

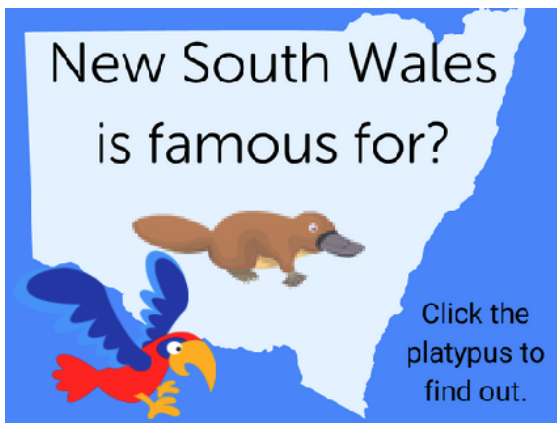
CODE OF ORIGIN



NSW Hide and Seek

Create a hide and seek game that explores unique places throughout New South Wales.

INTRODUCTION



What you will need

HARDWARE

A computer capable of running Scratch 3

SOFTWARE

Scratch 3:
either online
[rpf.io/scratchon](https://scratch.mit.edu/projects/748328385)
or offline
[rpf.io/scratchoff](https://scratch.mit.edu/projects/748328385)

What you will learn

- How to incorporate different backdrops
- How to use broadcast functions
- How to manipulate sprites

Starter Project

<https://scratch.mit.edu/projects/783497130/>

Additional notes for educators

Here is a link to the completed project
<https://scratch.mit.edu/projects/748328385/>

Read this [blog post](#) for information about the Code of Origin project by Code Club Australia.

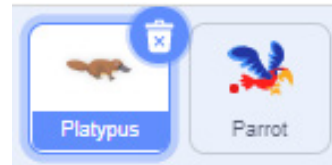


STEP 1 - CHANGING BACKDROPS

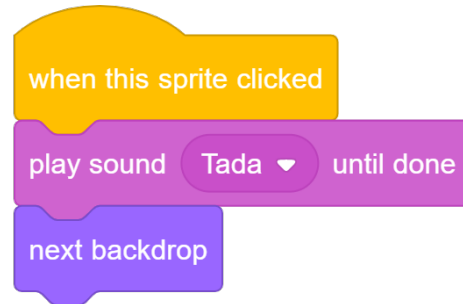
Open the starter project -<https://scratch.mit.edu/projects/783497130/>



Select the platypus sprite. Most of the algorithms will be attached to this sprite



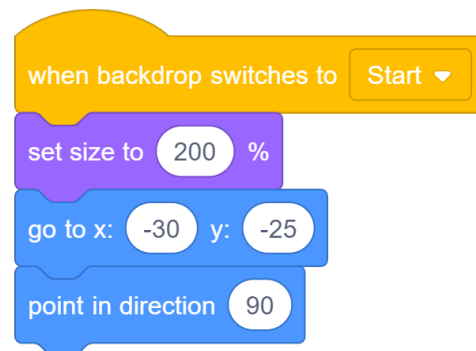
Start with the event **when this sprite clicked**. Add a sound block that will **play**. Add a block for **next backdrop**.



Test your code. Clicking on the platypus should make the backdrops change.



Start a new event **when backdrop switches to Start**. Add blocks to **set the size**, **go to specific x y coordinates** and **point in direction 90**. This will have the platypus showing on the NSW map at the start of the game.



Test your code.

STEP 2 - SETTING ALL BACKDROPS

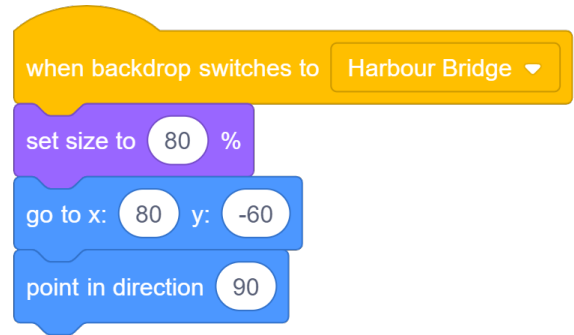


Remain on the platypus sprite. Start a new event **when backdrop switches to Blue Mountains**. Add blocks that set the **size** and **coordinates**. It is important to get these right as this positions the platypus to be 'hidden' in the scene.

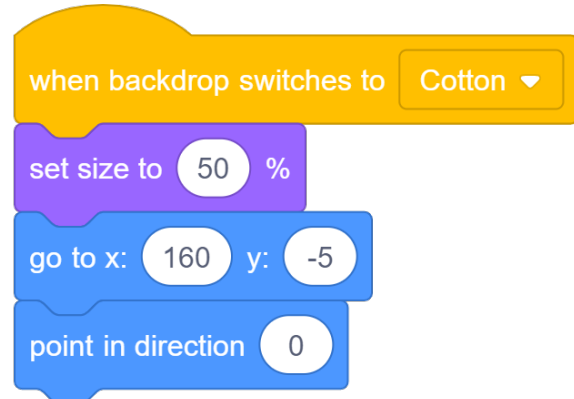




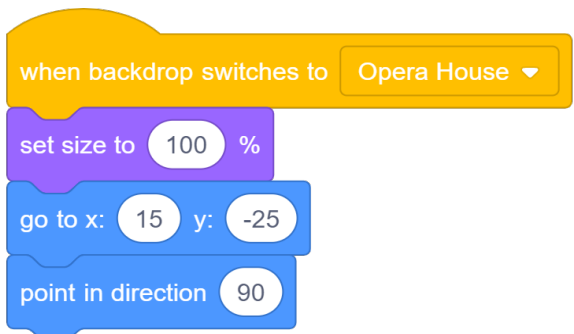
Start with the event **when backdrop switches to Harbour Bridge**. Add blocks to set the **size**, **coordinates** and **direction**.



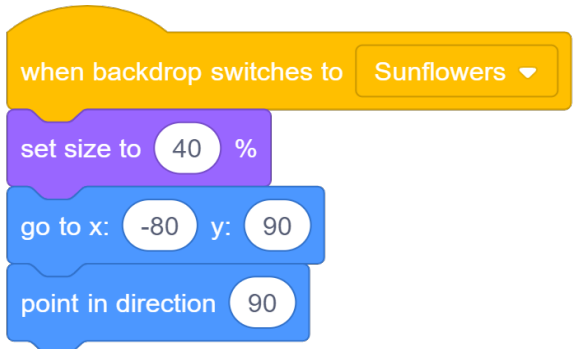
Start with the event **when backdrop switches to Cotton**. Add blocks to set the **size** and **coordinates**.



Start with the event **when backdrop switches to Opera House**. Add blocks to set the **size**, **coordinates** and **direction**.



Start with the event **when backdrop switches to Sunflowers**. Add blocks to set the **size**, **coordinates** and **direction**.



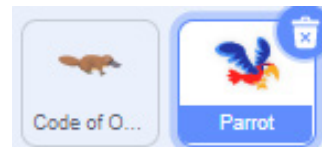


Test your code. As you click the platypus on each different backdrop it should swap to the next backdrop and be 'hidden' in a new position. You can change any of the inputs to create your own hiding places.

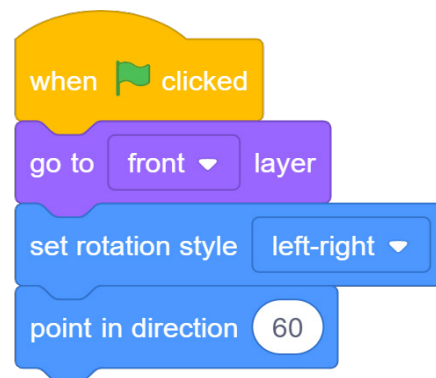
STEP 2 - CREATING A DISTRACTION



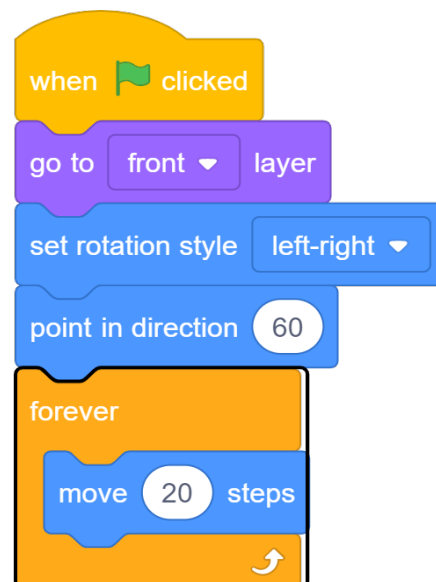
Select the parrot sprite



Start an algorithm with the event **when the green flag is clicked**. Set the parrot to **go to the front layer** so that sometimes it will hide the platypus. Add blocks to **set the rotation style** and **direction**



Add a **forever** block and inside it put a **move** block. This will have the parrot continually moving.



Test your code. The parrot should move. Do you notice a problem? Let's fix that.



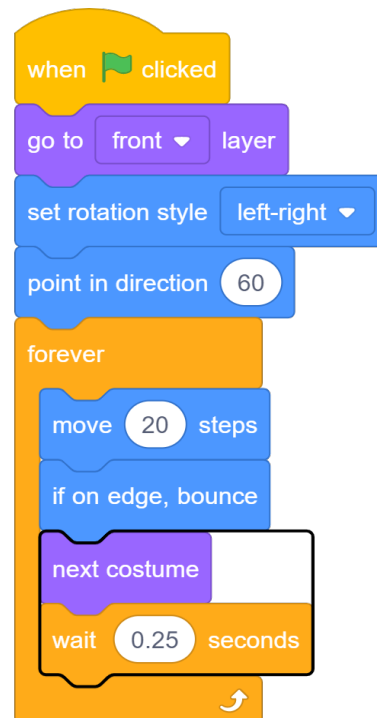


Inside the forever block, and the code **if on edge, bounce**. This will have the parrot bounce from the edge of the screen and continue movement.



If you click on the costumes tab you will notice that the parrot has different costumes which can make it look like it is flying.

Add a block that changes to the **next costume** and then a **wait** block. Change the timing to suit what looks best.



Test your code. Your game is now complete. The parrot should be a distraction flying over the page, sometimes over the top of the platypus. And each time you click the platypus the backdrop should change, with the platypus in its next hiding position.



Challenges:

Add more pages

New South Wales is known for many more famous places, landmarks and scenes. What new backdrops can you add and how can you hide the platypus in these backdrops?

Increase difficulty

Often games increase in difficulty with each new level that the player works through. How could you add this feature? Perhaps there is a time limit on each backdrop that determines if you get to the next screen or not. Maybe the platypus starts really small and slowly increases in size the longer it takes for the player to find it.

Distractors

At the moment there is just the parrot distractor. Could the distractor be:

- a different sprite in each level
- multiplied every new level that is reached eg 2 parrots on the 2nd screen and then 3 on the 3rd
- the sprite could change size, speed or colour depending on the level or backdrop

Congratulations!

You have created a game that will help others learn about Queensland.

Which state or territory will win the Code of Origin?

