

Y5 Computing N2K

Programming A - Selection in Physical Computing

Autumn 1

Concepts

Information Technology

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Computer Science

Understand what algorithms are, how they are implemented as programmes on digital devices and that programmes execute by following precise instructions. Design, write and debug programmes to accomplish specific goals.

Key Skills

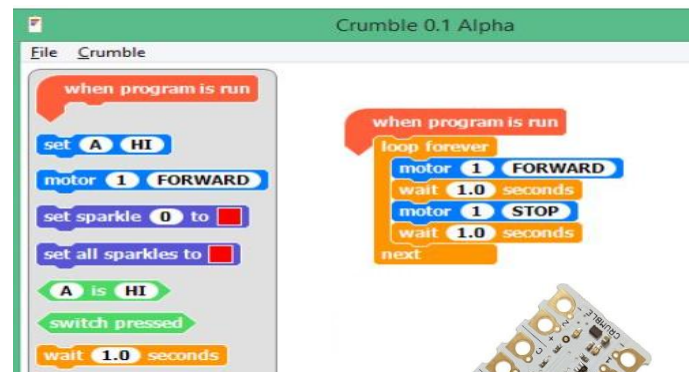
- Create a simple circuit and connect it to a computer.
- Use a count-controlled loop to program a device.
- Design a program with a conditional loop.
- Explain that a loop can repeatedly check if a condition is met or not.
- Design a physical project that includes selection.

Enquiry Questions

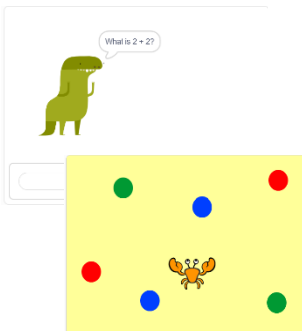
What is an example of selection in a program?

What is a conditioned loop?

How do you make your project that include a physical device?



Dino Quiz



Crab crawl



Explore **selection** in these **Scratch** projects. What conditions are being checked?

Key Vocabulary

component – A device used in an electrical circuit. These devices can often be programmed to give them instructions.

count-controlled loop – An action that is programmed to repeat a certain number of times before it stops.

selection – A decision or question that a program checks to follow a determined sequence.

condition – A decision in a program that can either be TRUE or FALSE. Events in a program can be determined by this condition.

debug – Identifying something unexpected in a program and deciding how to resolve it to act in an expected way.