Jerry Clay Academy: Computing – Key Stage Overview

KS1					
Algorithms	**Programming**	**Creating digital content**	**Logical reasoning**	**Use of technology**	**E-Safety**
• Understand what algorithms are • Understand that algorithms are implemented as programs on digital devices • Understand that programs execute by following precise and unambiguous instructions	• Create simple programs • Debug simple programs	• Use technology purposefully to create digital content • Use technology purposefully to store digital content • Use technology purposefully to retrieve digital content • Use technology purposefully to organise digital content • Use technology purposefully to manipulate digital content	• Use logical reasoning to predict the behaviour of own programs • Use logical reasoning to predict the behaviour of others' programs	• Recognise common uses of information technology at home • Recognise common uses of information technology outdoors	• Use technology safely • Keep personal information private • Use technology respectfully • Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

Jerry Clay Academy: Computing – Key Stage Overview

KS2				
Algorithms	**Programming**	**Computer networks**	**Software**	**E-Safety**
- Use logical reasoning to detect and correct errors in programs - Use logical reasoning to explain how some simple algorithms work - Use logical reasoning to detect and correct errors in algorithms	- Write programs that accomplish specific goals - Design programs that accomplish specific goals - Debug programs that accomplish specific goals - Control or simulate physical systems - Solve problems by decomposing them into smaller parts - Use sequence in programs - Use selection in programs - Use repetition in programs	- Understand how computer networks can provide multiple services, such as the world wide web - Understand computer networks, including the internet - Understand the opportunities computer networks offer for communication - Understand the opportunities computer networks offer for collaboration	- Select, use and combine software - Design and create content - Design and create systems - Collect, analyse, evaluate and present data - Collect, analyse, evaluate and present information	- Use technology responsibly - Identify a range of ways to report concerns about contact - Identify a range of ways to report concerns about content - Recognise acceptable/unacceptable behaviour

	• Work with variables • Work with various forms of input and output			