SWITCHEDON Computing

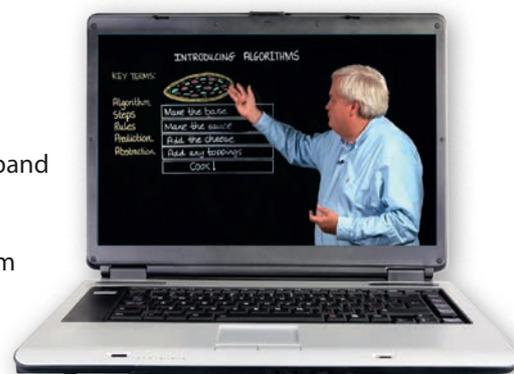# *Switched on Computing* knowledge and skills audit form

Identify gaps in your knowledge and skills for computing with this handy audit form taken from QuickStart Computing.

How to use

Step 1 Identify how confident you are in each area of the Computing PoS.

Step 2 In the areas where you are not as confident or where you would like to expand your knowledge and skills, go to the relevant *Switched on Computing* unit.

Step 3 Watch a short CPD video to gain subject knowledge for the new curriculum

What is QuickStart Computing?

The QuickStart Computing Guide is a free CPD toolkit for teachers that has been produced by CAS (Computing at School) and funded by the Department for Education and Microsoft. You can download your free copy from www.quickstartcomputing.co.uk

	I am not confident I can do this.	I am confident I can do this.	I am very confident I can do this	Switched on Computing unit where this knowledge/skill is covered
Section 1: Computer science				
I can explain what an algorithm is (KS1: S1)*				1.1, 1.2, 1.4, 2.1, 2.2
I can explain how algorithms are implemented as programs on digital devices (KS1: S1)				2.1, 2.2
I can explain how programs execute by following precise and unambiguous instructions (KS1: S1)				1.1, 1.2, 2.1, 2.2
I can create simple programs (KS1: S2)				1.1, 2.1
I can debug simple programs (KS1: S2)				1.1, 2.1
I can design programs that accomplish specific goals (KS2: S1)				3.1, 4.1, 4.2, 5.1, 6.5
I can write programs that accomplish specific goals (KS2: S1)				3.1, 4.1, 5.1, 6.5
I can debug programs that accomplish specific goals (KS2: S1)				3.1, 3.2, 4.1, 4.2, 5.1, 6.5
I can control or simulate physical systems (KS2: S1)				3.2, 4.2
I can solve problems by decomposing them into smaller parts (KS2: S1)				3.1, 3.5, 3.6, 4.1, 4.2, 4.5, 5.1, 5.3, 6.2, 6.5
I can use sequence in programs (KS2: S2)				3.1, 4.1, 4.3, 5.1, 5.3
I can use selection in programs (KS2: S2)				4.1, 4.3, 5.1, 5.3
I can use repetition in programs (KS2: S2)				3.1, 4.1, 4.3, 5.1
I can work with variables (KS2: S2)				3.2, 4.1, 5.1

*The relevant statement from the Computing PoS has been referenced in brackets.

www.switchedoncomputing.co.uk

	I am not confident I can do this.	I am confident I can do this.	I am very confident I can do this	Switched on Computing unit where this knowledge/skill is covered
I can work with various forms of input (KS2: S2)				3.3, 3.5, 4.1, 4.2, 4.6, 6.1
I can work with various forms of output (KS2: S2)				3.1, 3.5, 4.1, 4.2, 4.3, 6.1
I can use logical reasoning to predict what will happen when I run a program (KS1: S3)				1.1, 1.2, 2.1, 2.2
I can use logical reasoning to predict what will happen when I read through computer code (KS1: S3)				1.1, 1.2, 2.1, 2.2
I can use logical reasoning to explain how some algorithms work (KS2: S3)				3.1, 3.2, 4.1, 4.6, 5.1, 5.2, 5.3, 6.2, 6.4, 6.5
I can use logical reasoning to detect errors in algorithms (KS2: S3)				3.1, 4.1, 4.2, 5.1, 6.2
I can use logical reasoning to correct errors in algorithms (KS2: S3)				3.1, 3.2, 4.1, 4.2, 6.2
I can use logical reasoning to detect errors in programs (KS2: S3)				3.1, 3.2, 4.1, 4.2, 5.1
I can use logical reasoning to correct errors in programs (KS2: S3)				3.1, 3.2, 4.1, 4.2
I can explain how computer networks work, including the internet (KS2: S4)				3.3, 3.4, 3.6, 4.4, 6.1
I can explain how computer networks can provide multiple services such as the World Wide Web (KS2: S4)				3.5, 3.6, 4.4, 5.2, 5.5
I can explain how search results are selected (KS2: S5)				5.4
I can explain how search results are ranked (KS2: S5)				6.1
Section 2: Information technology				
I can use technology purposefully to create digital content (KS1: S4)				1.2, 1.3, 1.4, 1.5, 1.6, 2.3, 2.4, 2.5, 2.6
I can use technology purposefully to organise digital content (KS1: S4)				1.2, 1.3, 1.4, 1.5, 1.6, 2.3, 2.4, 2.5, 2.6
I can use technology purposefully to store digital content (KS1: S4)				1.3, 1.5, 1.6, 2.5, 2.6
I can use technology purposefully to retrieve digital content (KS1: S4)				1.2, 1.3, 1.4, 1.5, 1.6, 2.4, 2.5
I can use technology purposefully to manipulate digital content (KS1: S4)				1.2, 1.3, 1.4, 1.6, 2.3, 2.4, 2.5, 2.6
I can explain how to use search technologies effectively (KS2: S5)				4.5, 5.4, 5.6, 6.1
I can select, use and combine a variety of software (including internet services) on a range of digital devices (KS2: S6)				3.3, 4.4, 4.5, 6.1, 6.3, 6.4, 6.6
I can design a range of programs, systems and content that accomplish given goals (KS2: S6)				3.3, 3.6, 5.3, 5.6, 6.1, 6.2, 6.4
I can create a range of programs, systems and content that accomplish given goals (KS2: S6)				4.3, 5.1, 5.5, 6.1, 6.2, 6.6
I can collect, analyse, evaluate and present data (KS2: S6)				3.6, 4.6, 6.1, 6.3
I can collect, analyse, evaluate and present information (KS2: S6)				3.3, 4.4, 4.5, 4.6, 5.4, 5.5, 5.6, 6.1, 6.3
Section 3: Digital literacy				
I can discuss common uses of information technology beyond school (KS1: S5)				1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.2, 2.3, 2.4, 2.5, 2.6
I can explain how to use technology safely (KS1: S6)				1.6, 2.2, 2.5, 3.1, 3.3, 3.4, 3.5, 4.4, 4.5, 5.2, 5.4, 5.5, 6.2
I can explain how to use technology respectfully (KS1: S6)				1.3, 1.4, 1.5, 1.6, 2.2, 2.4, 2.5, 3.5, 3.6, 4.4, 4.5, 5.4, 5.5, 6.2
I can explain how to use technology responsibly (KS2: S7)				3.3, 3.4, 3.5, 3.6, 4.4, 4.5, 5.2, 5.4, 5.5, 6.2, 6.6
I can explain how to keep personal information private (KS1: S6)				1.4, 2.3
I can explain where to go for help and support when pupils have concerns about content or contact (KS1: S6)				1.3, 1.4, 2.2, 2.3, 2.4, 2.5, 3.4, 3.5, 5.4, 5.5
I can discuss the difference between acceptable and unacceptable behaviour online (KS2: S7)				3.3, 3.4, 4.3, 4.5, 5.4, 5.5, 6.2, 6.3, 6.4, 6.6
I understand what opportunities computer networks offer for communication and collaboration (KS2: S4)				3.5, 3.6, 4.3, 4.5, 5.2, 5.4, 5.5
I can explain how to be discerning in evaluating digital content (KS2: S5)				3.1, 3.5, 3.6, 4.3, 4.5, 5.3, 5.4, 5.5, 6.1, 6.2, 6.4