

COMPUTING: PROGRAMMING KNOWLEDGE ORGANISER



Overview

Quizzes in Scratch Jr.

- Programming is when we make a set of instructions for computers to follow.

-Scratch ir. is a program that we can use to code programs using a series of command blocks. This can be used to design quizzes.

-We use algorithms (a set of instructions to perform a task) to program the sprite to do different things.

Creating Quizzes

-Outcomes: An outcome is something that happens as a result of us doing something. E.g. in cookery, we can mix and cook ingredients to make an outcome of food! In Scratch Jr. a sequence of commands is followed and this results in an outcome.



-Quizzes in Scratch: We can create simple guizzes in Scratch jr. where the user can select an answer by clicking on a sprite. An outcome occurs when the sprite is clicked.



-Adding and Programming Sprites: We need multiple sprites for the user to select from. To add new sprites, we choose the + option (see right). We can program multiple sprites. The sprite we are programming is the picture in the programming area.

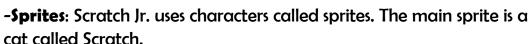


-Programming Sequences: Consider what question to ask your users, e.g. Who lives here? Program each sprite with a command sequence, so that they know if they are right or not when clicking on the sprite.



The Basics of Scratch Jr.

-What is Scratch Jr? Scratch is a website/ app that lets us code our own stories, games and animations.







programming blocks. We drag them into the **programming** area (right). Clicking the block in the area makes the sprite perform on the stage.

-Background: Backgrounds are

added by clicking this icon (right).

-Running the Code: Run your

animation by tapping the

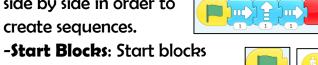
full screen icon, and then

the green flag.

-These (right) are the



process in which one thing follows another. In Scratch Jr. we can stack blocks together side by side in order to



-Sequences: -A sequence is a pattern or

are vellow & are used to start/run programs. The second block on the right starts the program when



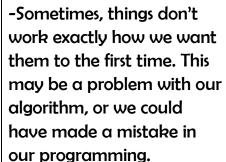
-End Blocks: End blocks are red. These are used to end your program.

Algorithms and Programming

-An **algorithm** is a set of instructions for

performing a task. Designing an algorithm can help us to make the guiz work in the way that we want it to.

-Programming is when we move the blocks into the position (based on our algorithm design). Programming uses a code that the computer can understand. In Scratch jr. this makes our quiz animation do the things we want it to.



Debugging

-If the animation does not work correctly the first time, remember to **debug** it. This means finding and fixing the problems.



Important Vocabulary

Programming Scratch Jr.

Sprite

the sprite is clicked on.

Quiz

Command

Block

Debugging

Sequence

Algorithm

Outcome