

# Living in Roebourne

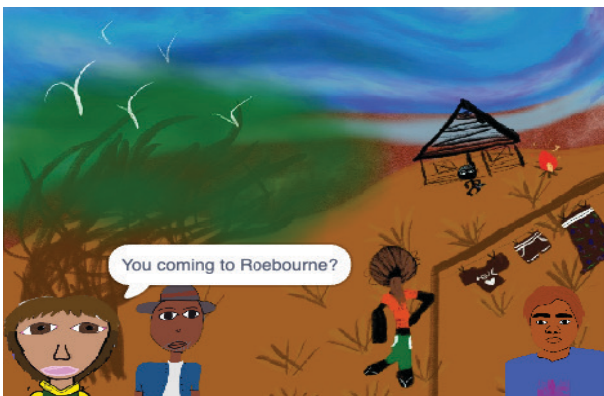
Join students from Roebourne District High School to create an animation, using original art and music. Thanks to Big hART for collaborating on this project!



## INTRODUCTION

### What you will make

Create an animation that shares original art and music from students in Roebourne.



### What you will learn

- using control blocks to create an animation
- incorporating sprites, music, and backgrounds for animation
- telling a story through coding

### What you will need

#### HARDWARE

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A computer capable of running Scratch 3

#### SOFTWARE

Scratch 3:  
either online  
<http://rpf.io/scratchon>  
or offline  
<http://rpf.io/scratchoff>

#### ADDITIONAL NOTES FOR STARTER PROJECT LINK

<https://scratch.mit.edu/projects/1235191542>

#### COMPLETED PROJECT LINK

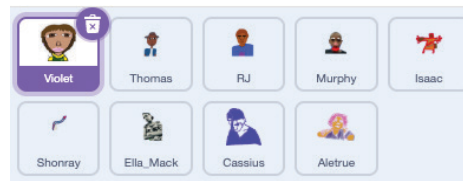
<https://scratch.mit.edu/projects/1235191161/>



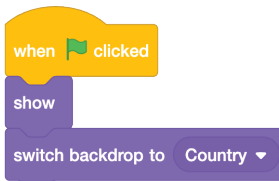
# 1. CREATING THE STORY

Open the starter project - <https://scratch.mit.edu/projects/1235191542>

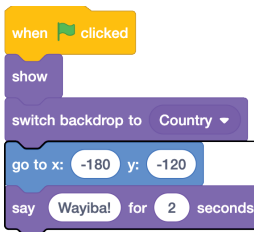
The animation will feature 3 characters. These instructions will start with Violet, but you can use any sprite you like.



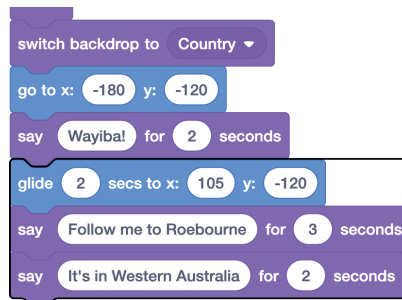
Start with the event **when flag is clicked**. Add a **show** block (this sprite will be hidden at the end) and add a block to **switch the backdrop** to Country.



Add a **go to** block to set Violet's starting location and then a **say** block. Wayiba means hello.



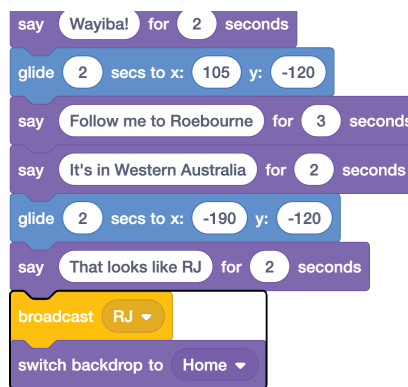
Add a **glide** block for Violet to move over to the other side of the screen (where they will talk to another sprite). Start a conversation, using two different **say** blocks.



Add another **glide** block to start heading to Roebourne. Then a **say** block to introduce another sprite.



Let's send a message that we can use for RJ to know when to show on screen. Create a **new broadcast** and call it RJ then add a broadcast block. Next add a block to **switch the backdrop** to Home.





Add a **say** block to ask if RJ is coming to Roebourne. Then add a **wait** block. This is to let the story play out.



```

broadcast RJ
switch backdrop to Home
say You coming to Roebourne? for 2 seconds
wait 5 seconds
  
```



Add a **say** block. When we add the music this will match the chorus playing. Create another **new broadcast** called youth. This will be used by all of the other sprites. Add a block to **change the backdrop** and then a block to **hide**.



```

wait 5 seconds
say Living in Roebourne! for 4 seconds
broadcast youth
switch backdrop to Art
hide
  
```



The final code will let the backdrop rotate through the artwork of students from Roebourne High School. Add a **repeat** block and inside place a **wait** and a **next backdrop** block.



```

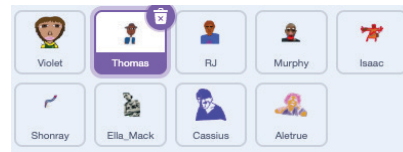
hide
repeat 5
  wait 5 seconds
  next backdrop
  
```



Click the green flag and watch your animation play out. It may look strange as we have only coded one sprite. Let's choose a 2nd sprite to add to the story. Our coding will use Thomas.



Select the Thomas sprite.



Start with the **green flag** event. Add a **show** block and a **go to** block to set Thomas' starting location.



```

when green flag clicked
show
go to x: 195 y: -120
  
```



Add a **wait** block. This is where Violet starts the animation. Add a **say** block to join the conversation.



```

go to x: 195 y: -120
wait 6 seconds
say Where is Roebourne? for 1 seconds
  
```



Add a **wait** block and then a **glide** block so that Thomas will follow Violet to head to Roebourne.



```

say Where is Roebourne? for 1 seconds
wait 2 seconds
glide 2 secs to x: -100 y: -120
  
```



Add a **wait** block to follow the conversation. Then add a **say** block to sing the song and a **hide** block to finish



```

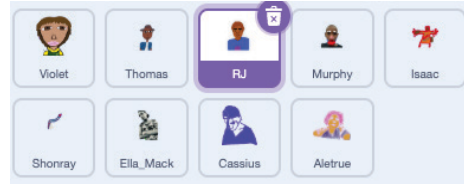
glide 2 secs to x: -100 y: -120
wait 9 seconds
say Living in Roebourne for 4 seconds
hide
  
```



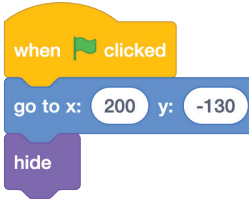
Click the green flag and watch your animation play out.



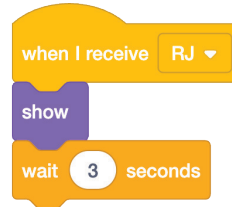
Time to bring in RJ! Select the RJ sprite.



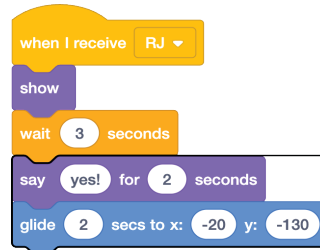
Start with a **green flag** event. Add **go to** block to set the starting position and a **hide** block so that RJ is not on screen at the beginning.



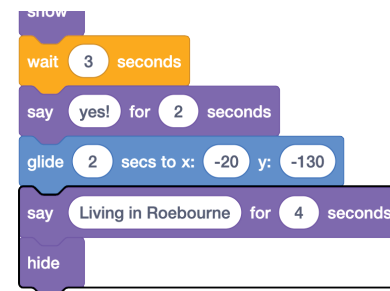
Start a new algorithm with the event, **when I receive RJ**. Remember creating this broadcast? Add a **show** block and then a **control** to wait.



Add a **say** block and then a **glide** block to move with the other sprites.



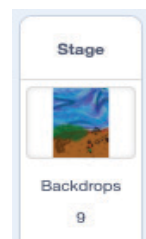
Add a **say** block to join in the song and then a **hide** block.



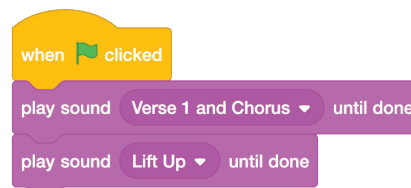
Click the green flag and watch your animation play out with 3 characters!



Let's add in the music that will play behind the animation. Click on the stage.



Add a **green flag event**. Add a **play sound until done** block and choose the sound Verse 1. Add a second **play sound** block and choose lift up.

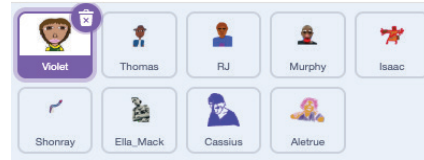


Click the green flag and watch your animation play with the music.

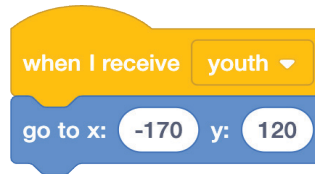
## 2. A DANCE PARTY

If you let your program run you will notice the backgrounds will change every 5 seconds. We programmed this on the Violet sprite. Let's add algorithms to 7 of the sprites. Each of them will take turns to show on the screen in a set position and then will move from left to right, to look like they are dancing to the music.

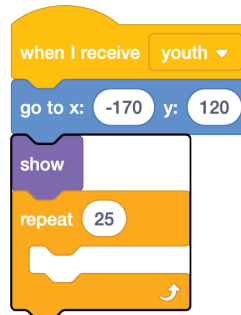
Select the Violet sprite.



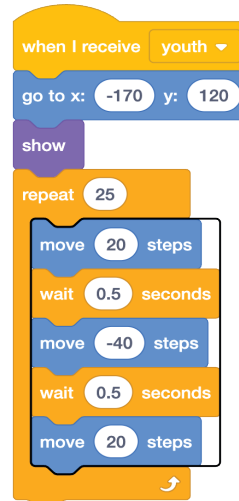
Start a new algorithm with the event **when I receive youth**. Add a **go to** block set the position.



Add a **show** block and then a **repeat** control block. This repeat block will control the 'dance' movement.

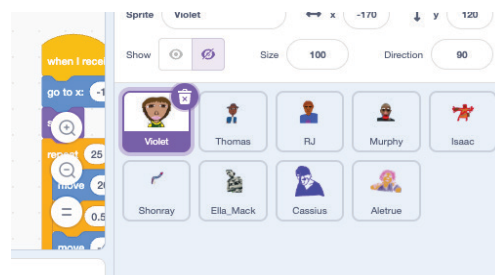


Inside the repeat block add a **move** block and then a **wait** block. Then another **move** block and **wait** block. And finally a **move** block.



Click the green flag. Does your sprite show up on screen after the conversation, and move from side to side with the music?

Let's duplicate this algorithm by dragging it on to the next sprite - Thomas. This will copy the algorithm across. (It will look like the code goes behind the sprites. This is OK. You can also just recreate the code on your sprite.





Select the Thomas sprite and you will see your copied code there. Add a **wait** block so Thomas starts after Violet. Also change the starting location. Everything else stays the same.



```

when I receive youth
  wait 1.5 seconds
  go to x: 0 y: 110
  show
  
```



Copy the algorithm to the RJ sprite and make changes to the wait and go to blocks.



```

when I receive youth
  wait 2 seconds
  go to x: 155 y: 115
  show
  
```



Choose 4 more sprites to copy the dance algorithm to and make the changes as below.

```

when I receive youth
  wait 4.5 seconds
  go to x: -95 y: 0
  show
  repeat 25
    move 20 steps
  
```

```

when I receive youth
  wait 6 seconds
  go to x: 80 y: -5
  show
  repeat 25
    move 20 steps
  
```

```

when I receive youth
  wait 7.5 seconds
  go to x: -135 y: -110
  show
  repeat 25
    move 20 steps
  
```

```

when I receive youth
  wait 9 seconds
  go to x: 145 y: -115
  show
  repeat 25
    move 20 steps
  
```



Click the green flag. Do you have 7 sprites dancing to the music? You can adapt your wait blocks and location blocks to make the dance work how you would like it to. But now we have a problem! The sprites are showing on the closing screen but we need them to hide so the text can be read. The sprites would also still be on screen if we click the green flag again.



To each of your dancing sprites add the algorithm when I receive the broadcast hide, hide.



```

when I receive hide
  hide
  
```



To each the 5 sprites that are NOT part of the first animation and only do the dancing, add the algorithm when green flag clicked, hide.



```

when clicked
  hide
  
```



Click the green flag. You will now have a complete animation about Living in Roebourne. A huge thank you to the students at Roebourne District State High School who helped to create the animation and shared their art work, and to Big hART for collaborating and bringing this project to life.