

# Introduction

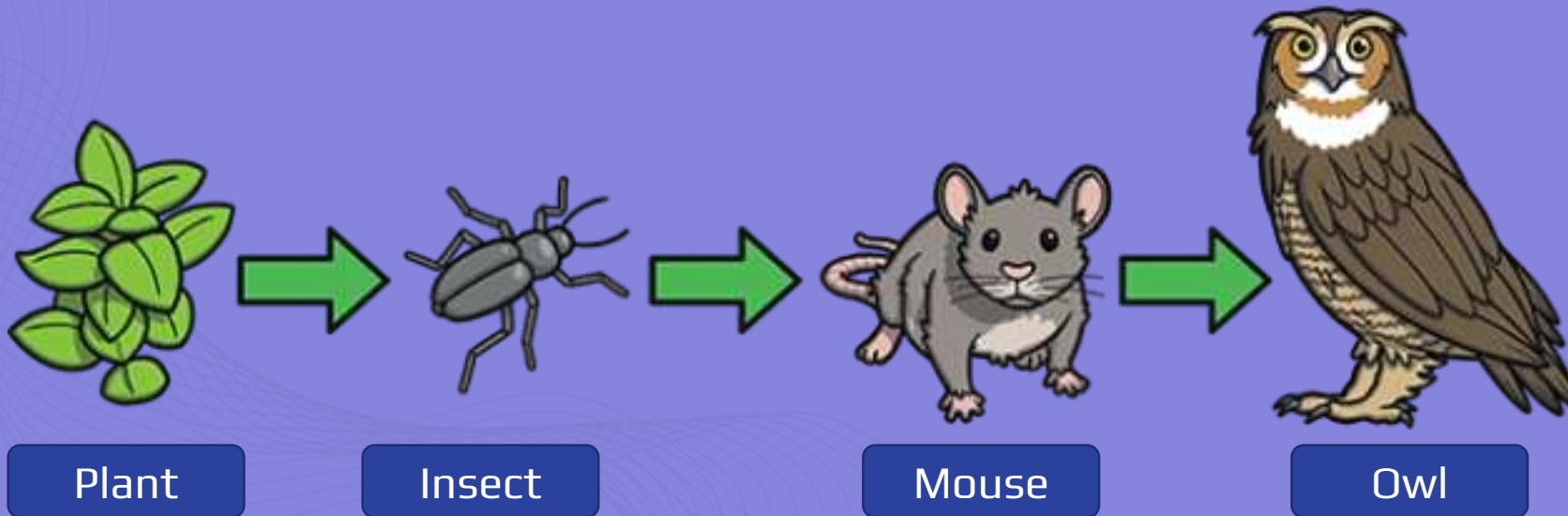
## What is a food chain?

- A food chain shows how plants and animals get their energy.

## Different elements of a food chain:

- Producer- A food chain always starts with a producer. This is an organism that makes its own food. Most food chains start with a green plant because plants can make their food by photosynthesis.
- Consumer- A living thing that eats other plants and animals is called a consumer.

# Introduction



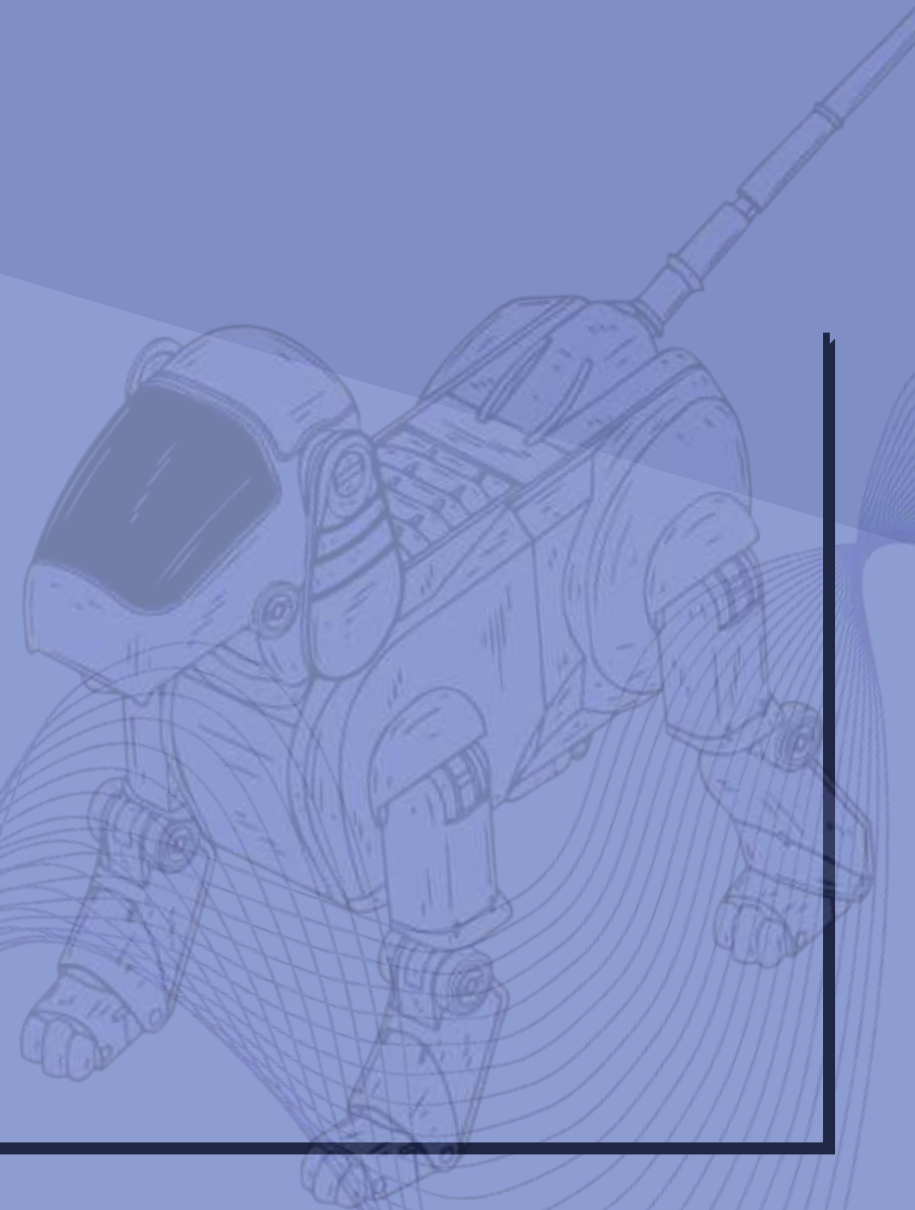
# Task

Your task is to create a scratch animation that will illustrate and explain a food chain of your choosing, much like the animation below



# Process

- Your code should display a simple animation of a food chain of your choosing to illustrate food consumption in the natural world using correctly timed sprites, backgrounds and varying different information slides

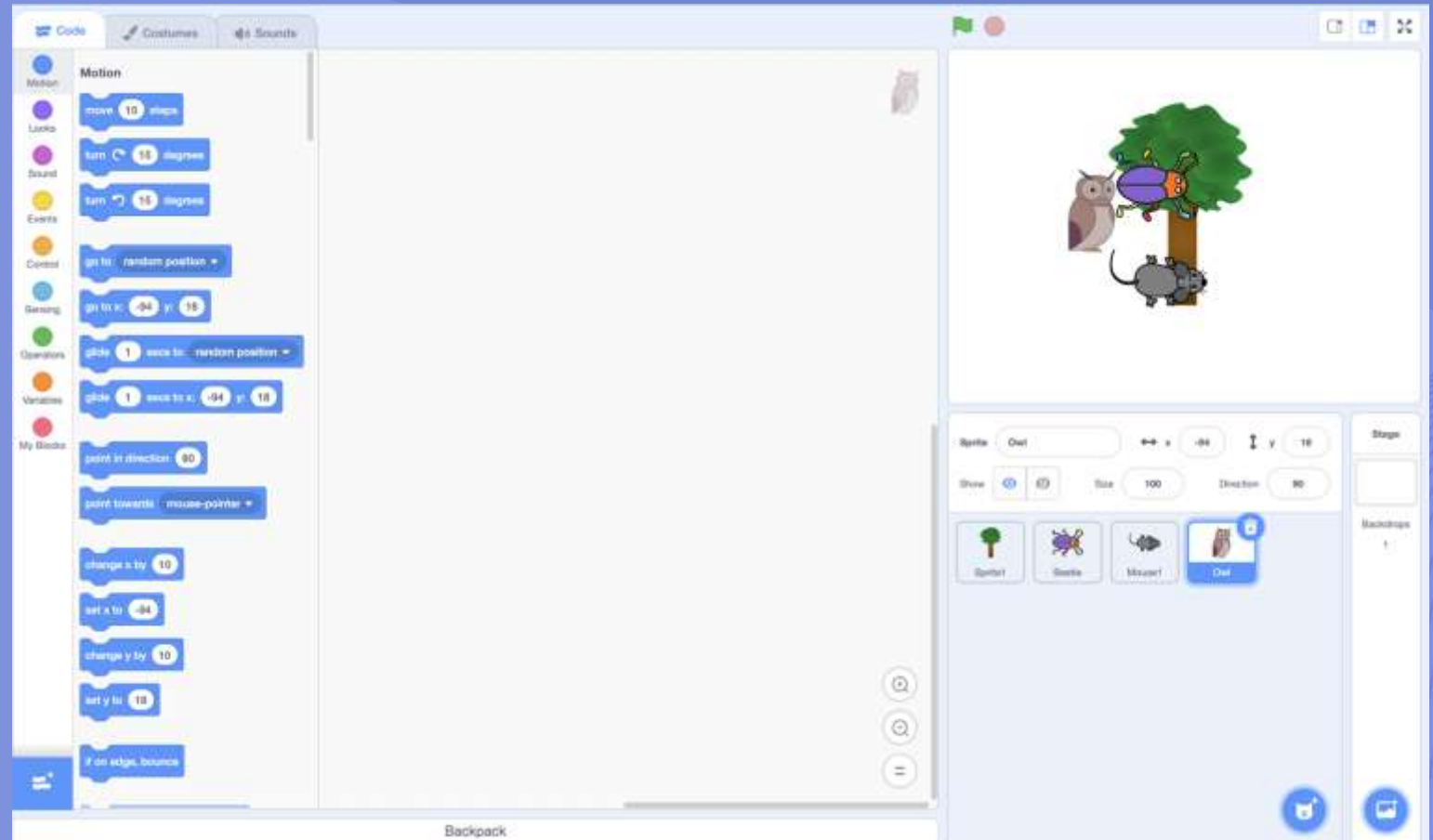


# Step 1

## Default template

Using what you have learned in the introduction to scratch, see if you can create 4 sprites:

1. The producer in your food chain
2. The primary consumer
3. The secondary consumer
4. The tertiary consumer

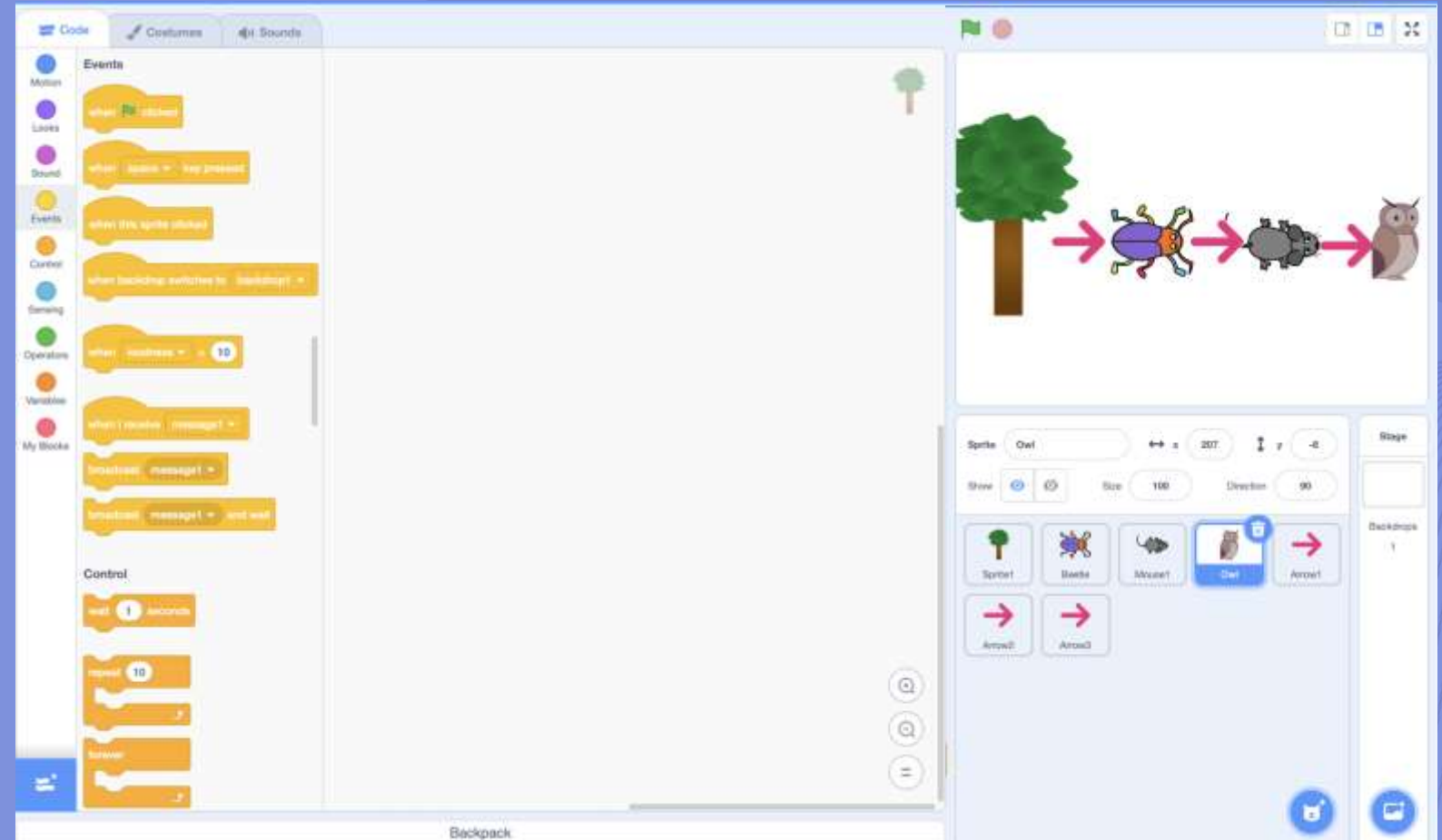




# Step 2

Arrange your sprites into a chain

Arrange your sprites as follows, and see if you can have a go at adding an arrow between each of the 4 different stages (you can either use an arrow sprite or draw your own- use the paintbrush icon when creating a sprite)



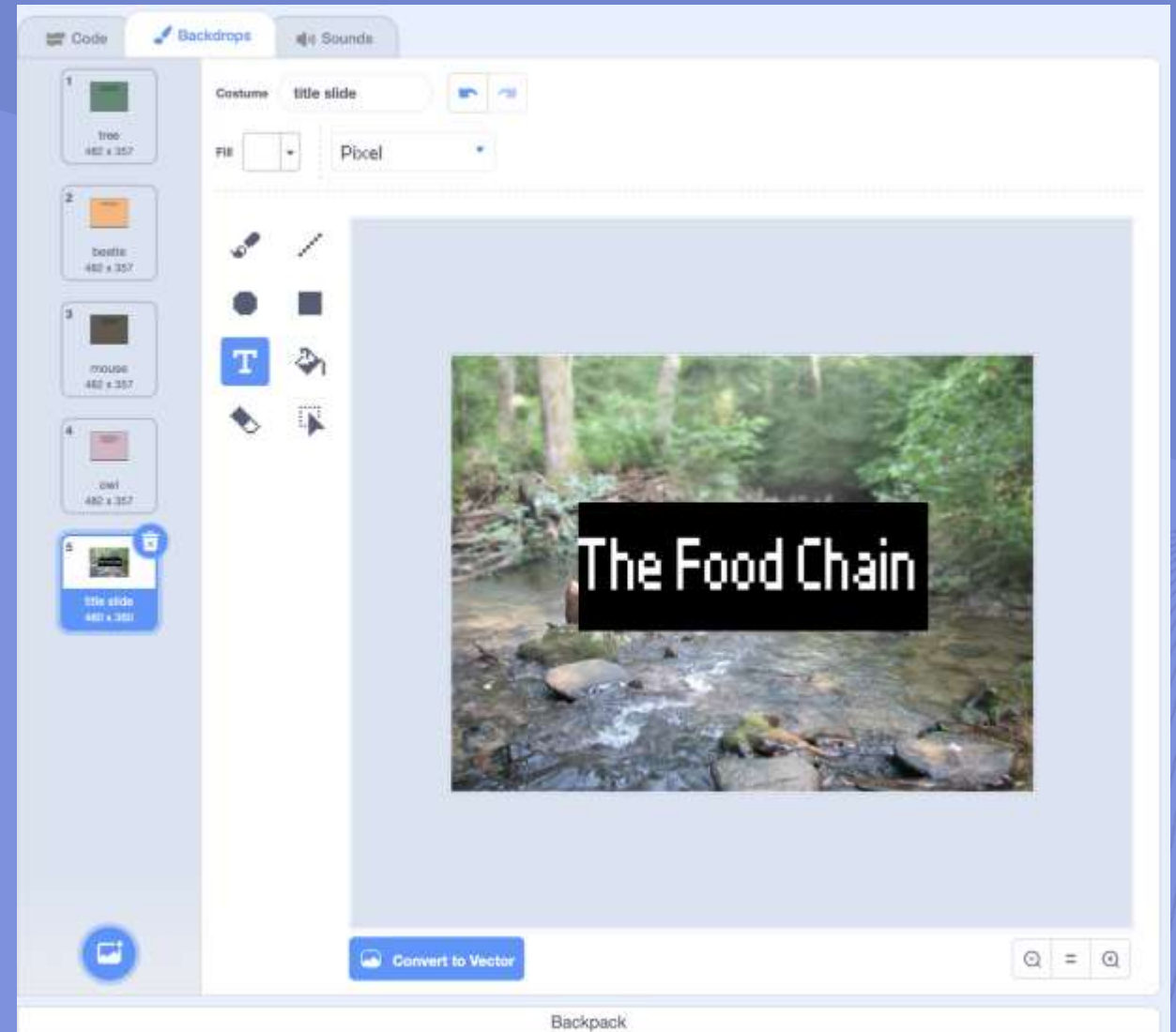
Start by creating a backdrop much like here, with information about the first part of your food chain (the producer).

The screenshot shows the Scratch 3.0 interface. The stage displays a green tree and a sequence of four sprites: a purple beetle, a grey mouse, a brown owl, and a red arrow. The top toolbar shows the 'Costume' dropdown menu open, with options like 'tree2', 'FBI', 'Costume', and 'Costume2'. The bottom toolbar shows the 'Convert to Bitmap' button.

# Step 4

## Creating the title

Using the upload background button-  
create a title slide for your food chain.  
You can drag and drop shapes and  
add text to the shape in order to  
create a title slide much like this one.



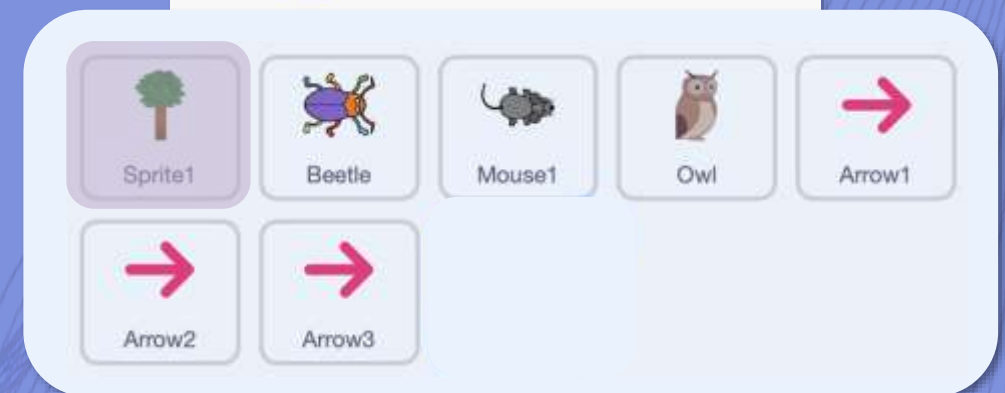
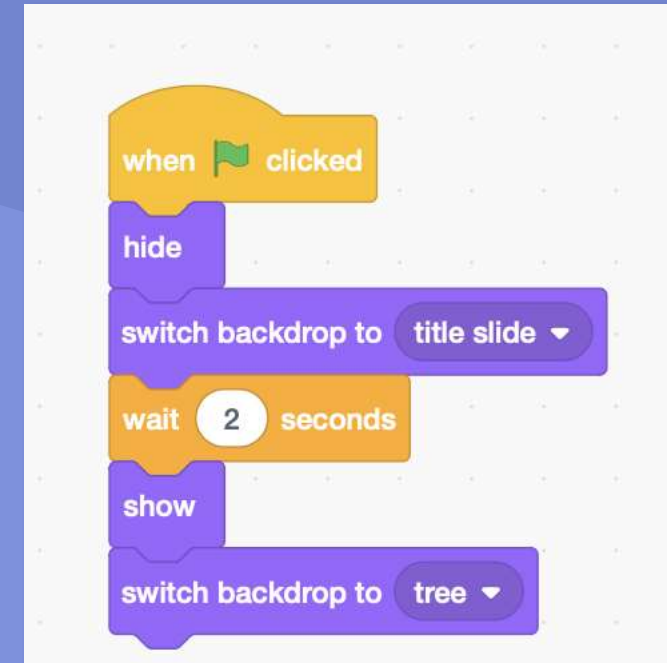


# Step 5

## The tree

The code will start with all the sprites hidden and just the title slide is shown. The title slide will remain on the slide for two seconds

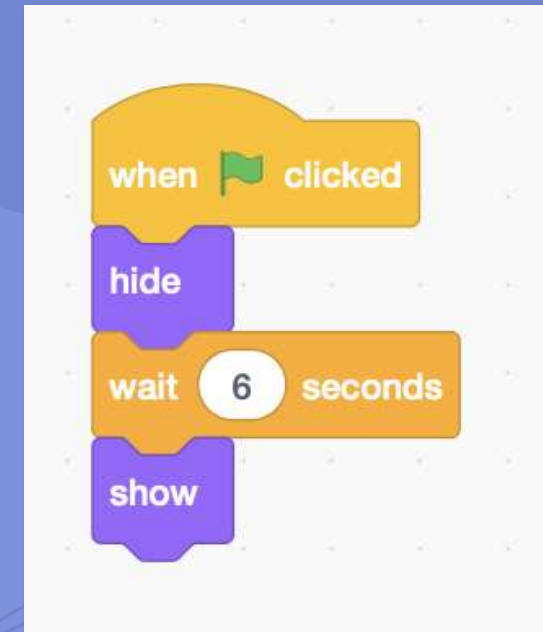
After these two seconds, the backdrop will be switched to the information about your producer (in this example, a tree), and the sprite will be shown



# Step 6

## Displaying the arrow

6 seconds after the code is run (after the title slide has displayed for 2 seconds, and the tree for 4 seconds), the arrow will be shown

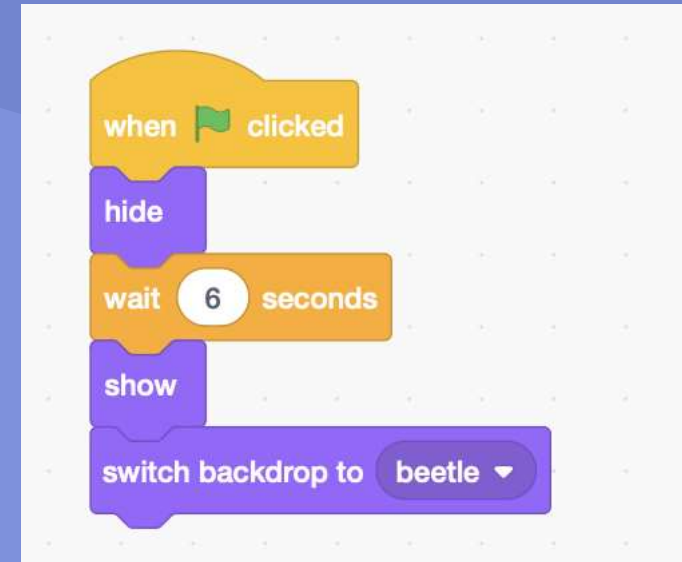


# Step 7

## Displaying the primary consumer

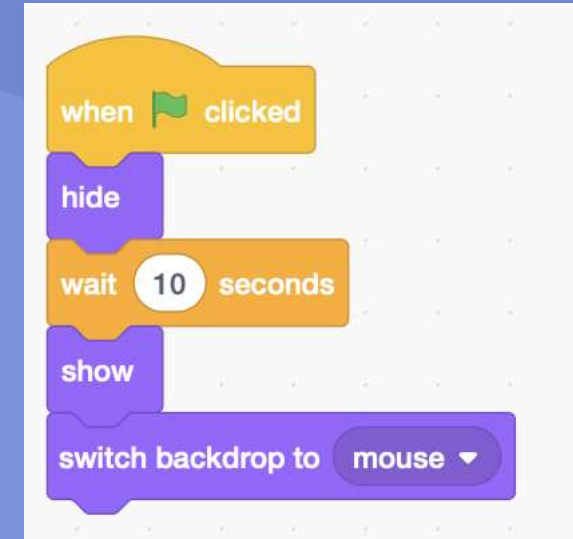
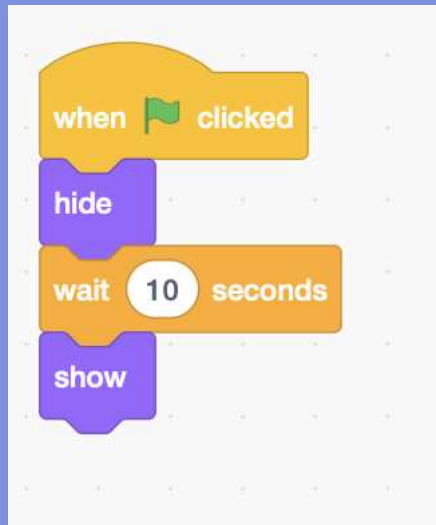
At the same time when the first arrow is shown, so is the beetle. The backdrop will also change to display the next lot of information, much like in step 5

See if you can do this for the remaining two arrows, and two elements of the food chain (answers on the following slides)



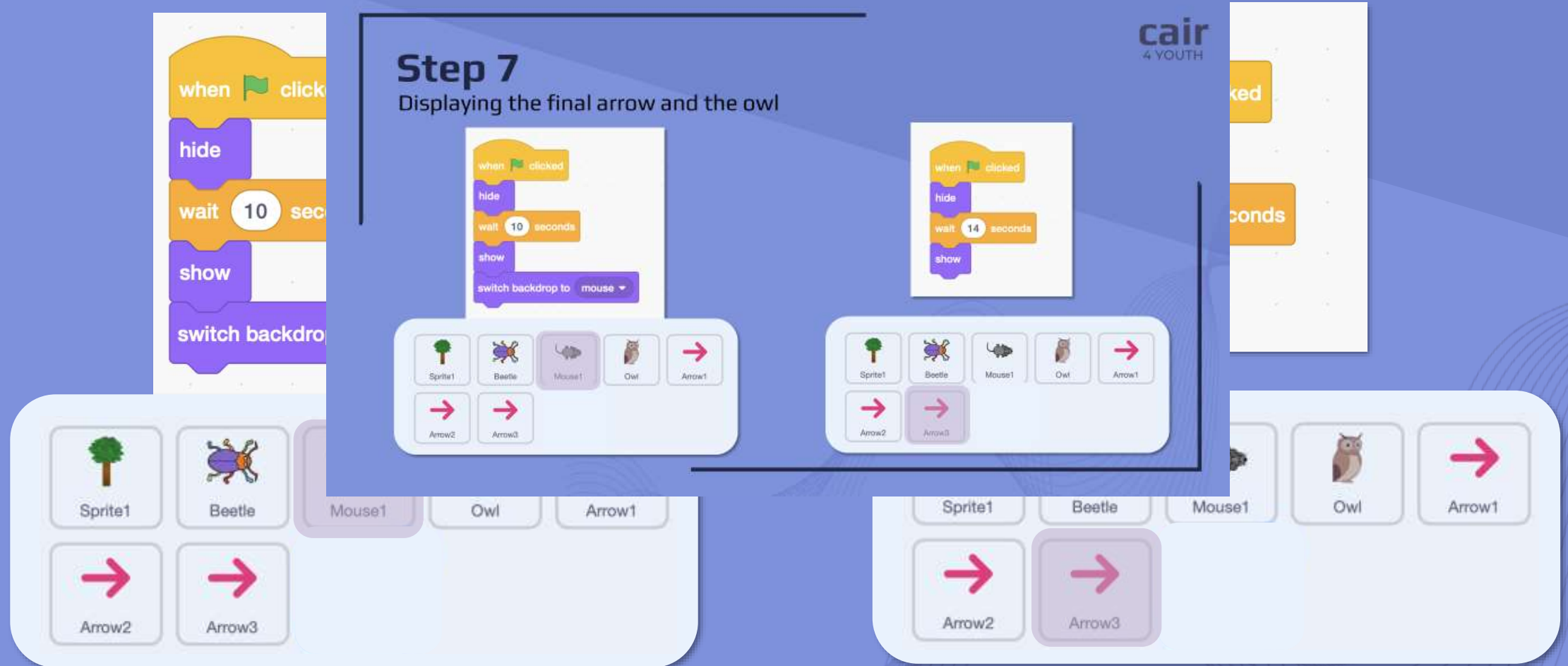
# Step 7

Displaying the second arrow and the mouse



# Step 7

Displaying the final arrow and the owl





# Step 8

## Extension

Have a go at complicating your food chain by adding multiple producers and consumers, with a complex arrangement of arrows.

