

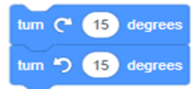



## KEY TERMS

Word	Definition	Image
Sprite	The name of a <b>character</b> in Scratch.	
Scratch	The name of the <b>programming lan-</b>	
Turn # # degrees	How far to the left or right you want to move your sprite. # is replaced with the number.	
Block	A single instruction in our algorithm.	

Instructions	Detailed information about how something
Execute	When you create a program for a computer, you give it a set of commands to execute.
Sequence	The order the instructions need to be in.
Selection	Making choices.
Iteration	Doing the same thing more than once <b>Iteration</b> in computing is the process of repeatedly executing instructions.
Repeat	The block that makes and instruction happen more than once.
Variables	A <b>variable</b> is a name that refers to data being stored by the computer, which can change.
Subroutines	In computer <b>programming</b> , a <b>subroutine</b> is a sequence of program instructions that
If block	Allows us to check a <b>condition</b> and perform an operation if the condition <b>evaluates</b> to 'true'.
Debugging	Finding errors in our code.
Abstraction	Taking away all the information that isn't needed.
Decomposition	Breaking down a problem.
Count-controlled	Count-controlled iteration will execute the commands a set number of times.
Condition-controlled	Condition-controlled will execute the commands until the condition you set is no longer being met.

## Scratch blocks and program example



## Algorithms



An **algorithm** is a **sequence** of step-by-step **instructions** to solve a problem.

Algorithms can be written in code, or be a **sequence** of BLOCKS.

We can use **algorithmic prediction** to guess what will happen. My **Sprite** is going to get bigger!

The **repeat loop** in this example, will move ten times. This is **more efficient** than writing out ten **commands**.

The **turn # degrees block** will turn my sprite. This **algorithm** will turn my **sprite**.