become a content creator on the internet, e.g. 2Blog. They are able to use criteria to evaluate the quality of digital solutions and are able to identify improvements, making some refinements.	Children demonstrate the safe and respectful use of a range of different technologies and online services. They identify more discreet inappropriate behaviours through developing critical thinking, e.g. 2Respond activities. They recognise the value in preserving their privacy when online for their own and other people's safety.

Y6 Pupil 'I Can' Statements for Computing SOW Skills - Computer Science

 = Sometimes   = Mostly   = Always **Name:**   **Class:**

	Unit Theme	'I can'	Aut	Spr	Sum	Teacher Comments
Computer Science	**6.1-Coding**	I can turn a complex programming task into an algorithm. (6.1)				
		I can identify the important aspects of a programming task (abstraction). (6.1)				
	6.2-Online Safety	I can decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work. (6.1)				
		I can test and debug my program as I work on it and use logical methods to identify a cause of a bug. (6.1)				
	6.4-Blogging	I can identify a specific line of code that is causing a problem in my program and attempt a fix. (6.1)				
		I can translate algorithms that include sequence, selection and repetition into code and nest these structures within each other. (6.1)				
		I can use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object (6.1, 6.7)				
	6.6-Networks	I can interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole. (6.1)				
		I can explain the difference between the internet and the World Wide Web. (6.2, 6.4, 6.6)				
	6.7-Binary	I can explain what a WAN and LAN is and describe the process of how access to the internet in school is possible. (6.2, 6.6)				

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Y6 Pupil 'I Can' Statements for Computing SOW Skills - Information Technology

![Sometimes] = Sometimes ![Mostly] = Mostly ![Always] = Always **Name:** **Class:**
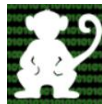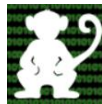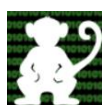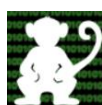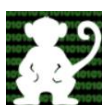
	Unit Theme	'I can'	Aut	Spr	Sum	Teacher Comments
Information Technology	6.1-Coding	I can use filters when searching for digital content. (6.2,6.9)				
	6.2-Online Safety	I can explain in detail how accurate and reliable a webpage and its content is. (6.2)				
	6.3-Spreadsheets	I can compare a range of digital content sources and rate them in terms of content quality and accuracy. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)				
	6.4-Blogging	I can consider the intended audience carefully when I design and make digital content. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)				
	6.5-Text Adventures	I can design and create my own online blogs. (6.4)				
	6.7-Quizzing					
	6.9-Spreadsheets	I can use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements. (6.1, 6.3, 6.4, 6.5, 6.7,6.9)				

Y6 Pupil 'I Can' Statements for Computing SOW Skills - Digital Literacy

 = Sometimes   = Mostly   = Always **Name:** **Class:**

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	Unit Theme	'I can'	Aut	Spr	Sum	Teacher Comments
Digital Literacy	6.2-Online Safety 6.4-Blogging	I can demonstrate safe and respectful use of a range of different technologies and online services. (6.2, 6.4)				
		I can identify more discrete inappropriate behaviours online. For example, someone who may be trying to groom me or someone else. (6.2)				
		I can use critical thinking to help me stay safe online. (6.2)				
		I know the value of protecting my privacy and others online. (6.2, 6.4)				

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