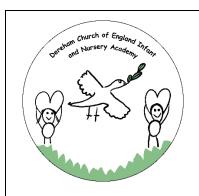
Dereham Church of England Infant and Nursery Academy- Computing





Year group: Year 2 Area/topic: Programming quizzes - Scratch

Jr (Summer 1)

(objectives from NC/ELG/Development matters)

Pupils to be taught:

- 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.

Prior learning	Future learning
 Children are first introduced to Scratch Jr during Summer 2 in Year 1. During this unit, the children learn how to create a set of instructions using the icons on Scratch. They then use the icons to create a short animation. The children will therefore build on this in Year 2 to create quizzes using Scratch. 	

Key knowledge and skills	Possible evidence
 Children to be taught that creating a program follows the 	 Children to use real
following structure: Task - what is needed, Design - what it	life scenarios to
should do, Code – how it is done, Running the code – what it	understand that
does.	sequences of
To recap knowledge of Scratch Jr – remembering that all	commands have an
algorithms must start with the green flag and end with a red	outcome.
block.	 Children will have the
To be able to predict the outcome of a sequence of commands.	opportunity to use an
To understand how to change the outcome of a sequence of	modify designs to
.commands.	create their own quiz
To understand what the blocks on Sprite Jr do.	questions in ScratchJ.
To be able to decide which blocks to use to meet the design brief	 Children to evaluate
and then build the sequence needed using the blocks.	their work verbally
To be able to create an algorithm.	and then act on these
To use and modify designs to create their own quiz questions in	evaluations to make
ScratchJr.	improvements to their
 To compare the project to the design and then consider ways of 	programming projects.
improving the project by adding features.	

• To understand how to debug the program.

computer to achieve a task.

computer.

a script.

complete a task.

Instructions - A direction or order.

Outcome - What happens at the end.

Key vocabulary

Sequence - A basic algorithm. A set of logical steps carried out in order.

• Program - A set of ordered commands that can be ran by a computer to

Command - A single instruction that can be used in a program to control a

• Blacks - Blacks of code that can be dragged anto their project in order to create

• Algorithm - A set of ordered steps that can be followed by a human or

 Sprite - A character on Scratch Jr. Modify - Change or edit. Debug - Finding and correcting errors in a program. Code - The commands that a computer can run. 	
Common misconceptions	Books linking to this area
 Children may not realise that there can be mistakes within an algorithm - Mistakes should be encouraged as these provide vital opportunities for children to debug and modify their algorithms. 	Ava in Code Land – Jess Hitchman
Memorable first hand experiences	Opportunities for communication
Children to be able to use an iPad to code their own quizzes and then test each other's algorithms.	 Children will be given the opportunity to discuss what outcomes the algorithm is creating and why (e.g. what blocks have been used to cause these outcomes). Children will be given the opportunity to evaluate their work verbally discussing what went well and what could be edited to make improvements.

Script - A set of instructions (algorithm).

Dereham Church of England Infant and Nursery Academy Reasonable adjustments for pupils with SEND

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(ammiin	ucation	and	Interaction
Communication		\mathcal{M}	

- Make sure the children are using the correct equipment for them.
- Consider headphones to support the child to hear.
- Have someone available to read any text that is on the screen.

Social, Emotional and Mental health

- Timer so they understand when they will need to log off.
- · Clear boundaries.
- Online safety instructions made clear.

Cognition and Learning

- Consider adjusting the brightness and colour so they can see the screen more easily.
- Have someone available to read any text that is on the screen.
- Shorter steps given at appropriate time.
- Simpler logins.
- Adult to support with logging in.
- Print out which the different functions and tools on.
- Step by step guide printed out for them to refer to.

Sensory and Physical

- Larger text/equipment.
- Print offs instead of screen time.
- Appropriate desk, chair, keyboard and mouse.