



Year 2 Computing

Autumn 2: We Are Games Testers (Working out the rules for games)

Session	National Curriculum Statement	WALT	Learning Outcomes (Success Criteria)	Resources	Vocabulary
<p>Subject Cultural Capital = Using & Applying computing knowledge to solve problems</p> <p>Differentiation = please see the differentiation for the EXC EM & SEND (Please see SEND pupils IEPs when planning)</p> <p>Minimum expectations to check for understanding during lessons = targeted questioning / mini whiteboards/ peer talk /thumb signs</p> <p>Long term memory skill development strategy = LAST, LAST, LAST linked to the WALT</p> <p>Literacy & Numeracy skills development = ICT vocabulary bank linked to the WALT & include numeracy skills where they are linked to the WALT in the weekly planning</p>					
<p>Online Safety: Although the games mentioned in this unit are appropriate for pupils in Year 2, there are concerns about the violent nature of some games. Choosing games wisely, including observing PEGI age restrictions and playing in moderation, are aspects of the safe and respectful use of technology that pupils learn about in this unit. The Scratch online community is generally a safe, well moderated space, but if pupils encounter content or comments which cause distress, make sure they know what to do: typically turn off the screen/ turn over the tablet over and let an adult know straight away. Content and comments on the Scratch site can be flagged as inappropriate to the moderators. This provides an opportunity to learn about where to go for help and support when they have concerns about content or contact.</p>					
1. Addition race game	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	To work out the rules (algorithm) for a simple arithmetic game	Children can play a digital game and predict what happens when they get and answer right or wrong. Children can identify the algorithm the programmer has coded.	iPads Chromebooks Scratch	Algorithm Source code Remix
2. Fish game	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	To work out the rules (algorithm) for a simple chase game	Children can decompose a digital game. Children begin to use language like, <i>If this.. then that..</i>	iPads Chromebooks Scratch	Algorithm Source code Remix Sprites Input Output Repetition

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3. Tennis	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	To work out the rules (algorithm) for a two-player sports game	Children can use logical reasoning to predict what will happen in a game. Children can work out a game's algorithms and record observations. Children can give ideas for a game's improvement.	iPads Chromebooks Scratch	Algorithm Source code Remix Sprites Input Output Repetition
4. Duck shooting	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	To investigate the rules (algorithm) for a simple shooting game	Children can make and test predictions to work out the algorithms used in a game. Children can begin to work out the code for a game.	iPads Chromebooks Scratch	Algorithm Source code Remix Sprites Input Output Repetition
5. A coding game	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	To practise some programming skills using a game	Children practise playing a strategy game and try to work out what rules have been coded into the game. Children begin to understand what makes games enjoyable or addictive.	iPads Chromebooks Scratch FixTheFactory	Algorithm Source code Remix Sprites Input Output Repetition
6. Nim	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Use logical reasoning to predict the behaviour of simple programs. Recognise common uses of information technology beyond school.	To work out winning strategies for the game of Nim	Children practise playing a strategy game and try to work out what rules have been coded into the game. Children can explain why the computer plays Nim so well.	iPads Chromebooks Scratch	Algorithm Source code Remix Sprites Input Output Repetition

