Conditional events (selection)

What is selection?

Sometimes we need the computer to make a decision about whether or not to carry out an instruction. We can do this by telling it to execute code **if**, or **when**, a certain **condition** is met. For example, we can write code which will only execute if one **object** hits another, or if the object is touching a certain colour. This is known as **selection**.

What you'll build

In *Level 3- Conditional events*, you'll learn to code using hit events, which allow us to set conditions for the code inside it.

Program a spaceship through a maze so that it stops at walls.

Keep a car on track by changing its direction if it hits a colour.

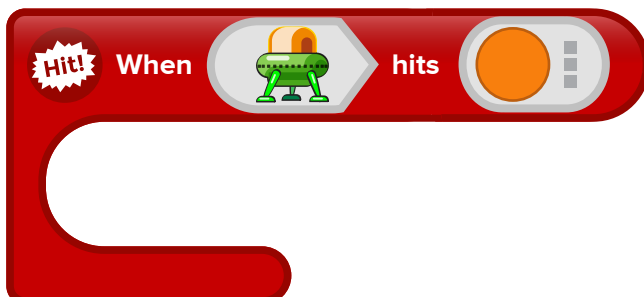Make eggs disappear and reappear in random places.

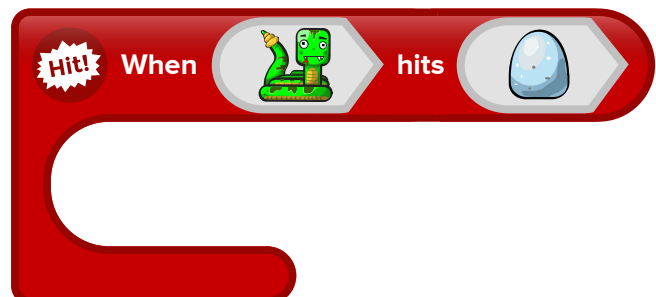Use a hit event to control more than one object at a time.

Your blocks

You'll use **hit events** to add selection to your code. Code will execute as a result of -

an object hitting a certain colour.

an object hitting another object.

Conditional events (selection)

Match each term to its meaning

| Hit event | Something on screen, such as a picture, a button or a piece of text. |

| Object | This code will execute when an object hits something. |

| Condition | Something that must be true in order for something to happen. |

| Selection | A way of telling a computer to execute code if a specific condition is met. |

Free Code Challenge

Choose a character and design a maze for your character to navigate. Add some items which they need to pick up along the way, and include some obstacles which will make them stop, change direction or disappear altogether! Use hit events to say what should happen when your character hits the walls or the objects you've included.

If-then dice game

There are lots of games that are based upon conditional events. Below, you will see a game board with a start and a finish square. It is your job to invent a rule for each number of the dice that is rolled.

If a 1 is rolled, *then move forward 3 spaces.*
If a 2 is rolled, *then* _____
If a 3 is rolled, *then* _____
If a 4 is rolled, *then* _____
If a 5 is rolled, *then skip a go.*
If 6 is rolled, *then* _____

Start

Finish