



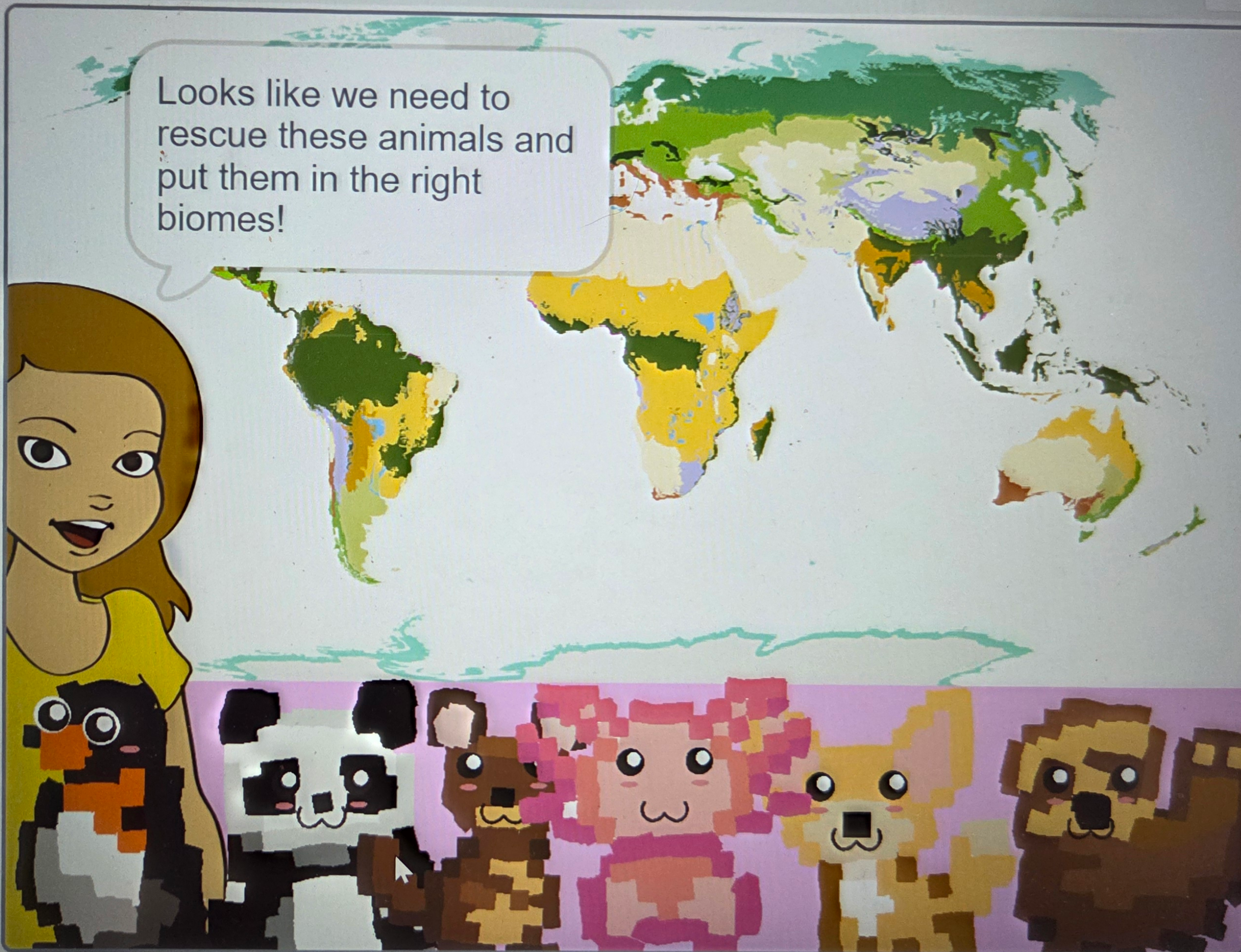
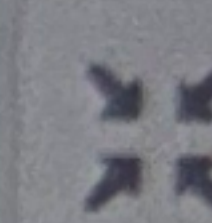
Prize Winner

Programming, Apps & Robotics Year R-2

Bonnie Slee

Belair Primary School





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Aim

I love playing games with lots of cute animals and I thought this was a good way of using animals but also having some fun doing science. I thought it would be a good way of expressing what I like and doing some science in a fun way. I thought a good science game could be having to rescue animals and return them to their proper environment where they live, and this meant I could make a game that had cute animals but also helped people learn more about science.

Scientific purpose

The scientific purpose of this game is that it helps kids learn more about biomes and about what animals need to survive. This is important because when we know more about animals and the world we live in, we can do better at protecting it.

In the game, you learn why animals live in their own environments and how it can be dangerous for them to live in some other places. You also learn about what they can eat and why they need those foods to be happy and healthy. By helping kids learn about science and animals and the places animals live, kids can grow up caring more about these things and protecting the world.

Potential applications

This game is for entertainment and education for kids. They can play it at home or at school, and it can teach them interesting things about these animals, about biomes, and about our world.

Hopefully it also makes them excited to learn more, and they can keep learning new things.

Requirements to run

Scratch games can be run using a web browser on most desktops, laptops, tablets and mobile phones.

Scratch supports versions of Chrome, Edge, Firefox, and Safari released within the last 3 years. Scratch may run on other browsers, but they are not officially supported. (From scratch.mit.edu/faq)

How to Play

To play the game, you need to follow the link <https://scratch.mit.edu/projects/1294058081>.



Click the button to play the game in full screen. Start the game by clicking on the green flag in the middle of the screen to start the game.

Bonnie will tell you what you need to know to start playing the game and get the animals to their correct biomes.

Click on an animal to select it. Then, click on one of the blue location markers that appear on the world map.

If you select the wrong location, Bonnie will let you know you are incorrect, and she will tell you to go back and try again.

Click on the back arrow to go back to the world biome map screen and click on an animal to try again.

If you are correct, Bonnie will let you know, and she will then tell you the animal is looking hungry.



Click on the food bag image to open up the different food choices.

Click on the food you think is right for your chosen animal. When you select a food, the food bag will close.

If you are incorrect, you can click on the food bag again to choose a different food.

If you are correct, Bonnie will let you know. The win screen will then load.

Clicking the button on the right will take you back to the world biome map screen and you can click on another animal. Clicking the button on the left will load a page for you to learn some fun facts about the animal and the biome it lives in.

How I Created my Game

I made a list of animals I might include that all lived in different places.

I made a list of things I wanted to know about each animal. Using the library and the internet I used books, websites and videos to research about these animals and about what biomes were.

I used a book to learn more about using Scratch, and I made my first game following a tutorial in this book.

I made a plan for how I wanted my game to work and what I wanted to happen.

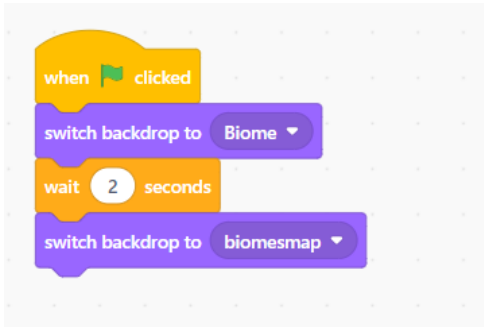
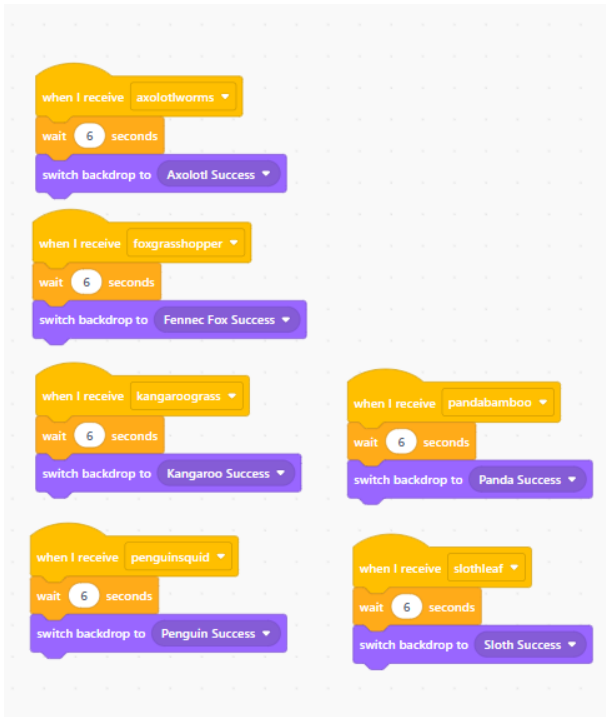
I drew the animals to use as my sprites using Procreate. My mum helped with making some of the other sprites I used in the game.

Coding was really tricky sometimes, because I would try something that I wanted to happen, but then something would go wrong and I would have to try different things or search for different ways I could do things.

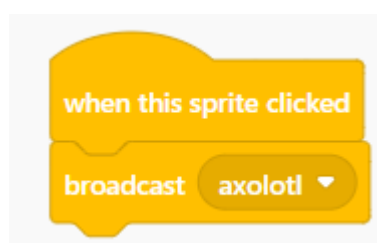
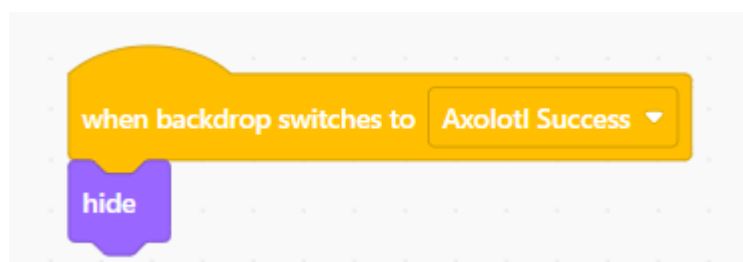
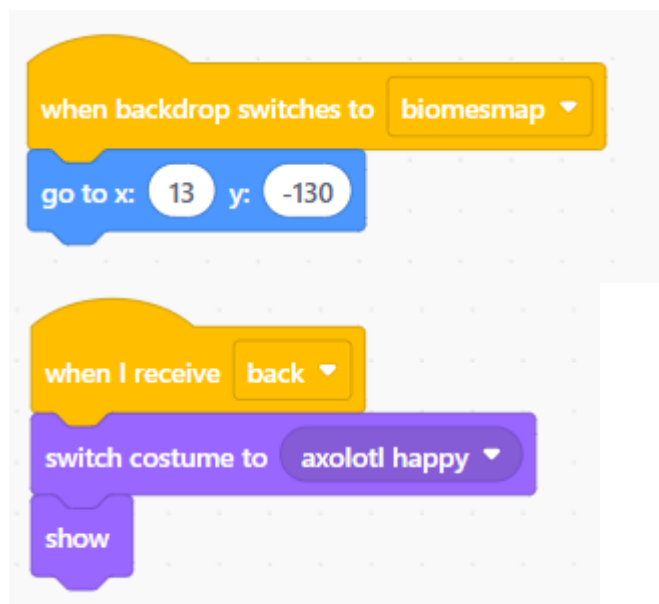
I am really proud of my game and I think I would like to make more games on Scratch again. If you need to ask me any questions you can email my mum at natashajean.s@gmail.com.

Program Explanation

This is the explanation of what my code does. It is very long because I have a lot of sprites. Even though they have similar code for certain sprites, I have included all of my program.

Code	Explanation
Stage  	When you click the flag it starts the game. The first backdrop is the title screen. The title screen shows for 2 seconds and then it switches it to the Biome Map that shows the world map. This code tells the stage what to do when each animal eats correct food. It tells the stage what to do when a broadcast is received. It needs to wait 6 seconds, so that the person playing can read what Bonnie says before it switches to the success backdrop.

Sprite: Axolotl



When the flag is clicked, the axolotl sprite needs to hide because it's going to show the title screen and you don't want any of the animals to be in there when the title screen is on.

It waits 2 seconds because that is how long the title screen is.

Then it tells the axolotl to show, so then you can see the axolotl on the screen.

When you're still choosing, all the animals should be happy.

The code also tells the axolotl sprite where to go, so all the animals are organised so they're not all random all over the place.

This code makes sure that if the backdrop changes to the biome map, the axolotl will still go to the right spot even if the green flag isn't clicked.

When you press the arrow to go back to the biome map, this broadcasts the message "back". This code tells the axolotl to change back to happy and to show when the back arrow is clicked.

Without this, no one would be able to choose the axolotl after going back and it might still look sad.

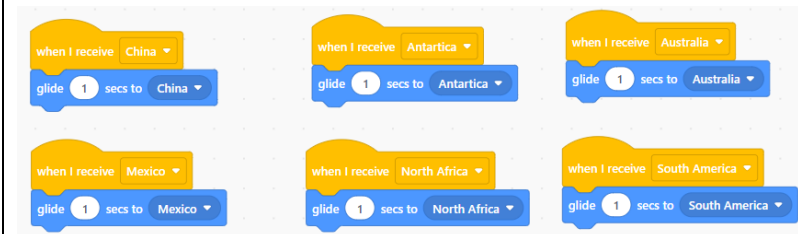
This code tells the axolotl sprite to hide when the backdrop switches to axolotl success. This is because if the axolotl is showing it might block the words on the success backdrop.

This means that when you press on the axolotl it broadcasts a message to the other sprites. This tells the other sprites what to do. When the other animals receive axolotl,

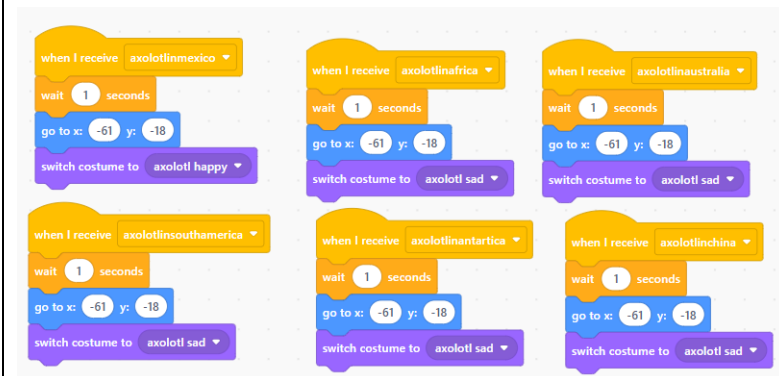


they hide, so the axolotl is the only visible animal sprite.

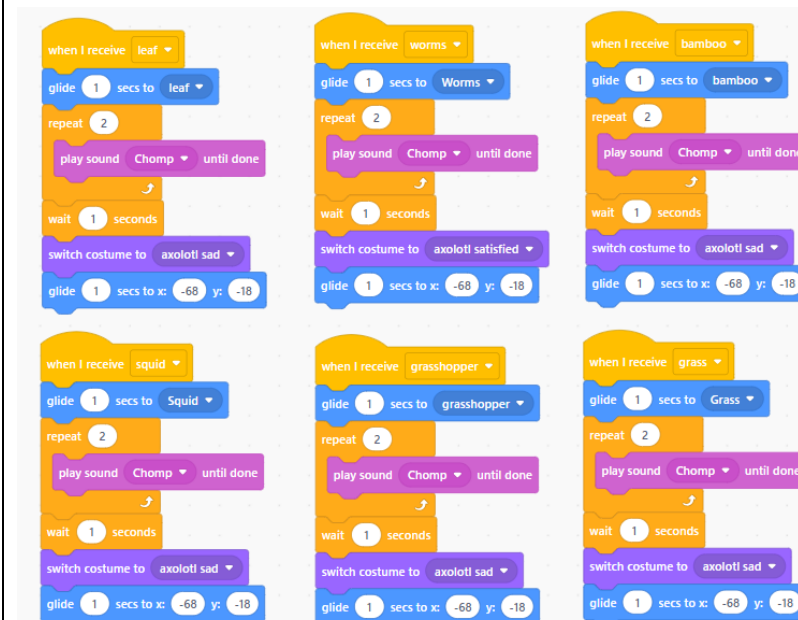
This code tells the axolotl what to do when it receives a broadcast from the other animal sprites when they are clicked on.



This code tells the axolotl what to do when you click on one of the location markers. When you click on them, they each broadcast a message, and this tells the axolotl to move to that spot.



This code tells the axolotl sprite what to do when it receives the broadcast after a location is chosen. It waits one second because otherwise it wasn't moving properly. It moves to a spot near the middle of the screen, and it switches its costume to happy if it's the right environment or sad if it's the wrong one.



This code tells the axolotl what to do when you click on the different foods it can eat. Clicking on a food broadcasts a message and when the axolotl receives the message it moves to eat the food. The chomp sound is repeated to sound like "chomp chomp" because it is eating the food. If it is the right food, the axolotl will change to "satisfied" and if it is the wrong food it will change to "sad". Then it moves back to its position so that you can choose a different food if you chose the wrong one.

Sprite: Fennec Fox



When the flag is clicked, the fennec fox sprite needs to hide because it's going to show the title screen and you don't want any of the animals to be in there when the title screen is on.



```

when green flag clicked
  hide
  wait 2 seconds
  show
  switch costume to fennec fox happy
  go to x: 96 y: -135

```

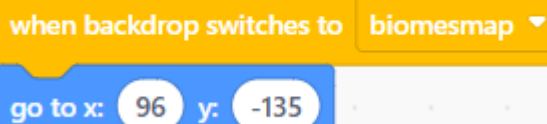
It waits 2 seconds because that is how long the title screen is.

Then it tells the fennec fox to show, so then you can see the fennec fox on the screen.

When you're still choosing, all the animals should be happy.

The code also tells the fennec fox sprite where to go, so all the animals are organised so they're not all random all over the place.

This code makes sure that if the backdrop changes to the biome map, the fennec fox will still go to the right spot even if the green flag isn't clicked.

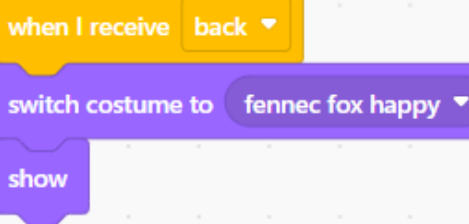


```

when backdrop switches to biomesmap
  go to x: 96 y: -135

```

When you press the arrow to go back to the biome map, this broadcasts the message "back". This code tells the fennec fox to change back to happy and to show when the back arrow is clicked.

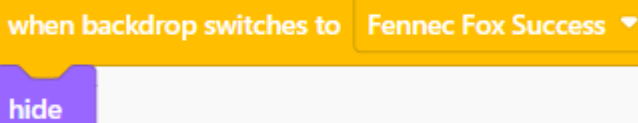


```

when I receive back
  switch costume to fennec fox happy
  show

```

Without this, no one would be able to choose the fennec fox after going back and it might still look sad.

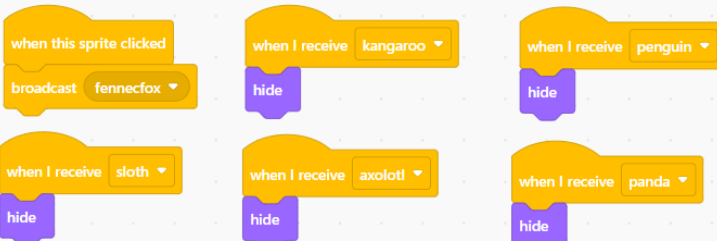


```

when backdrop switches to Fennec Fox Success
  hide

```

This code tells the fennec fox sprite to hide when the backdrop switches to fennec fox success. This is because if the fennec fox is showing it might block the words on the success backdrop.



```

when this sprite clicked
  broadcast fennecfox

when I receive kangaroo
  hide

when I receive penguin
  hide

when I receive sloth
  hide

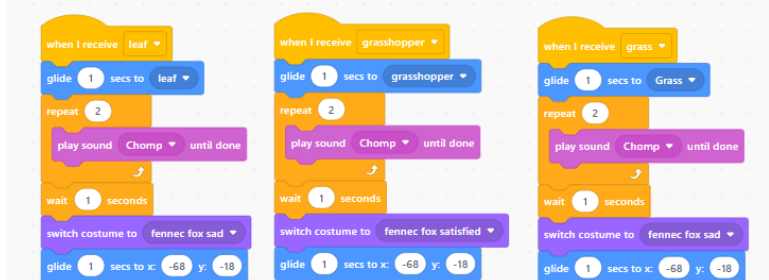
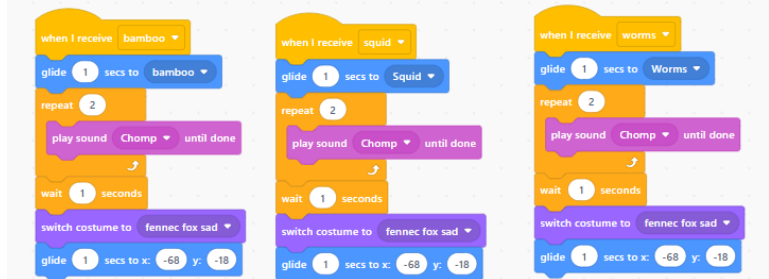
when I receive axolotl
  hide

when I receive panda
  hide

```

This means that when you press on the fennec fox it broadcasts a message to the other sprites. This tells the other sprites what to do. When the other animals receive fennec fox, they hide, so the fennec fox is the only visible animal sprite.

This code tells the fennec fox what to do when you click on one of the location markers. When you click on them, they



each broadcast a message, and this tells the fennec fox to move to that spot.

This code tells the fennec fox sprite what to do when it receives the broadcast after a location is chosen. It waits one second because otherwise it wasn't moving properly. It moves to a spot near the middle of the screen, and it switches its costume to happy if it's the right environment or sad if it's the wrong one.

This code tells the fennec fox what to do when you click on the different foods it can eat. Clicking on a food broadcasts a message and when the fennec fox receives the message it moves to eat the food. The chomp sound is repeated to sound like "chomp chomp" because it is eating the food. If it is the right food, the fennec fox will change to "satisfied" and if it is the wrong food it will change to "sad". Then it moves back to its position so that you can choose a different food if you chose the wrong one.

Sprite: Kangaroo



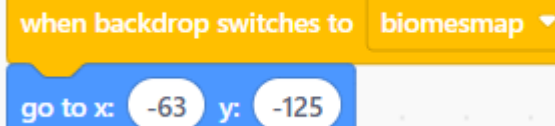
When the flag is clicked, the kangaroo sprite needs to hide because it's going to show the title screen and you don't want any of the animals to be in there when the title screen is on.

It waits 2 seconds because that is how long the title screen is.

Then it tells the kangaroo to show, so then you can see the fennec fox on the screen.

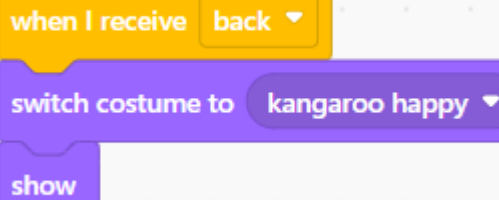
When you're still choosing, all the animals should be happy.

The code also tells the kangaroo sprite where to go, so all the animals are organised so they're not all random all over the place.



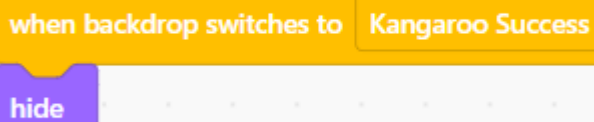
```

when backdrop switches to biomesmap
  go to x: -63 y: -125
  
```



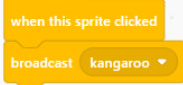
```

when I receive back
  switch costume to kangaroo happy
  show
  
```



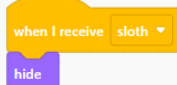
```

when backdrop switches to Kangaroo Success
  hide
  
```



```

when this sprite clicked
  broadcast kangaroo
  
```



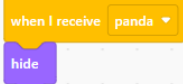
```

when I receive sloth
  hide
  
```



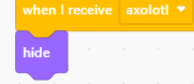
```

when I receive fennecfox
  hide
  
```



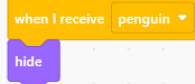
```

when I receive panda
  hide
  
```



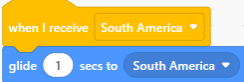
```

when I receive axolotl
  hide
  
```



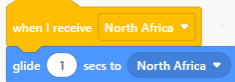
```

when I receive penguin
  hide
  
```



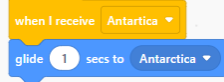
```

when I receive South America
  glide 1 secs to South America
  
```



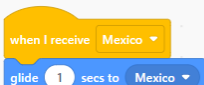
```

when I receive North Africa
  glide 1 secs to North Africa
  
```



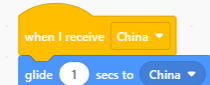
```

when I receive Antarctica
  glide 1 secs to Antarctica
  
```



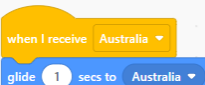
```

when I receive Mexico
  glide 1 secs to Mexico
  
```



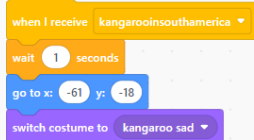
```

when I receive China
  glide 1 secs to China
  
```



```

when I receive Australia
  glide 1 secs to Australia
  
```



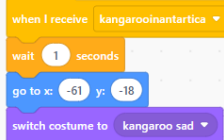
```

when I receive kangarooinsouthamerica
  wait 1 seconds
  go to x: -61 y: -18
  switch costume to kangaroo sad
  
```



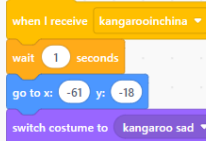
```

when I receive kangarooinafrica
  wait 1 seconds
  go to x: -61 y: -18
  switch costume to kangaroo sad
  
```



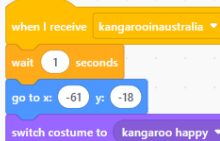
```

when I receive kangarooinantartica
  wait 1 seconds
  go to x: -61 y: -18
  switch costume to kangaroo sad
  
```



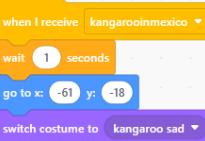
```

when I receive kangarooinchina
  wait 1 seconds
  go to x: -61 y: -18
  switch costume to kangaroo sad
  
```



```

when I receive kangarooinaustralia
  wait 1 seconds
  go to x: -61 y: -18
  switch costume to kangaroo happy
  
```



```

when I receive kangarooinmexico
  wait 1 seconds
  go to x: -61 y: -18
  switch costume to kangaroo sad
  
```

This code makes sure that if the backdrop changes to the biome map, the kangaroo will still go to the right spot even if the green flag isn't clicked.

When you press the arrow to go back to the biome map, this broadcasts the message "back". This code tells the kangaroo to change back to happy and to show when the back arrow is clicked.

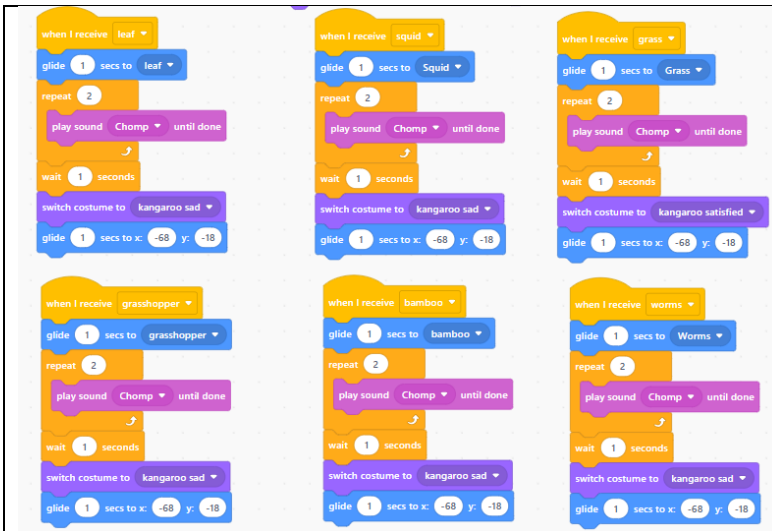
Without this, no one would be able to choose the kangaroo after going back and it might still look sad.

This code tells the kangaroo sprite to hide when the backdrop switches to kangaroo success. This is because if the kangaroo is showing it might block the words on the success backdrop.

This means that when you press on the kangaroo it broadcasts a message to the other sprites. This tells the other sprites what to do. When the other animals receive kangaroo they hide, so the kangaroo is the only visible animal sprite.

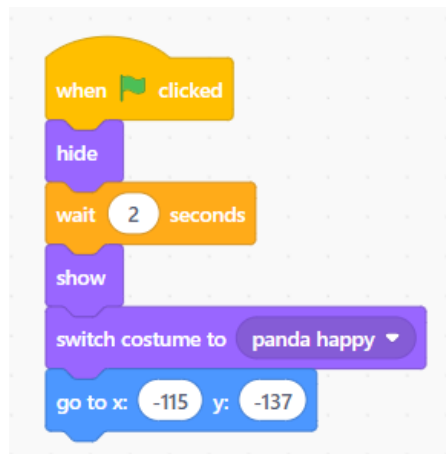
This code tells the kangaroo what to do when you click on one of the location markers. When you click on them, they each broadcast a message, and this tells the kangaroo to move to that spot.

This code tells the kangaroo sprite what to do when it receives the broadcast after a location is chosen. It waits one second because otherwise it wasn't moving properly. It moves to a spot near the middle of the screen, and it switches its costume to happy if it's the right environment or sad if it's the wrong one.



This code tells the kangaroo what to do when you click on the different foods it can eat. Clicking on a food broadcasts a message and when the kangaroo receives the message it moves to eat the food. The chomp sound is repeated to sound like “chomp chomp” because it is eating the food. If it is the right food, the kangaroo will change to “satisfied” and if it is the wrong food it will change to “sad”. Then it moves back to its position so that you can choose a different food if you chose the wrong one.

Sprite: Panda



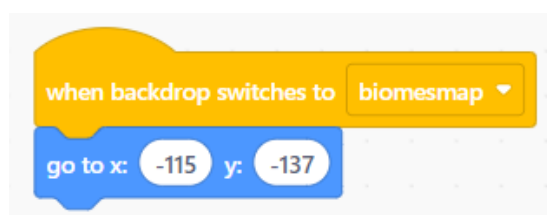
When the flag is clicked, the panda sprite needs to hide because it's going to show the title screen and you don't want any of the animals to be in there when the title screen is on.

It waits 2 seconds because that is how long the title screen is.

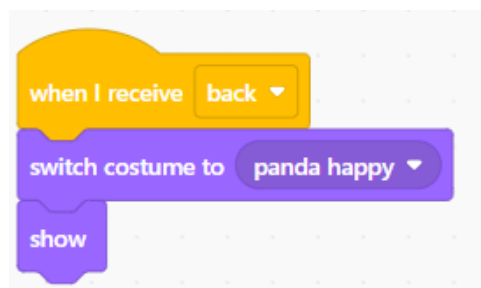
Then it tells the panda to show, so then you can see the panda on the screen.

When you're still choosing, all the animals should be happy.

The code also tells the panda sprite where to go, so all the animals are organised so they're not all random all over the place.

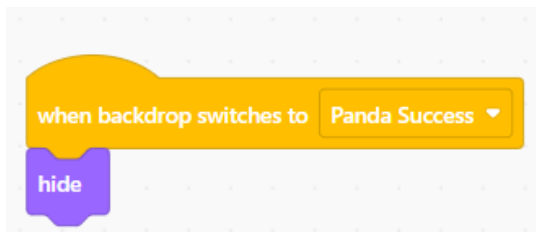


This code makes sure that if the backdrop changes to the biome map, the panda will still go to the right spot even if the green flag isn't clicked.

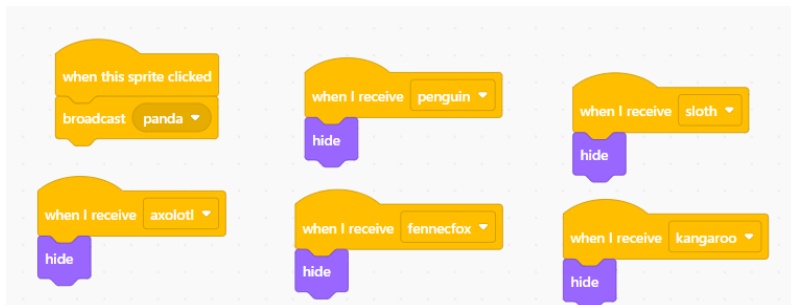


When you press the arrow to go back to the biome map, this broadcasts the message “back”. This code tells the panda to change back to happy and to show when the back arrow is clicked.

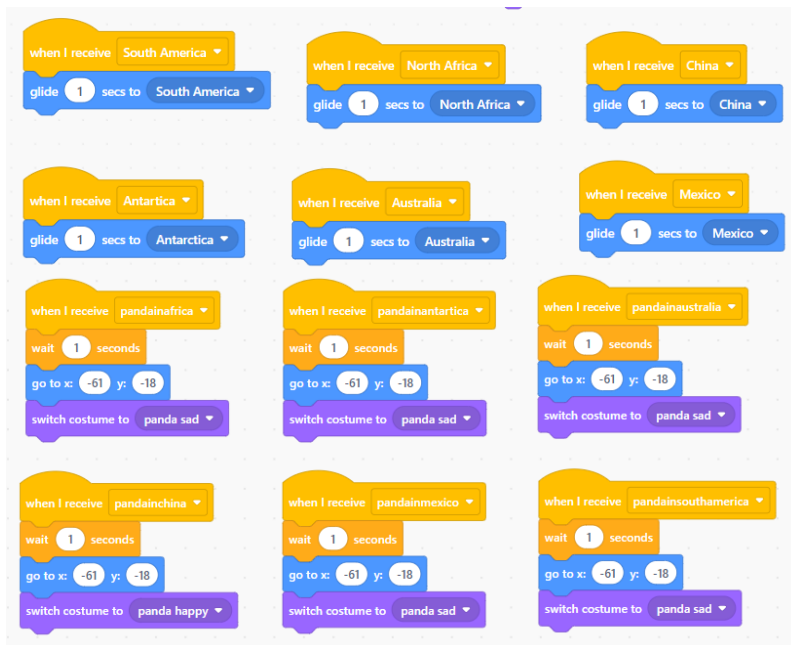
Without this, no one would be able to choose the panda after going back and it might still look sad.



This code tells the panda sprite to hide when the backdrop switches to panda success. This is because if the panda is showing it might block the words on the success backdrop.



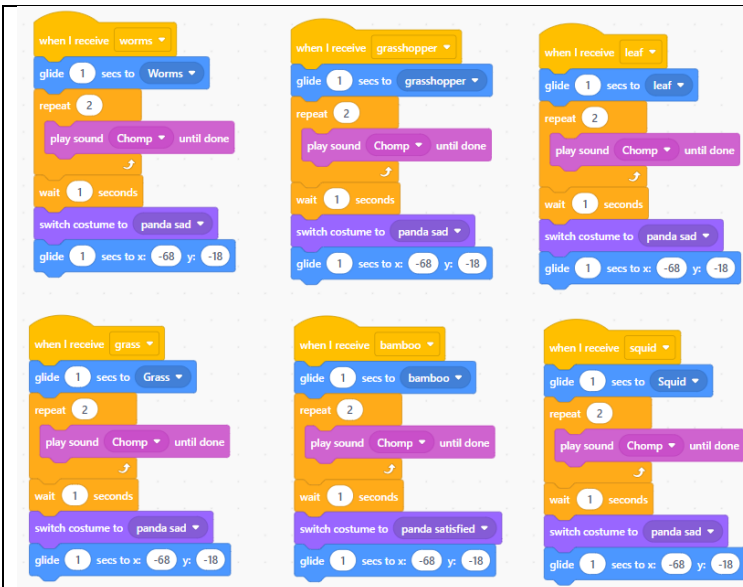
This means that when you press on the panda it broadcasts a message to the other sprites. This tells the other sprites what to do. When the other animals receive panda, they hide, so the panda is the only visible animal sprite.



This code tells the panda what to do when you click on one of the location markers. When you click on them, they each broadcast a message, and this tells the panda to move to that spot.

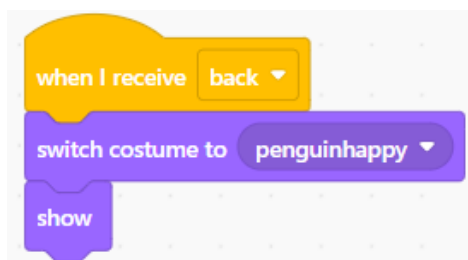
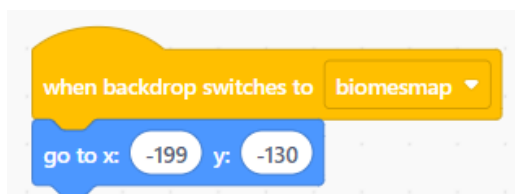
This code tells the panda sprite what to do when it receives the broadcast after a location is chosen. It waits one second because otherwise it wasn't moving properly. It moves to a spot near the middle of the screen, and it switches its costume to happy if it's the right environment or sad if it's the wrong one.

This code tells the panda what to do when you click on the different foods it can eat. Clicking on a food broadcasts a message and when the panda receives the message it moves to eat the food. The chomp sound is repeated to sound like "chomp chomp" because it is eating the food. If it is the right food, the panda will change to "satisfied" and if it is the wrong



food it will change to “sad”. Then it moves back to its position so that you can choose a different food if you chose the wrong one.

Sprite: Penguin



When the flag is clicked, the penguin sprite needs to hide because it's going to show the title screen and you don't want any of the animals to be in there when the title screen is on.

It waits 2 seconds because that is how long the title screen is.

Then it tells the penguin to show, so then you can see the fennec fox on the screen.

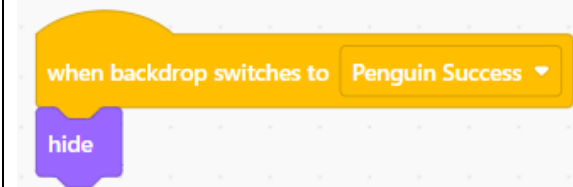
When you're still choosing, all the animals should be happy.

The code also tells the penguin sprite where to go, so all the animals are organised so they're not all random all over the place.

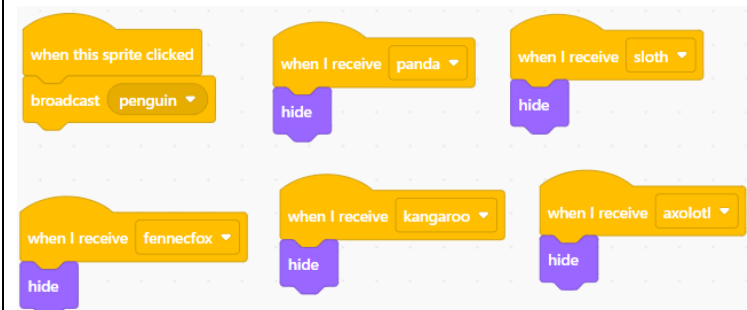
This code makes sure that if the backdrop changes to the biome map, the penguin will still go to the right spot even if the green flag isn't clicked.

When you press the arrow to go back to the biome map, this broadcasts the message “back”. This code tells the penguin to change back to happy and to show when the back arrow is clicked.

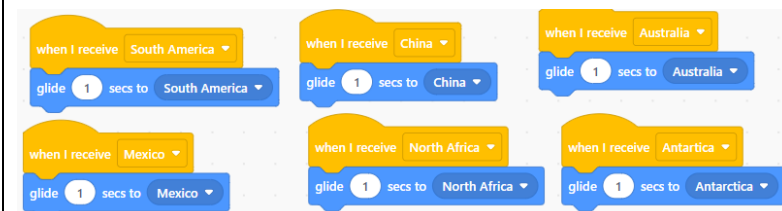
Without this, no one would be able to choose the penguin after going back and it might still look sad.



This code tells the penguin sprite to hide when the backdrop switches to penguin success. This is because if the penguin is showing it might block the words on the success backdrop.



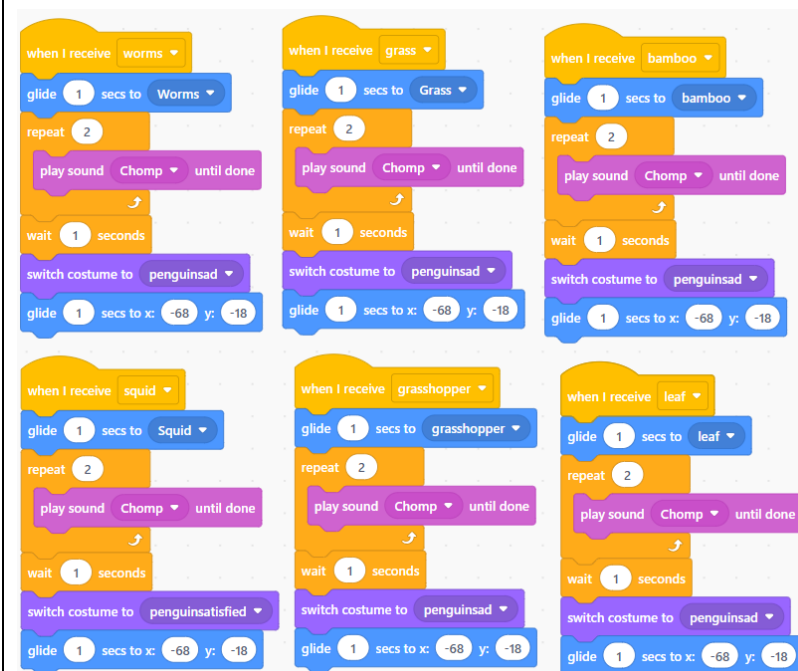
This means that when you press on the penguin it broadcasts a message to the other sprites. This tells the other sprites what to do. When the other animals receive penguin, they hide, so the penguin is the only visible animal sprite.



This code tells the penguin what to do when you click on one of the location markers. When you click on them, they each broadcast a message, and this tells the penguin to move to that spot.

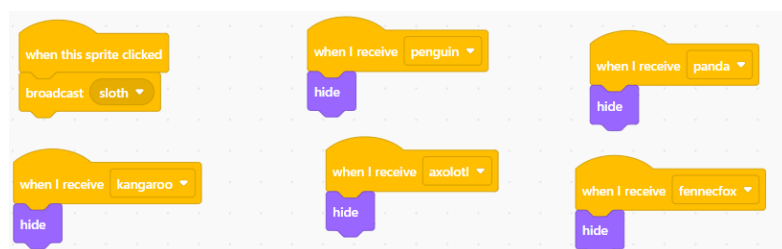
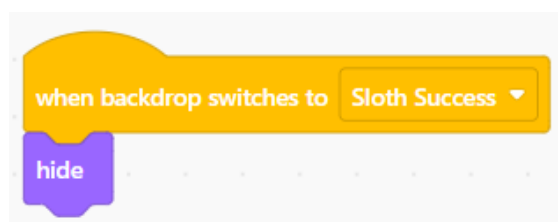
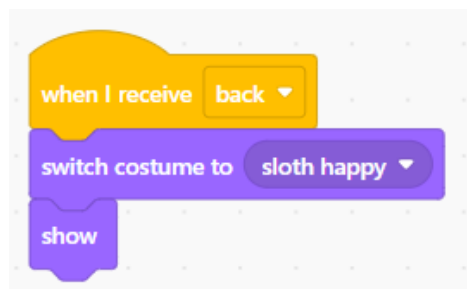
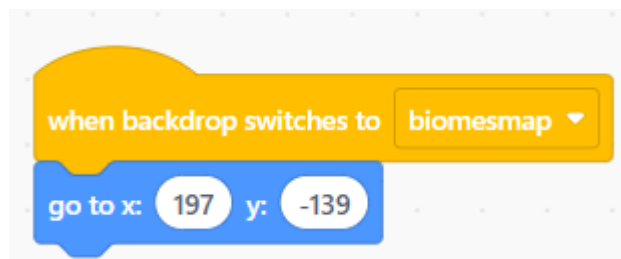
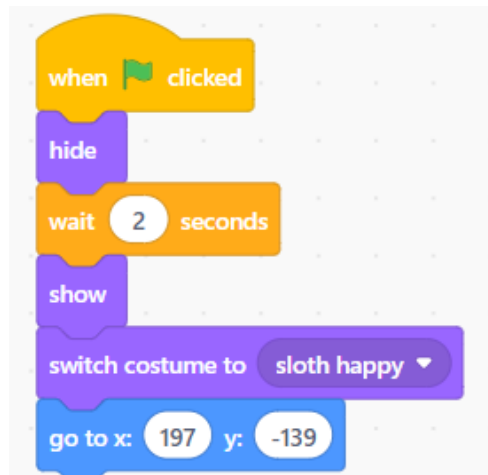


This code tells the penguin sprite what to do when it receives the broadcast after a location is chosen. It waits one second because otherwise it wasn't moving properly. It moves to a spot near the middle of the screen, and it switches its costume to happy if it's the right environment or sad if it's the wrong one.



This code tells the penguin what to do when you click on the different foods it can eat. Clicking on a food broadcasts a message and when the penguin receives the message it moves to eat the food. The chomp sound is repeated to sound like "chomp chomp" because it is eating the food. If it is the right food, the penguin will change to "satisfied" and if it is the wrong food it will change to "sad". Then it moves back to its position so that you can choose a different food if you chose the wrong one.

Sprite: Sloth



When the flag is clicked, the sloth sprite needs to hide because it's going to show the title screen and you don't want any of the animals to be in there when the title screen is on.

It waits 2 seconds because that is how long the title screen is.

Then it tells the sloth to show, so then you can see the sloth on the screen.

When you're still choosing, all the animals should be happy.

The code also tells the sloth sprite where to go, so all the animals are organised so they're not all random all over the place.

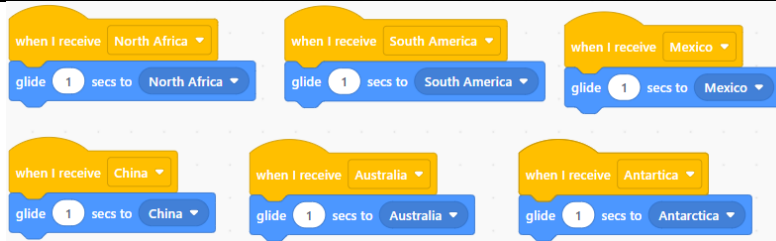
This code makes sure that if the backdrop changes to the biome map, the sloth will still go to the right spot even if the green flag isn't clicked.

When you press the arrow to go back to the biome map, this broadcasts the message "back". This code tells the sloth to change back to happy and to show when the back arrow is clicked.

Without this, no one would be able to choose the sloth after going back and it might still look sad.

This code tells the sloth sprite to hide when the backdrop switches to sloth success. This is because if the sloth is showing it might block the words on the success backdrop.

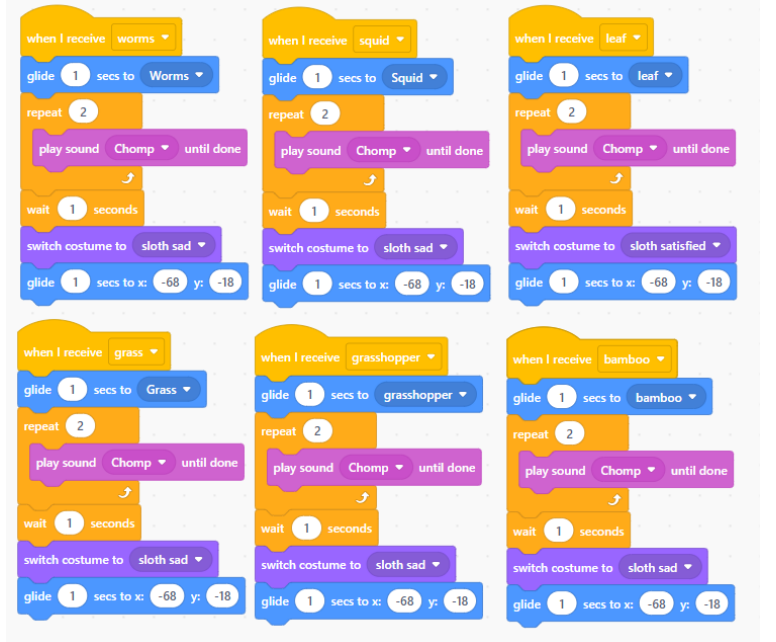
This means that when you press on the sloth it broadcasts a message to the other sprites. This tells the other sprites what to do. When the other animals receive sloth, they hide, so the sloth is the only visible animal sprite.



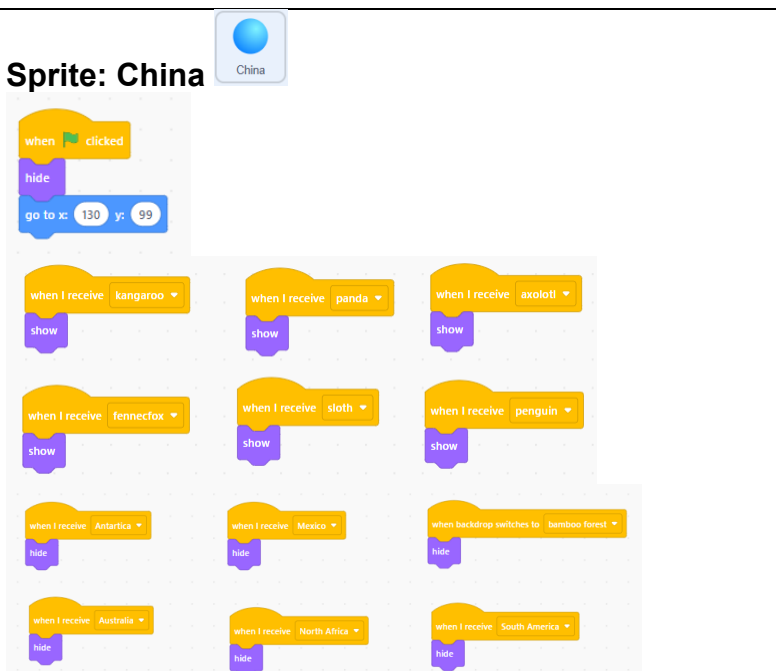
This code tells the sloth what to do when you click on one of the location markers. When you click on them, they each broadcast a message, and this tells the sloth to move to that spot.



This code tells the sloth sprite what to do when it receives the broadcast after a location is chosen. It waits one second because otherwise it wasn't moving properly. It moves to a spot near the middle of the screen, and it switches its costume to happy if it's the right environment or sad if it's the wrong one.



This code tells the sloth what to do when you click on the different foods it can eat. Clicking on a food broadcasts a message and when the sloth receives the message it moves to eat the food. The chomp sound is repeated to sound like "chomp chomp" because it is eating the food. If it is the right food, the sloth will change to "satisfied" and if it is the wrong food it will change to "sad". Then it moves back to its position so that you can choose a different food if you chose the wrong one.



Sprite: China

This code tells the China sprite that it needs to hide when the game is started. So it doesn't show when the title screen is shown.

This code tells the China sprite to appear when one of the animals is clicked. The animal broadcasts a message, and then when the China sprite receives it, it will show on the screen.

This code tells the China sprite what to do when one of the

```

when this sprite clicked
broadcast China
forever
if touching axolotl ? then
broadcast axolotlchina
wait 1.5 seconds
switch backdrop to bamboo forest
if touching fennec fox ? then
broadcast foxinchina
wait 1 seconds
switch backdrop to bamboo forest
if touching kangaroo ? then
broadcast kangarooinchina
wait 1 seconds
switch backdrop to bamboo forest
if touching panda ? then
broadcast pandainchina
wait 1 seconds
switch backdrop to bamboo forest
if touching penguin ? then
broadcast penguininchina
wait 1 seconds
switch backdrop to bamboo forest
if touching sloth ? then
broadcast slothinchina
wait 1 seconds
switch backdrop to bamboo forest

```

```

when I receive back
stop other scripts in sprite

```

location markers is clicked. The location marker broadcasts a message, and then the China sprite will hide. It doesn't need to hide when China is clicked.

It also tells the China sprite to hide when the backdrop switches to the bamboo forest, so it doesn't show when it changes.

This code tells the China sprite to broadcast the 'China' message when its clicked. This tells other sprites what to do depending on what their own code says.

It also tells the game what needs to happen when one of the animals moves to the China sprite. When one of the animals moves there, it broadcasts a message so that the other sprites can react. It then also switches the backdrop to 'bamboo forest'.

It needs to send a different message for each animal because this will tell 'Bonnie' and other sprites what to do when it changes to that backdrop.

This piece of code tells all the other code for the China sprite to stop when the back button is pressed. This is because the code for when the China sprite is clicked uses the forever code, and if it didn't stop the script then it would mess up what happened with the animals and locations.

Sprite: South America



```

when clicked
hide
go to x: -108 y: 50

```

This code tells the South America sprite that it needs to hide when the game is started. So it doesn't show when the title screen is shown.

This code tells the South America sprite to appear when one of the animals is clicked.

The image shows a collection of Scratch code blocks for a South America sprite. At the top, there are nine 'when I receive' blocks for messages: sloth, penguin, fennecfox, panda, kangaroo, axolotl, rainforest, Australia, and Antarctica. Each of these messages is followed by a 'show' or 'hide' block. Below these are three 'when I receive' blocks for Mexico, China, and North Africa, each followed by a 'hide' block. The main script starts with 'when this sprite clicked', followed by a 'broadcast South America' block. Then, there is a 'forever' loop containing six 'if touching' blocks for axolotl, fennec fox, kangaroo, panda, penguin, and sloth. Each 'if' block contains a 'broadcast' block (e.g., 'axolotlinsouthamerica'), a 'wait 1 seconds' block, and a 'switch backdrop to rainforest' block. Finally, there is a 'when I receive back' block followed by a 'stop other scripts in sprite' block.

The animal broadcasts a message, and then when the South America sprite receives it, it will show on the screen.

This code tells the South America sprite what to do when one of the location markers is clicked. The location marker broadcasts a message, and then the South America sprite will hide. It doesn't need to hide when South America is clicked. It also tells the South America sprite to hide when the backdrop switches to the rainforest, so it doesn't show when it changes.

This code tells the South America sprite to broadcast the 'South America' message when it's clicked. This tells other sprites what to do depending on what their own code says. It also tells the game what needs to happen when one of the animals moves to the South America sprite. When one of the animals moves there, it broadcasts a message so that the other sprites can react. It then also switches the backdrop to 'rainforest'. It needs to send a different message for each animal because this will tell 'Bonnie' and other sprites what to do when it changes to that backdrop.

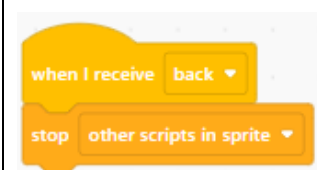
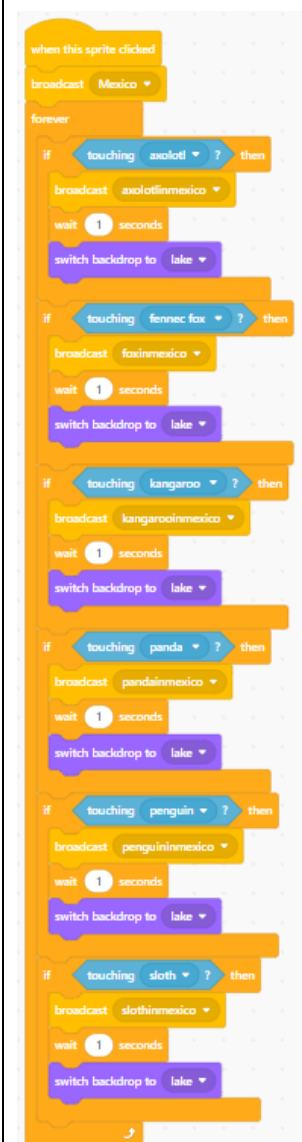
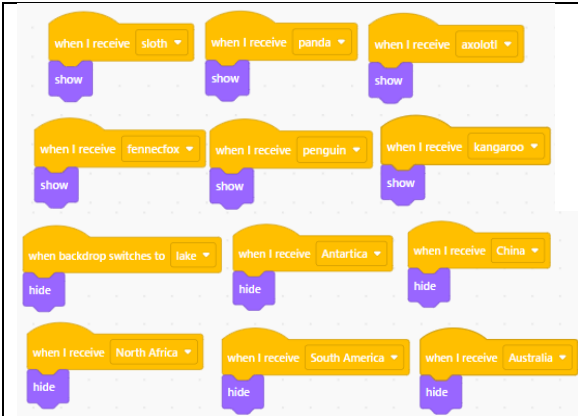
This piece of code tells all the other code for the South America sprite to stop when the back button is pressed. This is because the code for when the South America sprite is clicked uses the forever code, and if it didn't stop the script then it would mess up what happened with the animals and locations.

Sprite: Mexico



The image shows a small Scratch script for a Mexico sprite. It starts with a 'when clicked' block, followed by a 'hide' block, and then a 'go to x: -157 y: 87' block.

This code tells the Mexico sprite that it needs to hide when the game is started. So it doesn't show when the title screen is shown.



This code tells the Mexico sprite to appear when one of the animals is clicked. The animal broadcasts a message, and then when the Mexico sprite receives it, it will show on the screen.

This code tells the Mexico sprite what to do when one of the location markers is clicked. The location marker broadcasts a message, and then the Mexico sprite will hide. It doesn't need to hide when Mexico is clicked. It also tells the Mexico sprite to hide when the backdrop sprite switches to the lake, so it doesn't show when it changes.

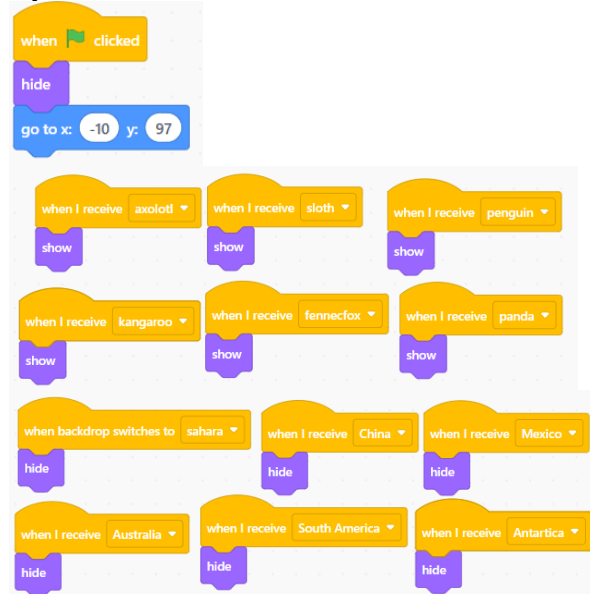
This code tells the Mexico sprite to broadcast the 'Mexico' message when it's clicked. This tells other sprites what to do depending on what their own code says.

It also tells the game what needs to happen when one of the animals moves to the Mexico sprite. When one of the animals moves there, it broadcasts a message so that the other sprites can react. It then also switches the backdrop to 'lake'.

It needs to send a different message for each animal because this will tell 'Bonnie' and other sprites what to do when it changes to that backdrop.

This piece of code tells all the other code for the Mexico sprite to stop when the back button is pressed. This is because the code for when the Mexico sprite is clicked uses the forever code, and if it didn't stop the script then it would mess up what happened with the animals and locations.

Sprite: North Africa



This code tells the North Africa sprite that it needs to hide when the game is started. So it doesn't show when the title screen is shown.

This code tells the North Africa sprite to appear when one of the animals is clicked. The animal broadcasts a message, and then when the North Africa sprite receives it, it will show on the screen.

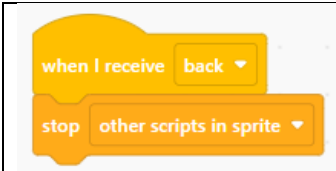
This code tells the North Africa sprite what to do when one of the location markers is clicked. The location marker broadcasts a message, and then the North Africa sprite will hide. It doesn't need to hide when North Africa is clicked.

It also tells the North Africa sprite to hide when the backdrop switches to the sahara, so it doesn't show when it changes.

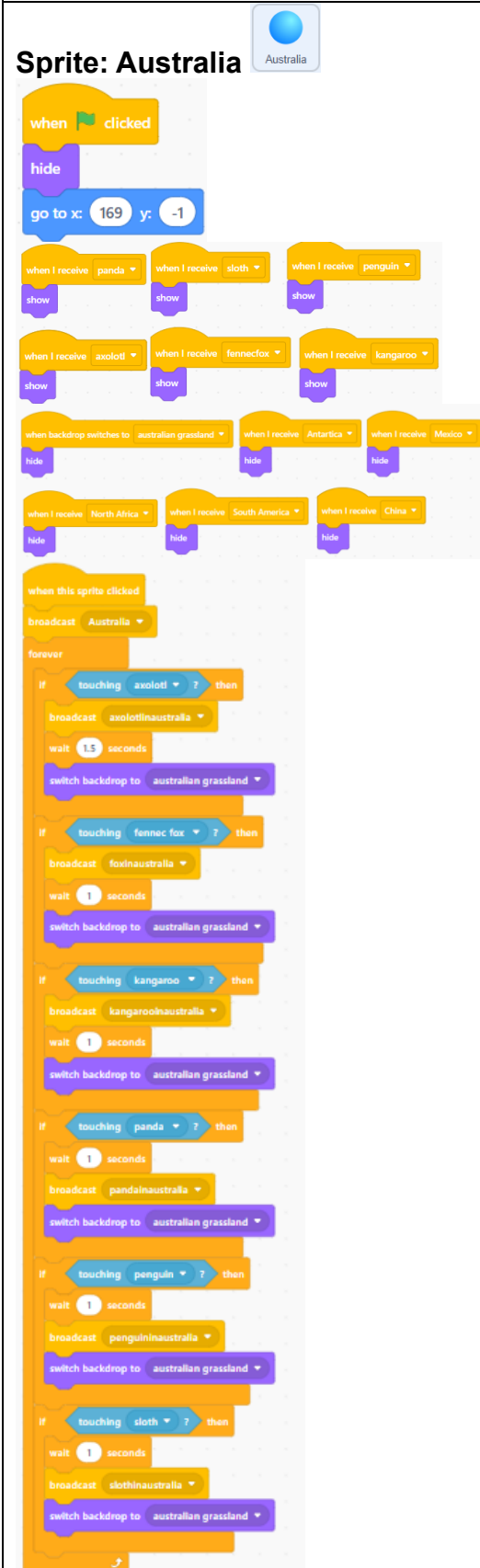
This code tells the North Africa sprite to broadcast the 'North Africa' message when it's clicked. This tells other sprites what to do depending on what their own code says.

It also tells the game what needs to happen when one of the animals moves to the North Africa sprite. When one of the animals moves there, it broadcasts a message so that the other sprites can react. It then also switches the backdrop to 'sahara'.

It needs to send a different message for each animal because this will tell 'Bonnie' and other sprites what to do when it changes to that backdrop.



This piece of code tells all the other code for the North Africa sprite to stop when the back button is pressed. This is because the code for when the North Africa sprite is clicked uses the forever code, and if it didn't stop the script then it would mess up what happened with the animals and locations.



This code tells the Australia sprite that it needs to hide when the game is started. So it doesn't show when the title screen is shown.

This code tells the Australia sprite to appear when one of the animals is clicked. The animal broadcasts a message, and then when the Australia sprite receives it, it will show on the screen.

This code tells the Australia sprite what to do when one of the location markers is clicked. The location marker broadcasts a message, and then the Australia sprite will hide. It doesn't need to hide when Australia is clicked. It also tells the Australia sprite to hide when the backdrop switches to the australian grassland, so it doesn't show when it changes.

This code tells the Australia sprite to broadcast the 'Australia' message when it's clicked. This tells other sprites what to do depending on what their own code says.

It also tells the game what needs to happen when one of the animals moves to the Australia sprite. When one of the animals moves there, it broadcasts a message so that the other sprites can react. It then also switches the backdrop to 'australian grassland'.

It needs to send a different message for each animal because this will tell 'Bonnie' and other sprites what to do when it changes to that backdrop.

```

when I receive back
stop other scripts in sprite

```

This piece of code tells all the other code for the Australia sprite to stop when the back button is pressed. This is because the code for when the Australia sprite is clicked uses the forever code, and if it didn't stop the script then it would mess up what happened with the animals and locations.

Sprite: Antarctica



```

when clicked
hide
go to x: 35 y: -58

when I receive axolotl
show

when I receive fennecfox
show

when I receive panda
show

when I receive sloth
show

when I receive penguin
show

when I receive kangaroo
show

when backdrop switches to antarctica
hide

when I receive Australia
hide

when I receive China
hide

when I receive North Africa
hide

when I receive South America
hide

when I receive Mexico
hide

when this sprite clicked
broadcast Antarctica

forever
if touching axolotl ? then
broadcast axolotinantarctica
wait 1 seconds
switch backdrop to antarctica

if touching fennec fox ? then
broadcast foxinantarctica
wait 1 seconds
switch backdrop to antarctica

if touching kangaroo ? then
wait 1 seconds
broadcast kangarooninantarctica
switch backdrop to antarctica

if touching panda ? then
wait 1 seconds
broadcast pandainantarctica
switch backdrop to antarctica

if touching penguin ? then
wait 1 seconds
broadcast penguininantarctica
switch backdrop to antarctica

if touching sloth ? then
wait 1 seconds
broadcast slothinantarctica
switch backdrop to antarctica

```

This code tells the Antarctica sprite that it needs to hide when the game is started. So it doesn't show when the title screen is shown.

This code tells the Antarctica sprite to appear when one of the animals is clicked. The animal broadcasts a message, and then when the Antarctica sprite receives it, it will show on the screen.

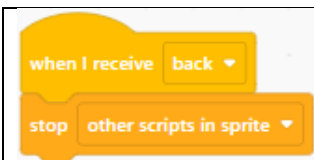
This code tells the Antarctica sprite what to do when one of the location markers is clicked. The location marker broadcasts a message, and then the Antarctica sprite will hide. It doesn't need to hide when Antarctica is clicked.

It also tells the Antarctica sprite to hide when the backdrop switches to the antarctica backdrop, so it doesn't show when it changes.

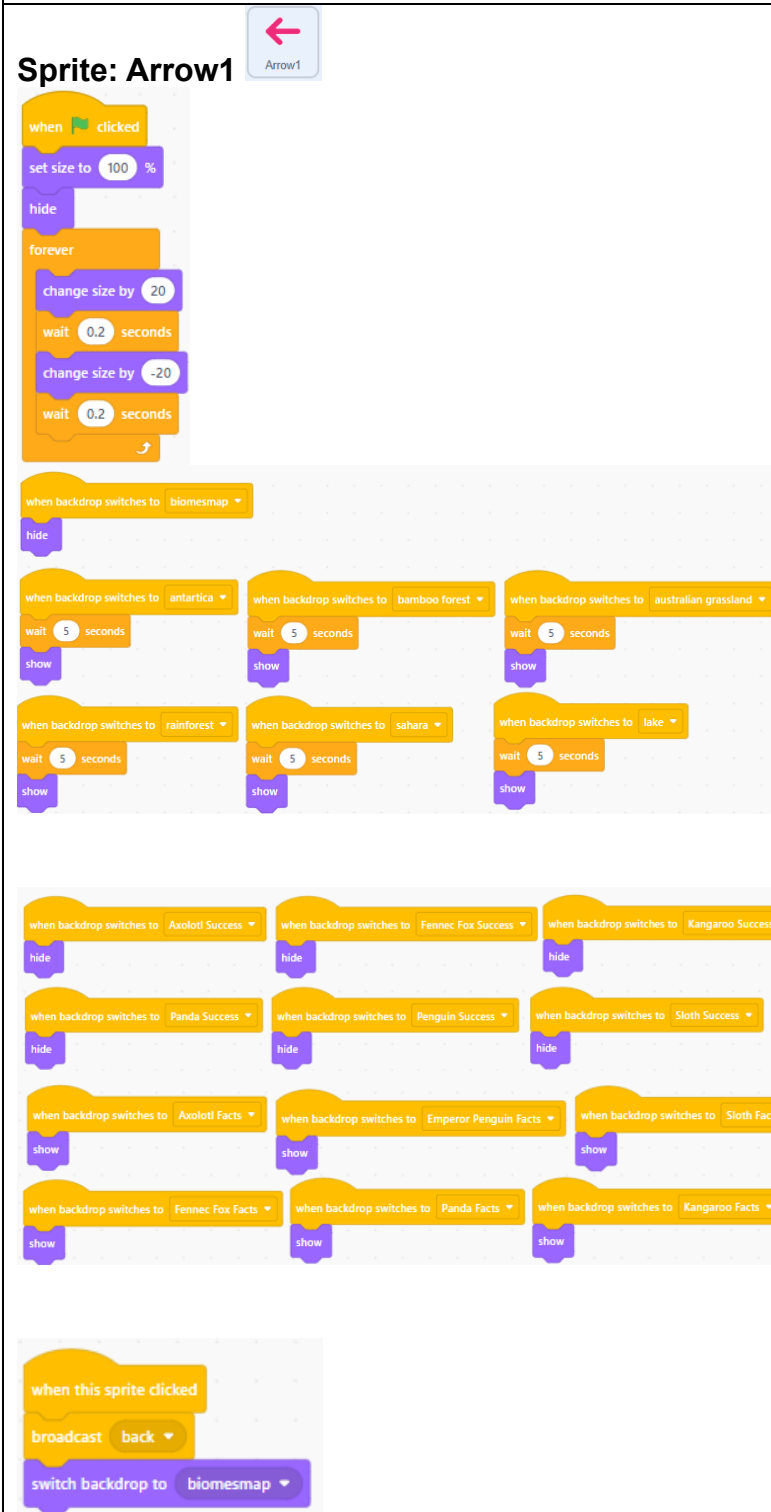
This code tells the Antarctica sprite to broadcast the 'Antarctica' message when it's clicked. This tells other sprites what to do depending on what their own code says.

It also tells the game what needs to happen when one of the animals moves to the Antarctica sprite. When one of the animals moves there, it broadcasts a message so that the other sprites can react. It then also switches the backdrop to 'antarctica'.

It needs to send a different message for each animal because this will tell 'Bonnie' and other sprites what to do when it changes to that backdrop.



This piece of code tells all the other code for the Antarctica sprite to stop when the back button is pressed. This is because the code for when the Antarctica sprite is clicked uses the forever code, and if it didn't stop the script then it would mess up what happened with the animals and locations.



This code makes the “back” arrow hide when the game starts. It makes the arrow grow bigger and smaller forever, so that it looks like its flashing when you do see it.

This code makes the arrow hide when the background changes to the biomes map. The arrow takes you back to this background, so it doesn't need to be seen.

This code tells the arrow show when the background changes to one of the countries. This is so that you can go back and choose a different country or animal if you want.

This code tells the arrow to hide when you feed each animal the right food in the right location.

This code tells the arrow to show again on each of the animal pages. This means you can go choose another animal to rescue after you read the facts.

This code tells the back arrow to broadcast the “back” message when it is clicked so that other sprites can do something when they receive the message. It also changes the background back to the biomesmap so you can choose another animal.

Sprite Bamboo



```

when I receive food pack
  go to x: -218 y: -128
  show
  go to front layer

when backdrop switches to Biome
  hide

when backdrop switches to biomesmap
  hide

when I receive worms
  hide

when I receive squid
  hide

when I receive leaf
  hide

when I receive grasshopper
  hide

when I receive grass
  hide
  
```

```

when this sprite clicked
  broadcast bamboo
  go to x: 60 y: 0
  forever
    if touching axoloti? then
      broadcast axolotibamboo
      wait 1.5 seconds
      hide
    if touching fennec fox? then
      broadcast foxbamboo
      wait 1.5 seconds
      hide
    if touching kangaroo? then
      broadcast kangaroo bamboo
      wait 1.5 seconds
      hide
    if touching panda? then
      broadcast pandabamboo
      wait 1.5 seconds
      hide
    if touching penguin? then
      broadcast penguin bamboo
      wait 1.5 seconds
      hide
    if touching sloth? then
      broadcast slothbamboo
      wait 1.5 seconds
      hide
  
```

This code tells the bamboo to show when it receives the message “food pack” and it tells it the position to go to. The message is broadcast when the food pack is clicked. It also goes to the front layer so it doesn't hide behind the food pack background and can be seen.

This code tells the bamboo to hide when the background is the biome map or the title screen.

This code tells the bamboo to hide when one of the other foods is selected (clicked)

This code tells the bamboo what to do when it is clicked. It broadcasts the message “bamboo” and moves to near the middle of the screen. This message will tell the animal to move to the same spot to eat the bamboo.

The bamboo then needs to broadcast another message to tell the game what to do. This is different for each animal, because the animals have different reactions.

After broadcasting the right message, it waits 1.5 seconds and then hides. This gives it time for other things to happen like the eating noise, before it hides. It looks like it has been eaten because it hides.

Lots of the code for the food tells it to hide again, because this way you can't see it unless you are actually trying to feed the animal.

Sprite: Food Pack



```

when this sprite clicked
  broadcast food pack
  go to back layer
  when backdrop switches to Biome
    hide
  when backdrop switches to biomesmap
    hide
  
```

```

when I receive kangarooinaustralia
  go to x: 170 y: -105
  wait 1.5 seconds
  show

when I receive axolotlinmexico
  go to x: 170 y: -105
  wait 1.5 seconds
  show

when I receive foxinafrica
  go to x: 170 y: -105
  wait 1.5 seconds
  show

when I receive pandainchina
  go to x: 170 y: -105
  wait 1.5 seconds
  show

when I receive penguininantartica
  go to x: 170 y: -105
  wait 1.5 seconds
  show

when I receive slothsouthamerica
  go to x: 170 y: -105
  wait 1.5 seconds
  show
  
```

```

when backdrop switches to Axolotl Success
  hide

when backdrop switches to Kangaroo Success
  hide

when backdrop switches to Penguin Success
  hide

when backdrop switches to Fennec Fox Success
  hide

when backdrop switches to Panda Success
  hide

when backdrop switches to Sloth Success
  hide
  
```

This code tells the food pack what to do when it is clicked. It broadcasts “food pack” which lets other things ‘receive’ the message and do something.

It also needs to hide when the background is the title screen or the biome map.

This code tells the food pack when to show on the screen and it tells it the position to go to in the corner. This means it doesn’t block anything. It also waits 1.5 seconds to make sure it doesn’t accidentally show up early.

When the animal is fed the right food, the food pack can hide because you don’t need to use it until you pick a new animal. It hides when the background changes to the success backgrounds.

Sprite: Grass



```

when I receive food pack
  go to x: 78 y: -128
  show
  go to front layer

when backdrop switches to Biome
  hide

when backdrop switches to biomesmap
  hide
  
```

```

when I receive bamboo
  hide

when I receive grasshopper
  hide

when I receive leaf
  hide

when I receive squid
  hide

when I receive worms
  hide
  
```

This code tells the grass to show when it receives the message “food pack” and it tells it the position to go to. The message is broadcast when the food pack is clicked. It also goes to the front layer so it doesn’t hide behind the food pack background and can be seen.

This code tells the grass to hide when the background is the biome map or the title screen.

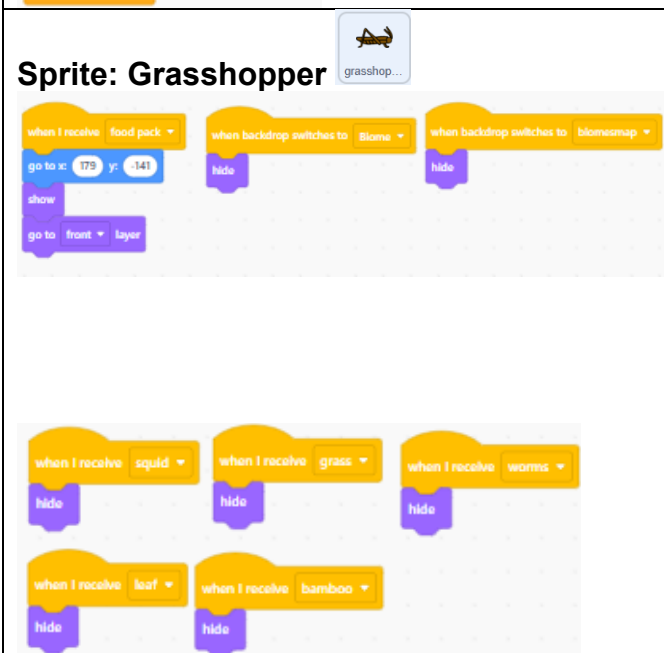
This code tells the grass to hide when one of the other foods is selected (clicked)



This code tells the grass what to do when it is clicked. It broadcasts the message “grass” and moves to near the middle of the screen. This message will tell the animal to move to the same spot to eat the grass.

The grass then needs to broadcast another message to tell the game what to do. This is different for each animal, because the animals have different reactions.

After broadcasting the right message, it waits 1.5 seconds and then hides. This gives it time for other things to happen like the eating noise, before it hides. It looks like it has been eaten because it hides.



This code tells the grasshopper to show when it receives the message “food pack” and it tells it the position to go to. The message is broadcast when the food pack is clicked. It also goes to the front layer so it doesn’t hide behind the food pack background and can be seen.

This code tells the grasshopper to hide when the background is the biome map or the title screen.

This code tells the grasshopper to hide when one of the other foods is selected (clicked)

```

when this sprite clicked
broadcast grasshopper
go to x: 60 y: 0
forever
  if touching axolotl ? then
    broadcast axolotlgrasshopper
    wait 1.5 seconds
    hide
  if touching fennec fox ? then
    broadcast foxgrasshopper
    wait 1.5 seconds
    hide
  if touching kangaroo ? then
    broadcast kangaroograsshopper
    wait 1.5 seconds
    hide
  if touching panda ? then
    broadcast pandagrasshopper
    wait 1.5 seconds
    hide
  if touching penguin ? then
    broadcast penguingrasshopper
    wait 1.5 seconds
    hide
  if touching sloth ? then
    broadcast slothgrasshopper
    wait 1.5 seconds
    hide

```

This code tells the grasshopper what to do when it is clicked. It broadcasts the message “grasshopper” and moves to near the middle of the screen. This message will tell the animal to move to the same spot to eat the grasshopper.

The grasshopper then needs to broadcast another message to tell the game what to do. This is different for each animal, because the animals have different reactions.

After broadcasting the right message, it waits 1.5 seconds and then hides. This gives it time for other things to happen like the eating noise, before it hides. It looks like it has been eaten because it hides.

Sprite: Leaf



```

when I receive food pack
go to x: 0 y: -139
show
go to front layer

when backdrop switches to Biome
hide

when backdrop switches to biomesmap
hide

when I receive worms
hide

when I receive squid
hide

when I receive grass
hide

when I receive grasshopper
hide

when I receive bamboo
hide

```

This code tells the leaf to show when it receives the message “food pack” and it tells it the position to go to. The message is broadcast when the food pack is clicked. It also goes to the front layer so it doesn’t hide behind the food pack background and can be seen.

This code tells the leaf to hide when the backdrop is the biome map or the title screen.

This code tells the leaf to hide when one of the other foods is selected (clicked)

```

when this sprite clicked
broadcast leaf
go to x: 60 y: 0
forever
if touching axolotl? then
broadcast axolotlleaf
wait 1.5 seconds
hide
if touching fennec fox? then
broadcast foxleaf
wait 1.5 seconds
hide
if touching kangaroo? then
broadcast kangarooleaf
wait 1.5 seconds
hide
if touching panda? then
broadcast pandaleaf
wait 1.5 seconds
hide
if touching penguin? then
broadcast penguinleaf
wait 1.5 seconds
hide
if touching sloth? then
broadcast slothleaf
wait 1.5 seconds
hide

```

This code tells the leaf what to do when it is clicked. It broadcasts the message “leaf” and moves to near the middle of the screen. This message will tell the animal to move to the same spot to eat the leaf.

The leaf then needs to broadcast another message to tell the game what to do. This is different for each animal, because the animals have different reactions.

After broadcasting the right message, it waits 1.5 seconds and then hides. This gives it time for other things to happen like the eating noise, before it hides. It looks like it has been eaten because it hides.

Sprite: Squid



```

when I receive food pack
go to x: -150 y: -135
show
go to front layer

when backdrop switches to biomesmap
hide

when backdrop switches to Biome
hide

```

```

when I receive grass
hide

when I receive bamboo
hide

when I receive grasshopper
hide

when I receive leaf
hide

when I receive worms
hide

```

This code tells the squid to show when it receives the message “food pack” and it tells it the position to go to. The message is broadcast when the food pack is clicked. It also goes to the front layer so it doesn’t hide behind the food pack background and can be seen.

This code tells the squid to hide when the background is the biome map or the title screen.

This code tells the squid to hide when one of the other foods is selected (clicked)

```

when this sprite clicked
broadcast squid
go to x: 60 y: 0
forever
  if touching axolotl? then
    broadcast axolotlsquid
    wait 1.5 seconds
    hide
  if touching fennec fox? then
    broadcast foxsquid
    wait 1.5 seconds
    hide
  if touching kangaroo? then
    broadcast kangaroosquid
    wait 1.5 seconds
    hide
  if touching panda? then
    broadcast pandasquid
    wait 1.5 seconds
    hide
  if touching penguin? then
    broadcast penguinsquid
    wait 1.5 seconds
    hide
  if touching sloth? then
    broadcast slothsquid
    wait 1.5 seconds
    hide

```

This code tells the squid what to do when it is clicked. It broadcasts the message “squid” and moves to near the middle of the screen. This message will tell the animal to move to the same spot to eat the squid.

The squid then needs to broadcast another message to tell the game what to do. This is different for each animal, because the animals have different reactions.

After broadcasting the right message, it waits 1.5 seconds and then hides. This gives it time for other things to happen like the eating noise, before it hides. It looks like it has been eaten because it hides.

Sprite: Worms



```

when I receive food pack
  go to x: -76 y: -121
  show
  go to front layer

when backdrop switches to Biome
  hide

when backdrop switches to biomesmap
  hide

when I receive squid
  hide

when I receive leaf
  hide

when I receive bamboo
  hide

when I receive grass
  hide

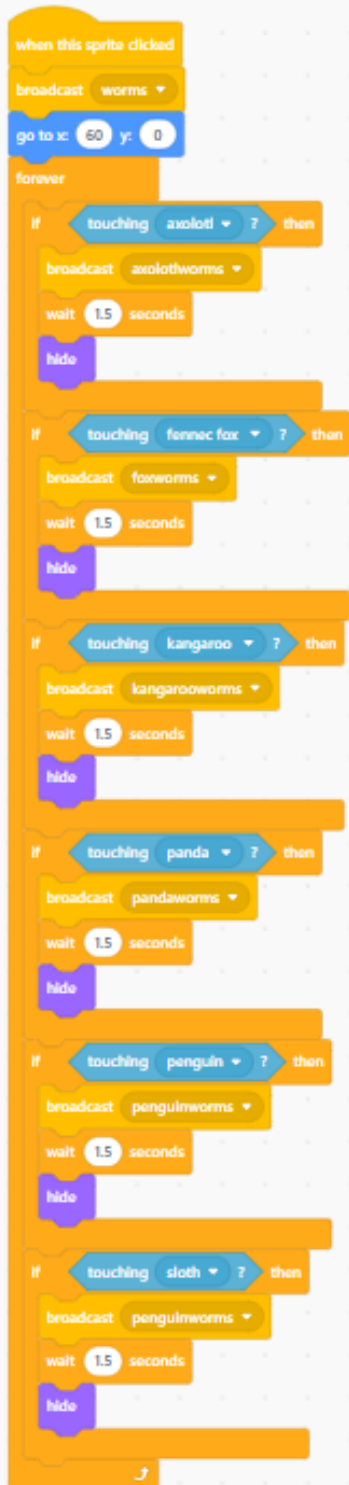
when I receive grasshopper
  hide

```

This code tells the worms to show when it receives the message “food pack” and it tells it the position to go to. The message is broadcast when the food pack is clicked. It also goes to the front layer so it doesn't hide behind the food pack background and can be seen.

This code tells the worms to hide when the background is the biome map or the title screen.

This code tells the worms to hide when one of the other foods is selected (clicked)

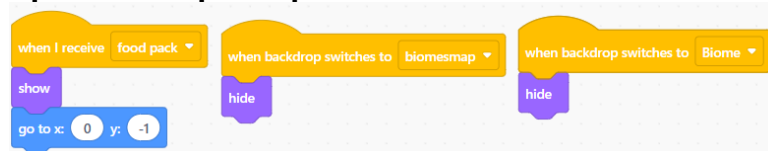


This code tells the worms what to do when it is clicked. It broadcasts the message “worms” and moves to near the middle of the screen. This message will tell the animal to move to the same spot to eat the worms.

The worms then needs to broadcast another message to tell the game what to do. This is different for each animal, because the animals have different reactions.

After broadcasting the right message, it waits 1.5 seconds and then hides. This gives it time for other things to happen like the eating noise, before it hides. It looks like it has been eaten because it hides.

Sprite: Foodpackopen



This code tells the food pack background what to do.

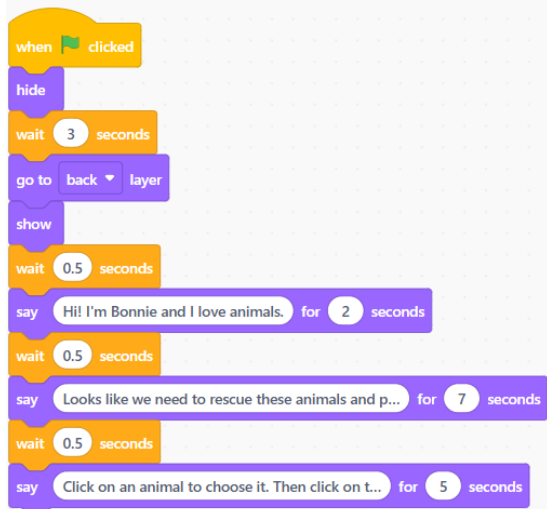
When it receives “food pack” (when the food pack is clicked) it shows and needs to go to the right location. This helps you see the food better and also makes it look like the bag is open.

When the backdrop is the biome map or the title screen it needs to hide.



This code tells it to hide when you click on one of the foods. This is because the food pack “closes” once you choose a food. It will show again if you click on the food pack.

Sprite: Bonnie



This code tells the ‘Bonnie’ sprite what to do when the game starts. At first Bonnie needs to hide so you don’t see her during the title screen. Then she waits 3 seconds so she appears when the map appears.

It also tells her to go to back layer to make sure she doesn’t cover any of the animals.

Then it tells her what to say when the game starts. This tells people what to do. It was tricky choosing the right time for each one to make sure people had enough time to read it, but it wasn’t too fast that they clicked ahead without reading.

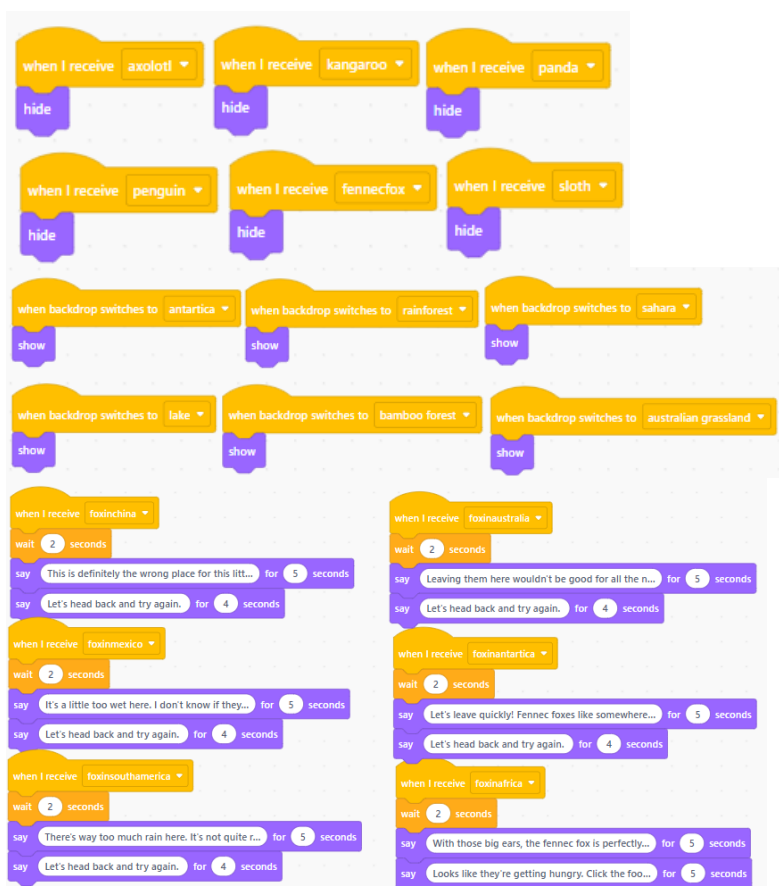
This code says that when an animal is clicked, Bonnie hides.

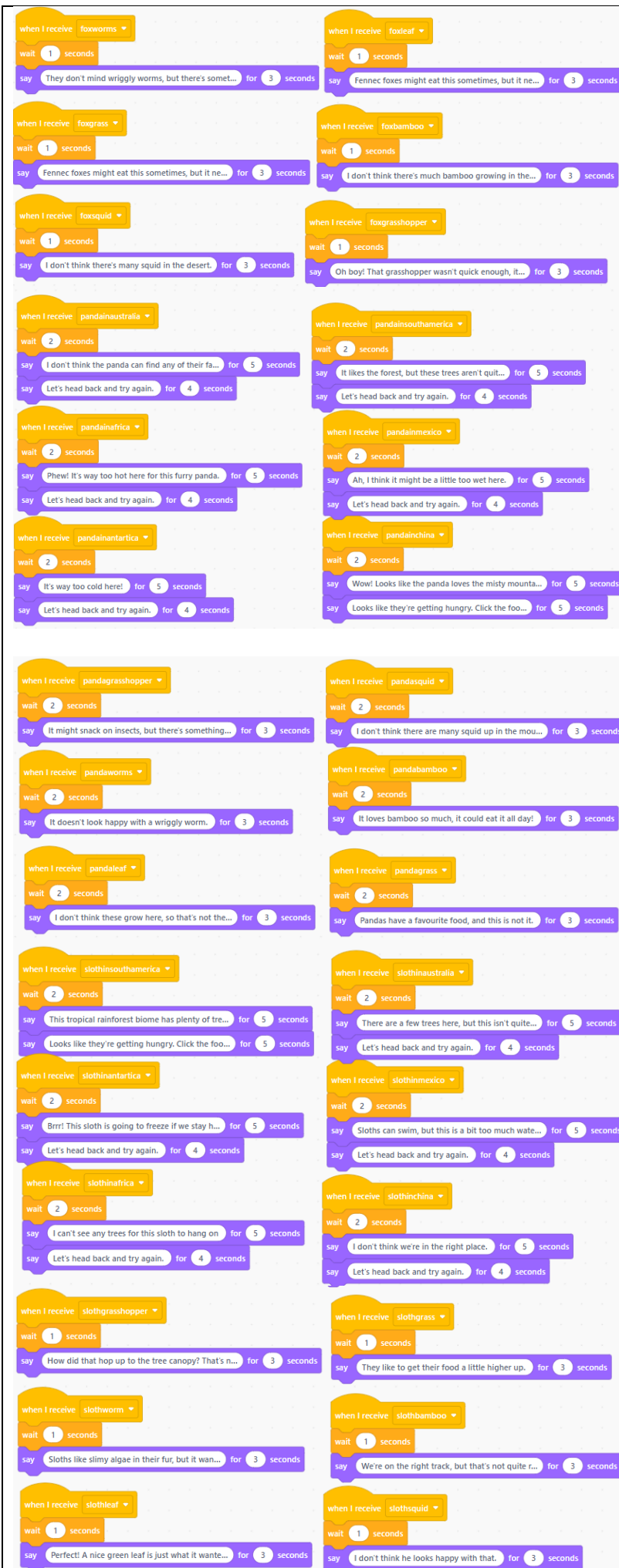
This code says that Bonnie appears again when the background changes to one of the locations. This is so she can give more tips about playing the game.

This next code is important because it tells the player if they’ve chosen the right location, but it also teaches them something about the biomes and each animal.

It makes Bonnie say something based on the location you choose. If it is wrong, she will tell you to go back and try again. If it is right, she will tell you to click on the food pack to feed the animal. This is the code for the fennec fox for each location. But she has the same code with different messages for each animal.

The wait block makes it so she doesn’t say it too early and also gives people time to read.





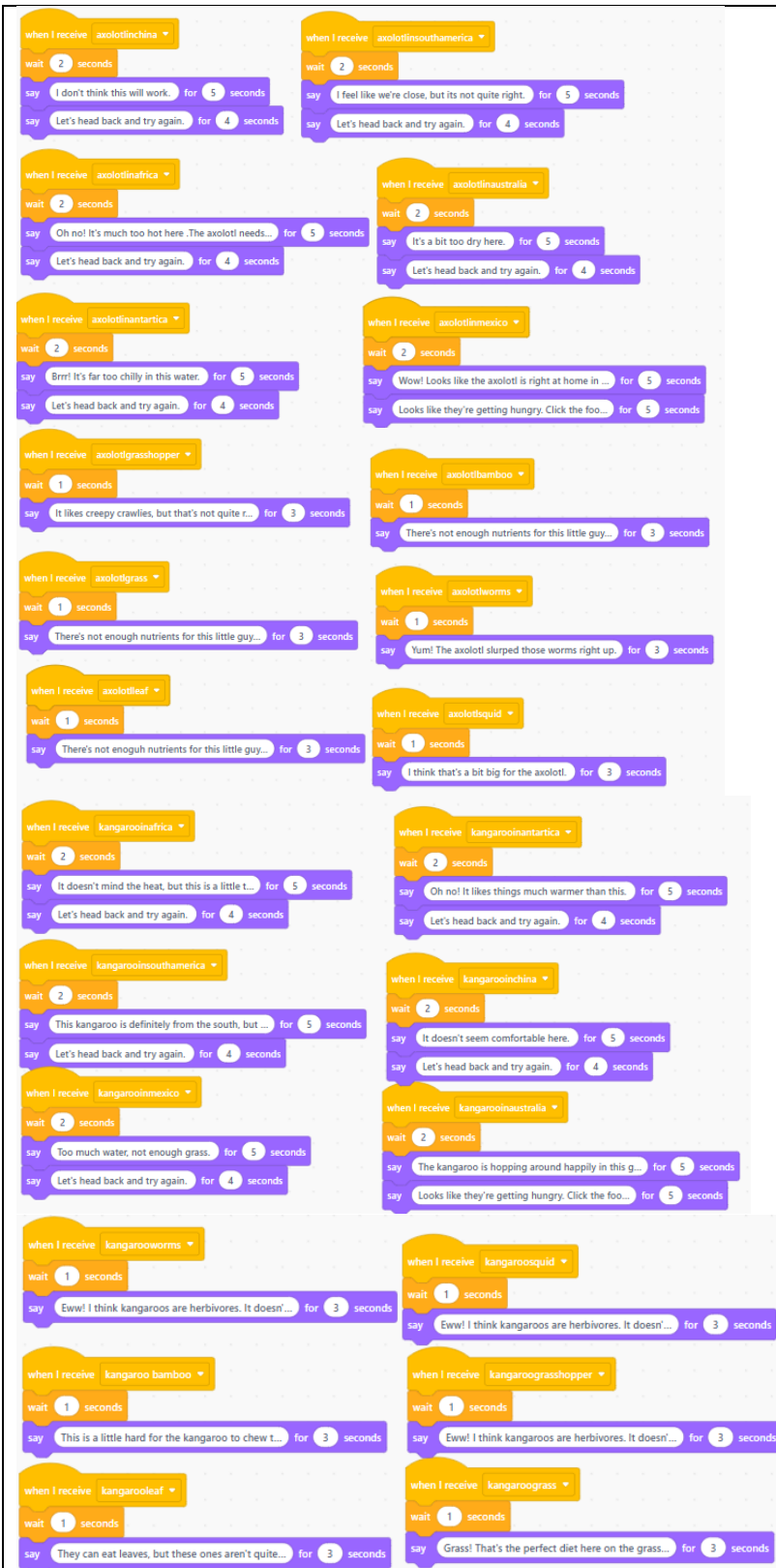
This code tells Bonnie what to say when the fennec fox eats the food. She normally says something different for each different food. This helps people to learn more about the animals and the biomes, like what kinds of foods are found there and whether the animal is a carnivore or a herbivore or both.

I used my research to help me write different things for each one and I wrote down a list of each animal, each location and each food first. Then when I did the code I added the things to the game.

I actually had to change some of them because I realised I got some of the things they can eat wrong. I said that the fennec fox was a carnivore, but sometimes they eat grasses or plants. I also said that the panda was a herbivore, but then I checked my information again and they actually sometimes eat small animals and bugs so it wasn't true.

Sometimes I had a problem because the animal actually could eat another food, so I had to write a message saying that they liked something else more to make the player pick a different food.

I haven't explained every bit of code for every animal, because the code is the same for each animal, it just tells Bonnie to say something different for each one.



```

when I receive penguininfrica
wait 2 seconds
say Too hot! This penguin needs to go cool down. for 5 seconds
say Let's head back and try again. for 4 seconds

when I receive penguininaustralia
wait 2 seconds
say Take it down a notch, its a bit too hot here. for 5 seconds
say Let's head back and try again. for 4 seconds

when I receive penguininchina
wait 2 seconds
say We're up a little high here, I think we need to ... for 5 seconds
say Let's head back and try again. for 4 seconds

when I receive penguininmexico
wait 2 seconds
say This penguin in a strong swimmer, but I think th... for 5 seconds
say Let's head back and try again. for 4 seconds

when I receive penguininsouthamerica
wait 2 seconds
say Lots of birds live here, but not this one. for 5 seconds
say Let's head back and try again. for 4 seconds

when I receive penguininantarctica
wait 2 seconds
say This chill tundra biome is the perfect home for... for 5 seconds
say Looks like they're getting hungry. Click the foo... for 5 seconds

when I receive penguingrass
wait 1 seconds
say Penguins are carnivores, they're not happy eatin... for 3 seconds

when I receive penguingrasshopper
wait 1 seconds
say I think penguins like to find their food in the ... for 3 seconds

when I receive penguinsquid
wait 1 seconds
say Oh perfect! Penguins can catch these while swim... for 3 seconds

when I receive penguinbamboo
wait 1 seconds
say Penguins are carnivores, they're not happy eatin... for 3 seconds

when I receive penguinleaf
wait 1 seconds
say Penguins are carnivores, they're not happy eatin... for 3 seconds

when I receive penguinworms
wait 1 seconds
say I don't think it likes worms too much. for 3 seconds

when backdrop switches to Axolotl Success
hide

when backdrop switches to Kangaroo Success
hide

when backdrop switches to Fennec Fox Success
hide

when backdrop switches to Panda Success
hide

when backdrop switches to Penguin Success
hide

when backdrop switches to Sloth Success
hide

```

This code tells Bonnie to hide once the background changes after an animal eats the right food. This is because she doesn't say anything else after this. She will show again if you go back and pick another animal.

Sprite: Axolotls FACTS

```

when clicked
hide

when I receive back
set size to 60 %
hide

when backdrop switches to Axolotl Success
show
go to x: -125 y: -108
forever
change size by 10
wait 0.3 seconds
change size by -10
wait 0.3 seconds

```

This code tells the axolotl facts button to hide when the game is started. The next one tells it to hide again when the back button is clicked. It sets the size to 60% which is its original size.

This code tells the axolotl facts button to appear when the backdrop switches to axolotl success. This has a message that tells the player they made the right choice and they can either go back or learn more facts. It also tells the button where to go on the screen.

It gets bigger and then smaller forever, which makes it look like it is flashing. It waits 0.3 seconds so that the flashing looks more normal.

```

when this sprite clicked
broadcast axolotlfacts
broadcast hideback
switch backdrop to Axolotl Facts
hide

```

This code tells the axolotl facts button to broadcast the message “axolotl facts” when it is clicked. When other sprites get this message they can be told what to do. It also broadcasts the “hideback” message which hides the back button.

Then the background changes to the Axolotl facts background and the facts button hides because it isn’t needed anymore.

Sprite: Fennec Fox FACTS

```

when clicked
hide

when I receive back
set size to 60 %
hide

when backdrop switches to Fennec Fox Success
show
go to x: -125 y: -108
forever
change size by 10
wait 0.3 seconds
change size by -10
wait 0.3 seconds

when this sprite clicked
broadcast fennec fox facts
broadcast hideback
switch backdrop to Fennec Fox Facts
hide

```

This code tells the fennec fox facts button to hide when the game is started.

The next one tells it to hide again when the back button is clicked. It sets the size to 60% which is its original size.

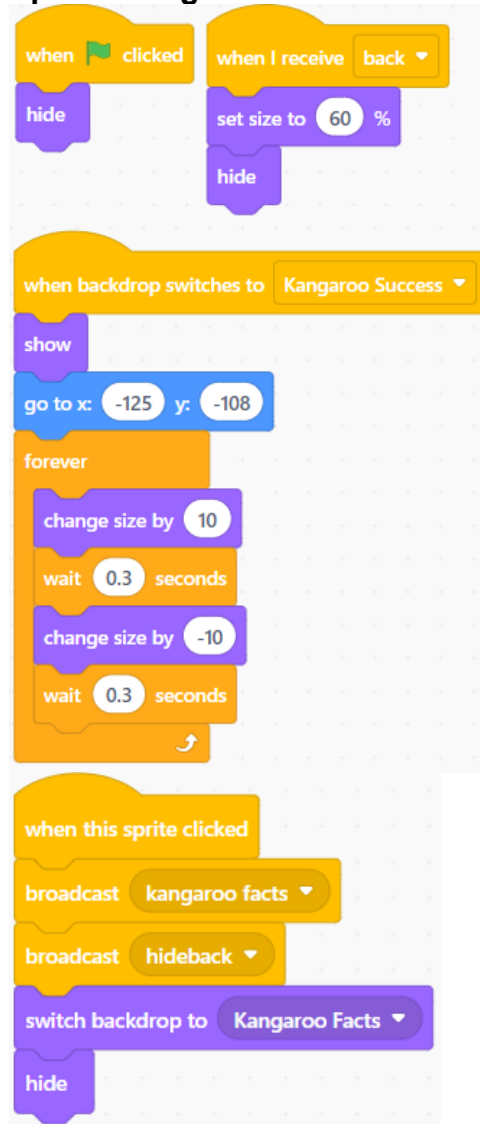
This code tells the fennec fox facts button to appear when the backdrop switches to fennec fox success. This has a message that tells the player they made the right choice and they can either go back or learn more facts. It also tells the button where to go on the screen.

It gets bigger and then smaller forever, which makes it look like it is flashing. It waits 0.3 seconds so that the flashing looks more normal.

This code tells the fennec fox facts button to broadcast the message "fennec fox facts" when it is clicked. When other sprites get this message they can be told what to do. It also broadcasts the "hideback" message which hides the back button.

Then the background changes to the Fennec Fox facts background and the facts button hides because it isn't needed anymore.

Sprite: Kangaroo FACTS



This code tells the kangaroo facts button to hide when the game is started.

The next one tells it to hide again when the back button is clicked. It sets the size to 60% which is its original size.

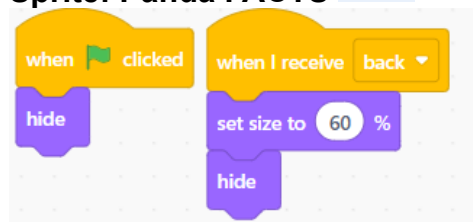
This code tells the kangaroo facts button to appear when the backdrop switches to kangaroo success. This has a message that tells the player they made the right choice and they can either go back or learn more facts. It also tells the button where to go on the screen.

It gets bigger and then smaller forever, which makes it look like it is flashing. It waits 0.3 seconds so that the flashing looks more normal.

This code tells the kangaroo facts button to broadcast the message "kangaroo facts" when it is clicked. When other sprites get this message they can be told what to do. It also broadcasts the "hideback" message which hides the back button.

Then the background changes to the Kangaroo facts background and the facts button hides because it isn't needed anymore.

Sprite: Panda FACTS



This code tells the panda facts button to hide when the game is started.

The next one tells it to hide again when the back button is clicked. It sets the size to 60% which is its original size.

```

when backdrop switches to Panda Success
  show
  go to x: -125 y: -108
  forever
    change size by 10
    wait 0.3 seconds
    change size by -10
    wait 0.3 seconds

```

This code tells the panda facts button to appear when the backdrop switches to panda success. This has a message that tells the player they made the right choice and they can either go back or learn more facts. It also tells the button where to go on the screen.

It gets bigger and then smaller forever, which makes it look like it is flashing. It waits 0.3 seconds so that the flashing looks more normal.

```

when this sprite clicked
  broadcast panda facts
  broadcast hideback
  switch backdrop to Panda Facts
  hide

```

This code tells the panda facts button to broadcast the message "panda facts" when it is clicked. When other sprites get this message they can be told what to do. It also broadcasts the "hideback" message which hides the back button.

Then the background changes to the Panda facts background and the facts button hides because it isn't needed anymore.

Sprite: Penguin FACTS



```

when clicked
  hide

when I receive back
  set size to 60 %
  hide

when backdrop switches to Penguin Success
  show
  go to x: -125 y: -108
  forever
    change size by 10
    wait 0.3 seconds
    change size by -10
    wait 0.3 seconds

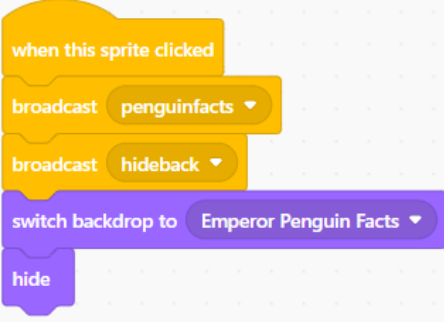
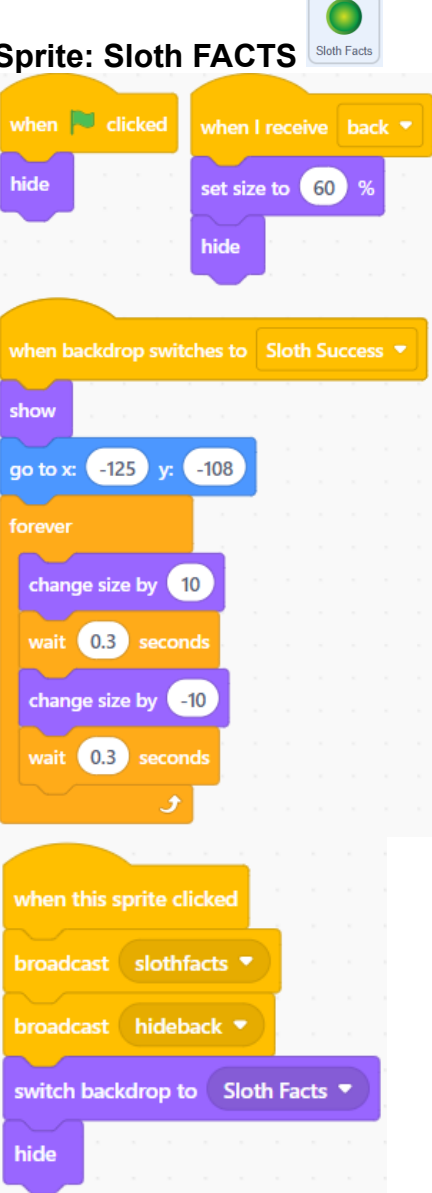
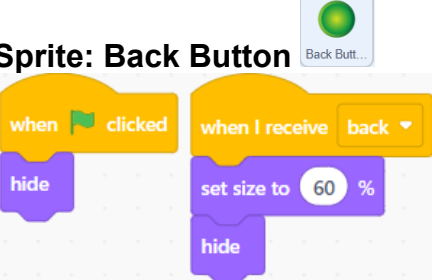
```

This code tells the penguin facts button to hide when the game is started.

The next one tells it to hide again when the back button is clicked. It sets the size to 60% which is its original size.

This code tells the penguin facts button to appear when the backdrop switches to penguin success. This has a message that tells the player they made the right choice and they can either go back or learn more facts. It also tells the button where to go on the screen.

It gets bigger and then smaller forever, which makes it look like it is flashing. It waits 0.3 seconds so that the flashing looks more normal.

 <pre> when this sprite clicked broadcast penguinfacts broadcast hideback switch backdrop to Emperor Penguin Facts hide </pre>	This code tells the penguin facts button to broadcast the message "penguin facts" when it is clicked. When other sprites get this message they can be told what to do. It also broadcasts the "hideback" message which hides the back button. Then the background changes to the Penguin facts background and the facts button hides because it isn't needed anymore.
Sprite: Sloth FACTS  <pre> when clicked hide when I receive back set size to 60% hide when backdrop switches to Sloth Success show go to x: -125 y: -108 forever loop change size by 10 wait 0.3 seconds change size by -10 wait 0.3 seconds when this sprite clicked broadcast slothfacts broadcast hideback switch backdrop to Sloth Facts hide </pre>	This code tells the sloth facts button to hide when the game is started. The next one tells it to hide again when the back button is clicked. It sets the size to 60% which is its original size. This code tells the sloth facts button to appear when the backdrop switches to sloth success. This has a message that tells the player they made the right choice and they can either go back or learn more facts. It also tells the button where to go on the screen. It gets bigger and then smaller forever, which makes it look like it is flashing. It waits 0.3 seconds so that the flashing looks more normal. This code tells the sloth facts button to broadcast the message "sloth facts" when it is clicked. When other sprites get this message they can be told what to do. It also broadcasts the "hideback" message which hides the back button. Then the background changes to the Sloth facts background and the facts button hides because it isn't needed anymore.
Sprite: Back Button  <pre> when clicked hide when I receive back set size to 60% hide </pre>	This back button is different from the back arrow. It shows when you have the choice to learn more facts. It is made to look the same as the different animal facts buttons. When the game is started and when it receives the back message (when it is clicked) it

The image shows six Scratch code snippets for different animal success backgrounds: Sloth, Penguin, Panda, Kangaroo, Fennec Fox, and Axolotl. Each snippet starts with 'when backdrop switches to [Animal Name] Success', followed by 'show', 'go to x: 107 y: -108', and a 'forever' loop containing 'change size by 10', 'wait 0.3 seconds', 'change size by -10', and 'wait 0.3 seconds'. Below these is a 'when this sprite clicked' event with 'broadcast back' and 'switch backdrop to biomesmap'.

hides. It also changes its size back to 60% once it receives back.

This code tells the back button to appear when the background changes to each of the animal success backgrounds. It always goes to the same place, and it changes its size to look like it is flashing. This is the same as the animal facts buttons, but it needs to have the code for each animal because the back button is the same each time.

This code tells the game what to do when the back button is clicked. It broadcasts “back” and the backdrop switches to the biomes map. This kind of starts the game again to choose a different animal.

Sprite: Tundrabiome

This sprite gives information about the tundra biome. I added it later, so I needed to add it as a different sprite instead of just having it as part of the background picture.

The image shows the Scratch code for the Tundrabiome sprite. It starts with 'when green flag clicked', followed by 'set size to 40 %', 'go to x: 165 y: 109', and 'hide'. Then there is a 'when I receive back' event with a 'hide' block. Next is a 'when backdrop switches to antarctica' event with a 'show' block. Finally, there is a 'when backdrop switches to Penguin Success' event with a 'hide' block.

When I first had my idea, I wanted to make it so that you could change the weather and the animal would be happy or sad based on what their biome should have. Then when I started making my game it already took so long to do everything else, so instead, these sprites are just an image that gives more information rather than being something that the player can change.

The first code sets the correct size and where it sits when the game starts. This means it will be the same for the whole game, even if it is hidden. It also makes the sprite hide so you don’t see it.

The next code tells it to hide when it receives back. This is because it should only be visible when the background is Antarctica.

When the backdrop switches to Antarctica it shows, because it gives information about the tundra biome like antarctica.

It needs to hide again when the background changes.

Sprite: Desertbiome



```
when clicked
  set size to 40 %
  go to x: 165 y: 109
  hide

when I receive back
  hide

when backdrop switches to sahara
  show

when backdrop switches to Fennec Fox Success
  hide
```

This code sets the correct size and where it sits when the game starts. This means it will be the same for the whole game, even if it is hidden. It also makes the sprite hide so you don't see it.

The next code tells it to hide when it receives back. This is because it should only be visible when the background is the Sahara.

When the backdrop switches to sahara it shows, because it gives information about the desert biome like the sahara. It needs to hide again when the background changes.

Sprite: Forestbiome



```
when clicked
  set size to 40 %
  go to x: 165 y: 109
  hide

when I receive back
  hide

when backdrop switches to bamboo forest
  show

when backdrop switches to Panda Success
  hide
```

This code sets the correct size and where it sits when the game starts. This means it will be the same for the whole game, even if it is hidden. It also makes the sprite hide so you don't see it.

The next code tells it to hide when it receives back. This is because it should only be visible when the background is the bamboo forest.

When the backdrop switches to bamboo forest it shows, because it gives information about the forest biome like the mountains in China. It needs to hide again when the background changes.

Sprite: Freshwaterbiome



```
when clicked
  set size to 40 %
  go to x: 165 y: 109
  hide

when I receive back
  hide

when backdrop switches to lake
  show

when backdrop switches to Axolotl Success
  hide
```

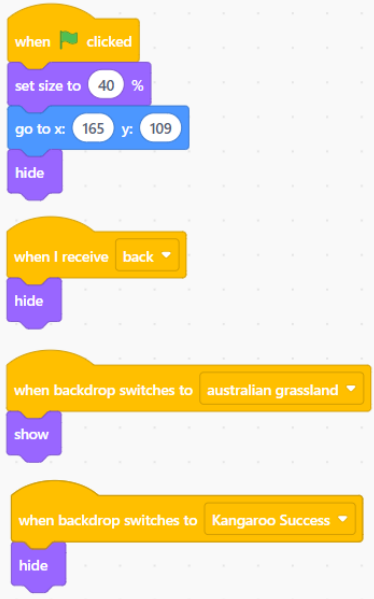
This code sets the correct size and where it sits when the game starts. This means it will be the same for the whole game, even if it is hidden. It also makes the sprite hide so you don't see it.

The next code tells it to hide when it receives back. This is because it should only be visible when the background is the lake.

When the backdrop switches to lake it shows, because it gives information about the freshwater biome like Lake Xolchmilcho in Mexico.

It needs to hide again when the background changes.

Sprite: Grasslandbiome



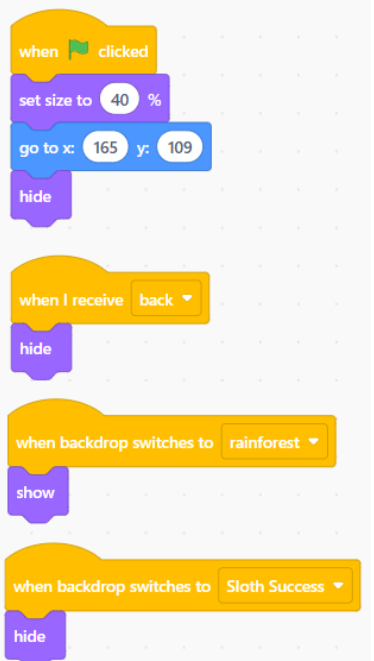
This code sets the correct size and where it sits when the game starts. This means it will be the same for the whole game, even if it is hidden. It also makes the sprite hide so you don't see it.

The next code tells it to hide when it receives back. This is because it should only be visible when the background is the Australian grassland.

When the backdrop switches to Australian grassland it shows, because it gives information about the grassland biome like in Australia.

It needs to hide again when the background changes.

Sprite: Tropicalrainforestbiome



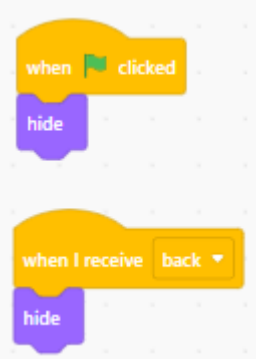
This code sets the correct size and where it sits when the game starts. This means it will be the same for the whole game, even if it is hidden. It also makes the sprite hide so you don't see it.

The next code tells it to hide when it receives back. This is because it should only be visible when the background is the rainforest.

When the backdrop switches to rainforest it shows, because it gives information about the tropical rainforest biome like in South America.

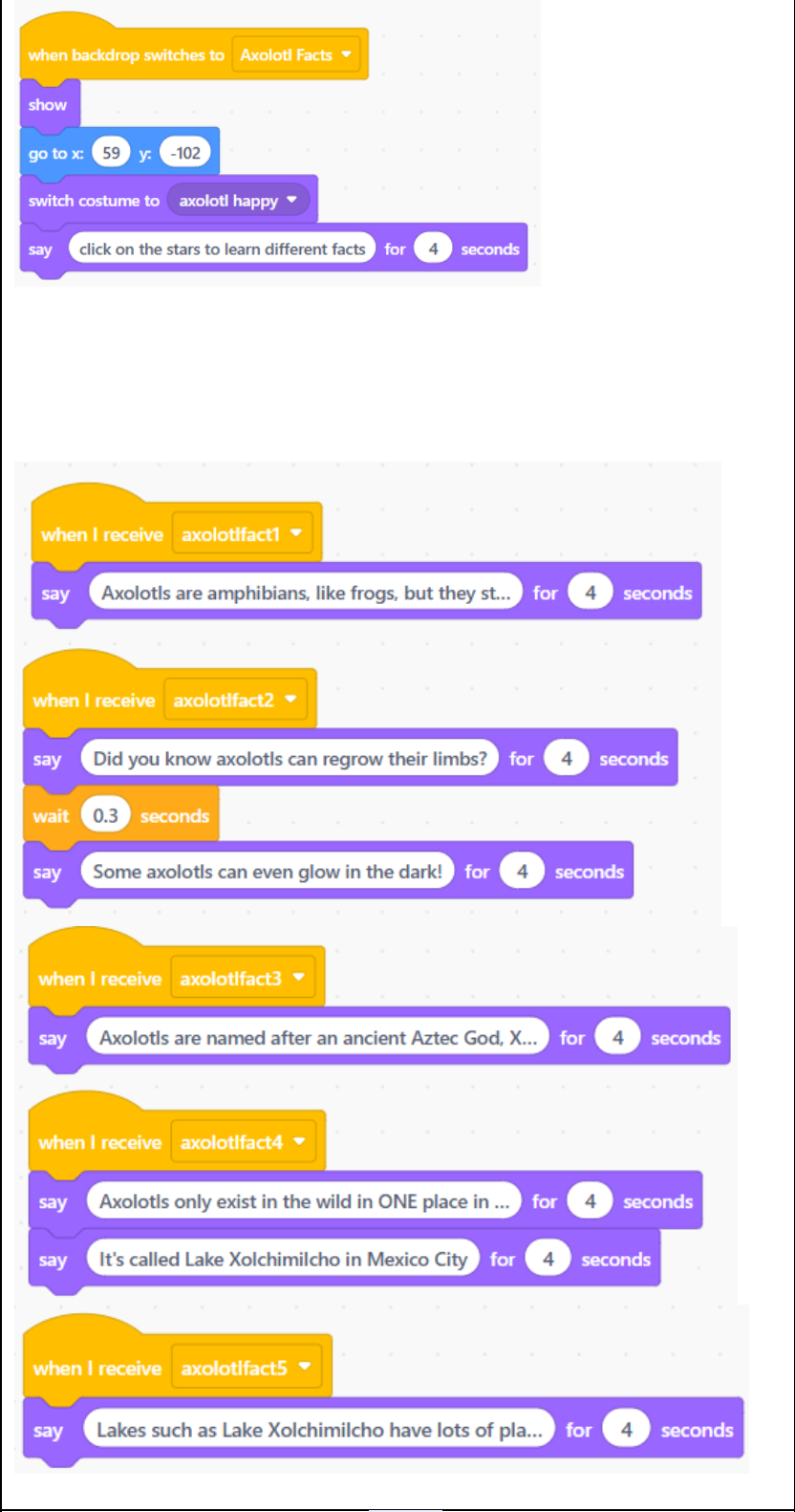
It needs to hide again when the background changes.

Sprite: Axolotl facts



This code tells the axolotl facts sprite to hide when the game starts. The animal facts sprites look the same as the happy version of the normal animals, but they only appear on each animal's facts screen.

This code tells the axolotl facts sprite to hide when it receives back so that it doesn't appear on any other page.

 The code for the Axolotl Facts sprite consists of several blocks: when backdrop switches to Axolotl Facts (yellow) show (purple) go to x: 59 y: -102 (blue) switch costume to axolotl happy (purple) say click on the stars to learn different facts for 4 seconds (purple) Below this, there are five separate fact blocks, each starting with when I receive (yellow) followed by a say block (purple) and a wait block (orange): when I receive axolotlfact1: say Axolotls are amphibians, like frogs, but they st... for 4 seconds; wait 0.3 seconds; say Some axolotls can even glow in the dark! for 4 seconds when I receive axolotlfact2: say Did you know axolotls can regrow their limbs? for 4 seconds; wait 0.3 seconds; say Some axolotls can even glow in the dark! for 4 seconds when I receive axolotlfact3: say Axolotls are named after an ancient Aztec God, X... for 4 seconds when I receive axolotlfact4: say Axolotls only exist in the wild in ONE place in ... for 4 seconds; say It's called Lake Xolchmilcho in Mexico City for 4 seconds when I receive axolotlfact5: say Lakes such as Lake Xolchmilcho have lots of pla... for 4 seconds	This code tells the axolotl facts sprite to appear when the backdrop switches to “Axolotl Facts”. It also tells it what position to go to. The position helps make sure it doesn’t block any of the pictures. It also makes sure the axolotl has the happy version of the costume. It tells the player what to do, to click on stars to learn facts. I used the animals to tell the facts instead of Bonnie, because I thought it was cute. This code tells what to do when axolotlfact1 is received (when a certain star is clicked). The axolotl says a fact about axolotls. This is the same, but the message comes from a different fact star being clicked. It has two parts, so there is a wait block in the middle of them. This is the same, but the message comes from a different fact star being clicked. This is the same, but it comes from a different fact star being clicked. This is the same, but it comes from a different fact star being clicked.
Sprite: Fennec fox facts  The code for the Fennec fox facts sprite consists of two blocks: when green flag clicked (yellow) hide (purple) Below this, there is another block: when I receive back (yellow) hide (purple)	This code tells the fennec fox facts sprite to hide when the game starts. This code tells the fennec fox facts sprite to hide when it receives back so that it doesn’t appear on any other page.

```

when backdrop switches to Fennec Fox Facts
show
switch costume to fennec fox happy
say click on the stars to learn different facts for 4 seconds

```

```

when I receive foxfact1
say Fennec fox ears help it stay cool in the heat for 4 seconds
wait 0.2 seconds
say With those big ears, it can even hear insects mo... for 4 seconds

```

```

when I receive foxfact2
say Fennec foxes are the smallest type of foxes in t... for 4 seconds

```

```

when I receive foxfact3
say There are actually different types of deserts ar... for 5 seconds

```

This code tells the fennec fox facts sprite to appear when the backdrop switches to “Fennec Fox Facts”.

It also makes sure the fennec fox has the happy version of the costume. It tells the player what to do, to click on stars to learn facts.

This code tells what to do when foxfact1 is received (when a certain star is clicked). The fennec fox says a fact about fennec foxes.

This is the same, but the message comes from a different fact star being clicked.

This is the same, but it comes from a different fact star being clicked.

Sprite: Kangaroo facts



```

when green flag clicked
hide

when I receive back
hide

when backdrop switches to Kangaroo Facts
show
switch costume to kangaroo happy
say click on the stars to learn different facts for 4 seconds

```

This code tells the kangaroo facts sprite to hide when the game starts.

This code tells the kangaroo facts sprite to hide when it receives back so that it doesn't appear on any other page.

This code tells the kangaroo facts sprite to appear when the backdrop switches to “Kangaroo Facts”.

It also makes sure the kangaroo has the happy version of the costume. It tells the player what to do, to click on stars to learn facts.

```

when I receive kangaroofact1
say Kangaroos are marsupials and their babies grow i... for 4 seconds
wait 0.2 seconds
say Kangaroo babies are called joeys. for 4 seconds

when I receive kangaroofact2
say Heat, drought, and hunger due to less habitat ar... for 4 seconds

when I receive kangaroofact3
say Male kangaroos fight for attention. for 5 seconds

when I receive kangaroofact4
say Grasslands exist on every continent in the world... for 5 seconds

```

This code tells what to do when kangaroofact1 is received (when a certain star is clicked). The kangaroo says a fact about kangaroos.

This is the same, but the message comes from a different fact star being clicked.

This is the same, but it comes from a different fact star being clicked.

This is the same, but it comes from a different fact star being clicked.

Sprite: Panda facts



```

when green flag clicked
hide

when I receive back
hide

when backdrop switches to Panda Facts
show
switch costume to panda happy
say click on the stars to learn different facts for 4 seconds

when I receive pandafact1
say There are only around 1500 pandas that live in t... for 4 seconds

when I receive pandafact2
say Bamboo shoots and leaves are almost 99% of a pan... for 4 seconds

```

This code tells the panda facts sprite to hide when the game starts.

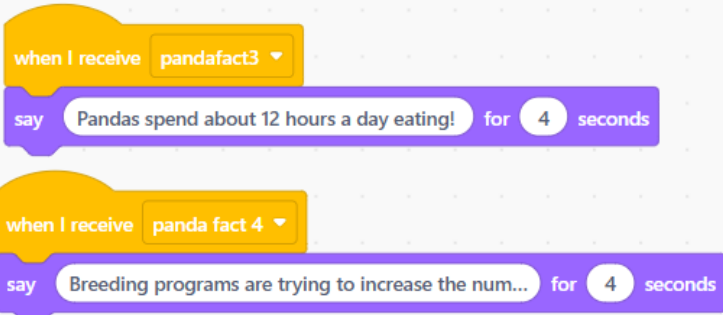
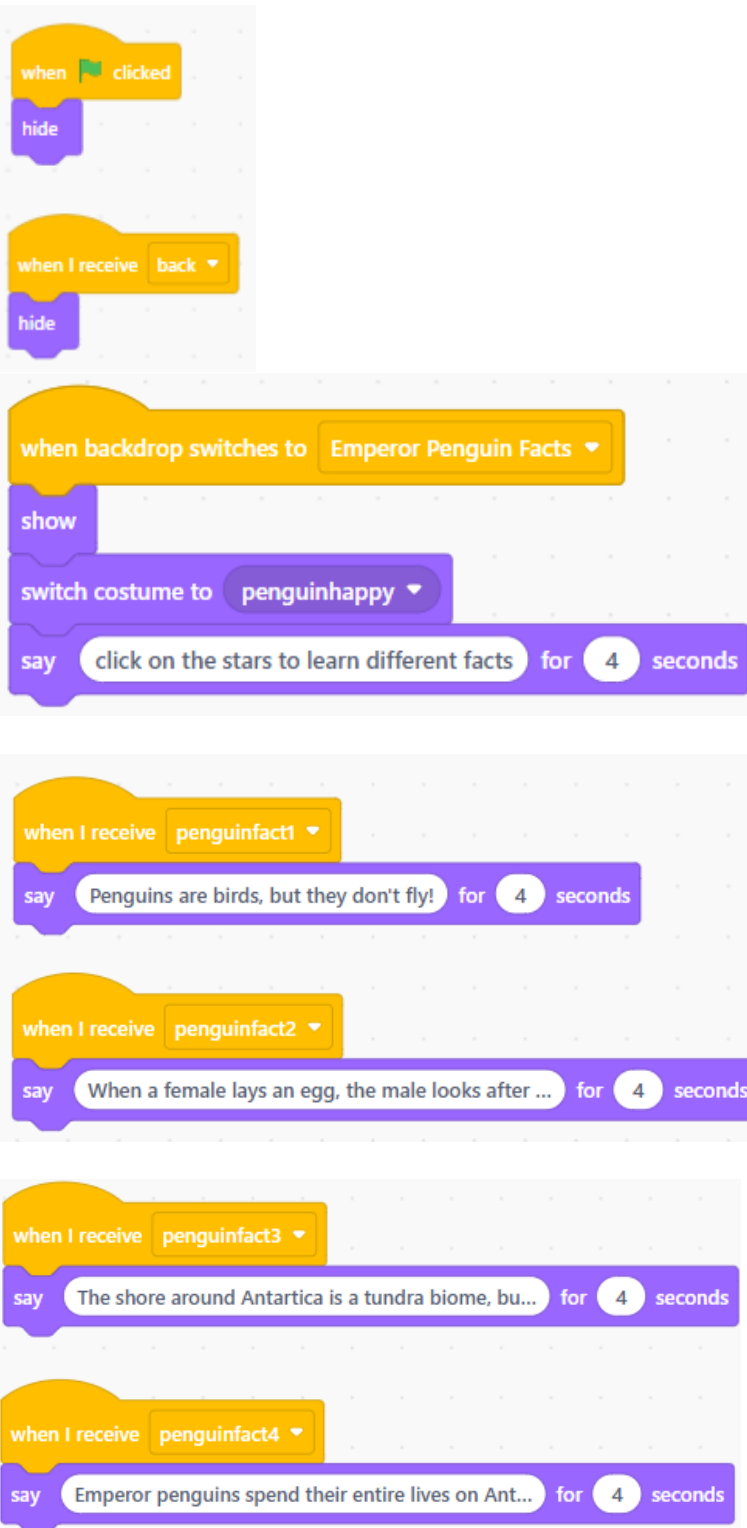
This code tells the panda facts sprite to hide when it receives back so that it doesn't appear on any other page.

This code tells the panda facts sprite to appear when the backdrop switches to "Panda Facts".

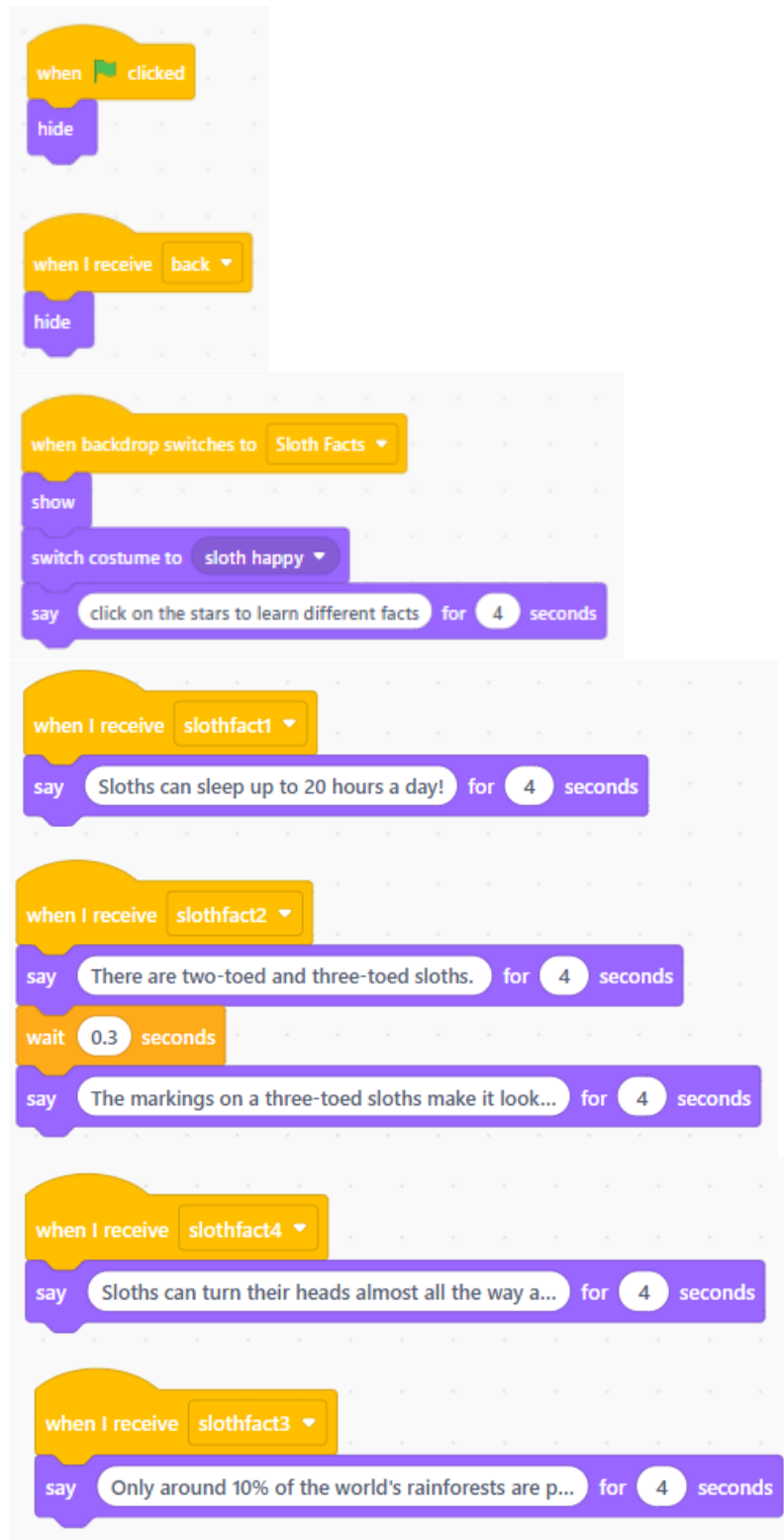
It also makes sure the panda has the happy version of the costume. It tells the player what to do, to click on stars to learn facts.

This code tells what to do when pandafact1 is received (when a certain star is clicked). The panda says a fact about pandas.

This is the same, but the message comes from a different fact star being clicked.

	This is the same, but it comes from a different fact star being clicked. This is the same, but it comes from a different fact star being clicked.
Sprite: Penguin facts  	This code tells the penguin facts sprite to hide when the game starts. This code tells the penguin facts sprite to hide when it receives back so that it doesn't appear on any other page. This code tells the penguin facts sprite to appear when the backdrop switches to "Penguin Facts". It also makes sure the penguin has the happy version of the costume. It tells the player what to do, to click on stars to learn facts. This code tells what to do when penguinfact1 is received (when a certain star is clicked). The penguin says a fact about penguins. This is the same, but the message comes from a different fact star being clicked. This is the same, but it comes from a different fact star being clicked. This is the same, but it comes from a different fact star being clicked.

Sprite: Sloth facts



This code tells the sloth facts sprite to hide when the game starts.

This code tells the sloth facts sprite to hide when it receives back so that it doesn't appear on any other page.

This code tells the sloth facts sprite to appear when the backdrop switches to "Sloth Facts".

It also makes sure the sloth has the happy version of the costume. It tells the player what to do, to click on stars to learn facts.

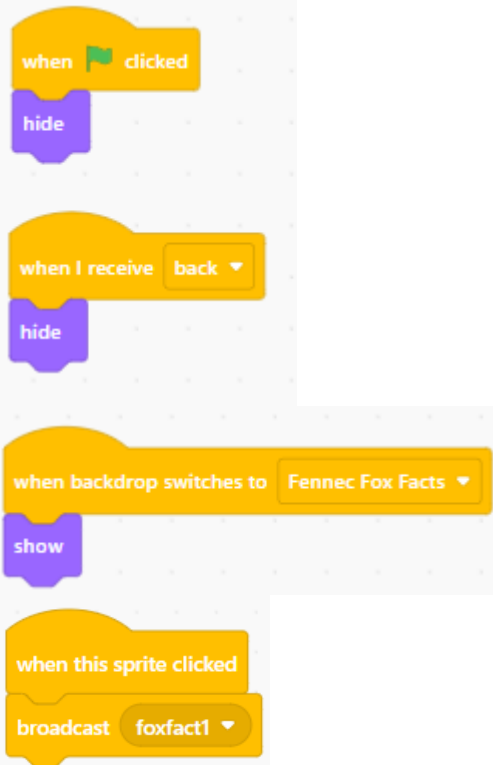
This code tells what to do when slothfact1 is received (when a certain star is clicked). The sloth says a fact about sloths.

This is the same, but the message comes from a different fact star being clicked.

This is the same, but it comes from a different fact star being clicked.

This is the same, but it comes from a different fact star being clicked.

Sprite: Fox fact 1



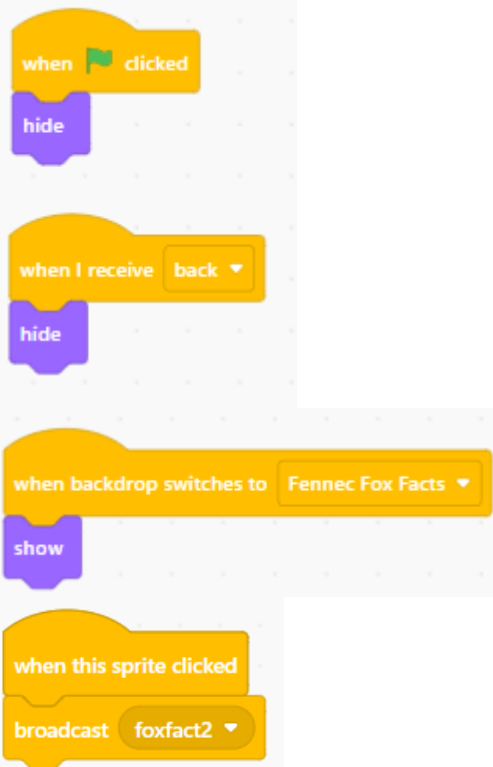
These sprites are what tell the different animal fact sprites what facts to tell. Each fact has its own star sprite so when you click it a different message gets sent, and the animal sprite can say a different fact.

It needs to hide when the game starts and when you click back. It only shows on the facts screen.

This one is for the fennec fox, so when the backdrop changes to fennec fox facts, the star needs to appear.

When the star is clicked, it broadcasts a message with the fact number. This tells the animal fact sprite what fact to share.

Sprite: Fox fact 2



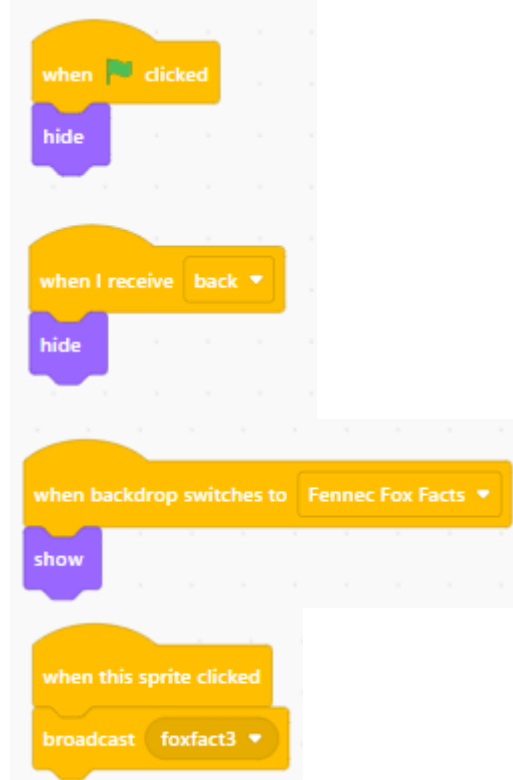
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the star to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Fox fact 3



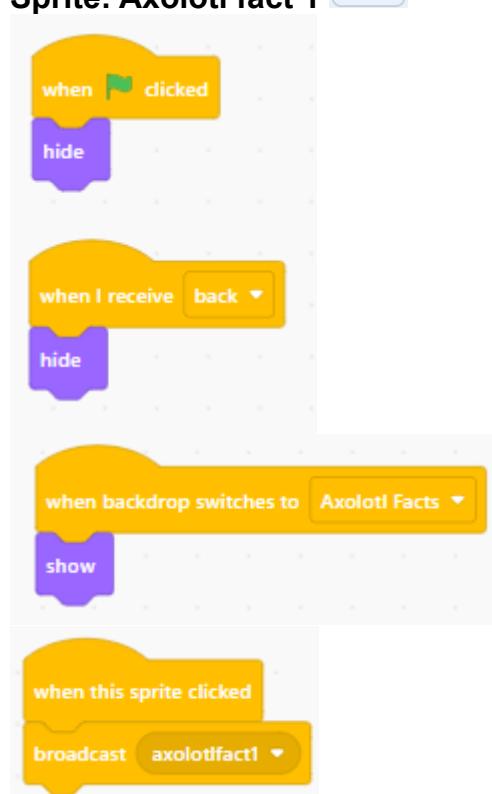
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the backdrop switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Axolotl fact 1



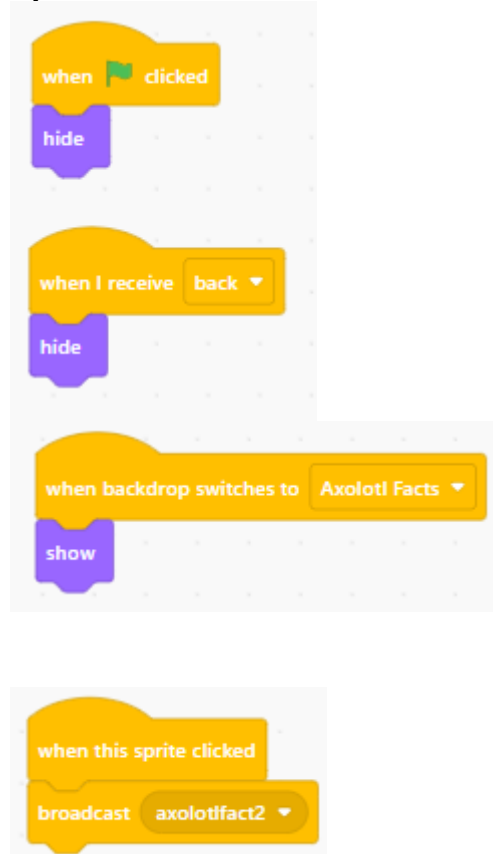
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the backdrop switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Axolotl fact 2



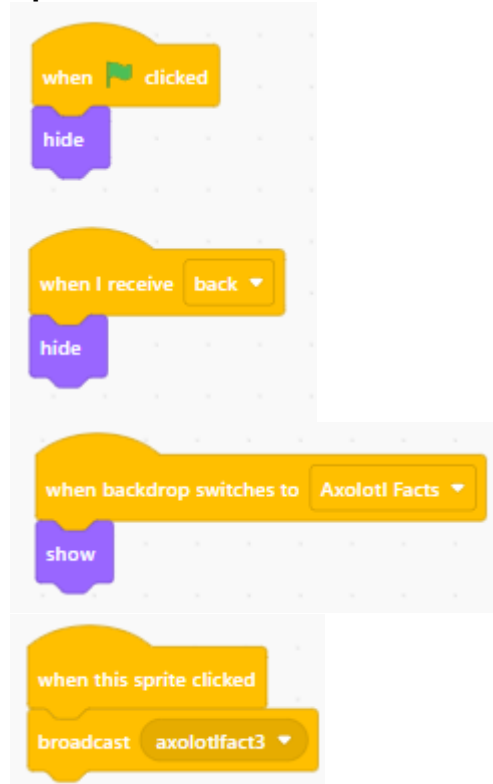
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Axolotl fact 3



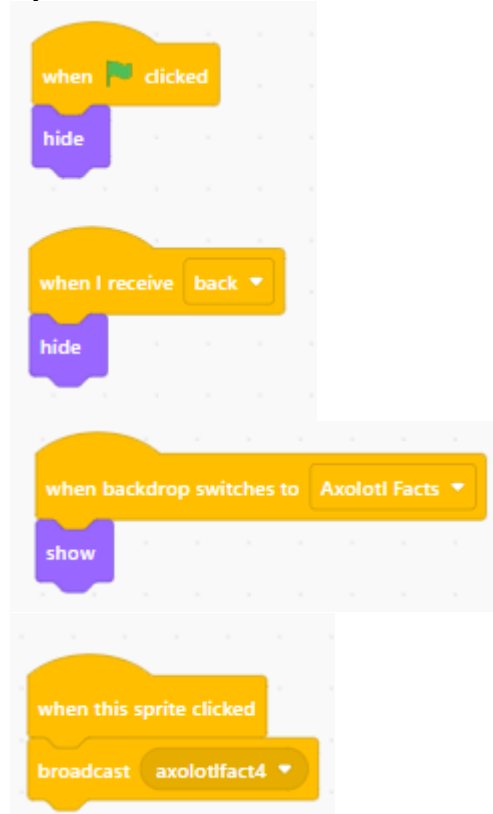
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Axolotl fact 4



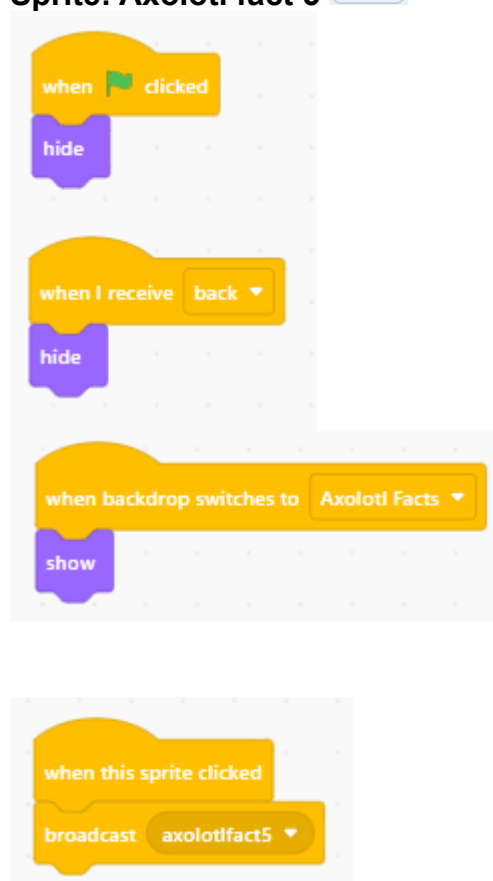
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Axolotl fact 5



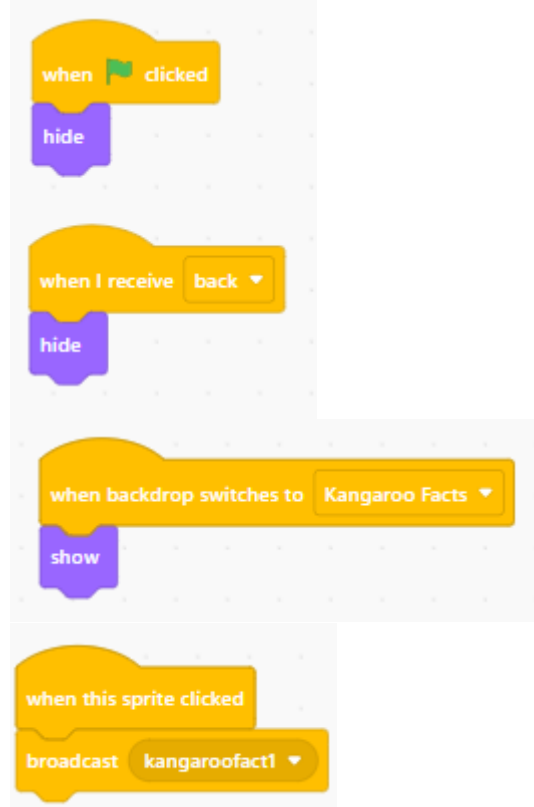
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Kangaroo fact 1



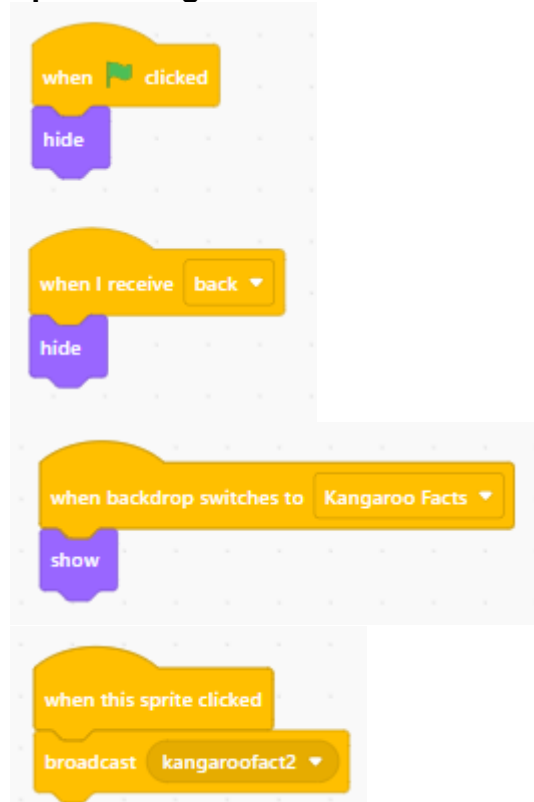
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Kangaroo fact 2



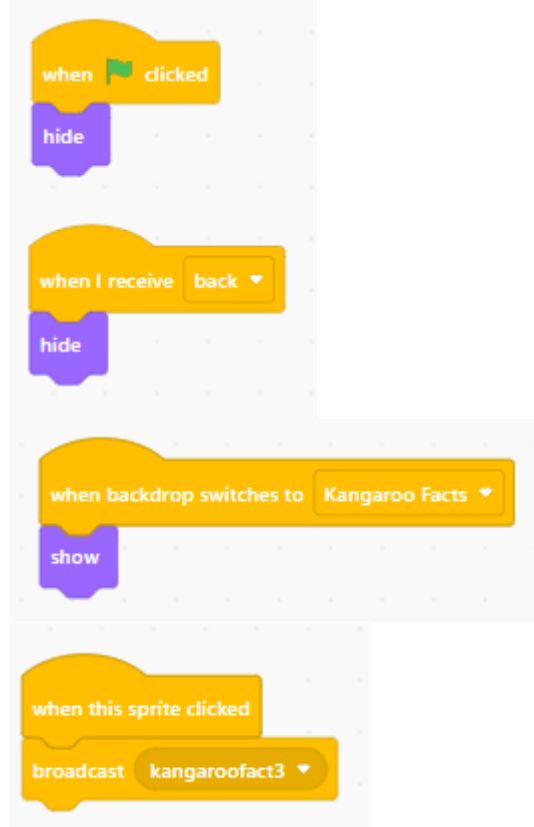
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Kangaroo fact 3



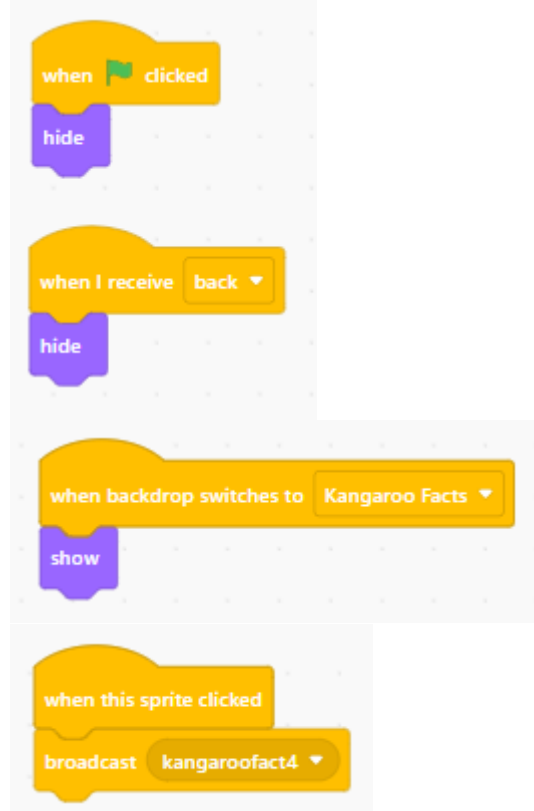
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Kangaroo fact 4



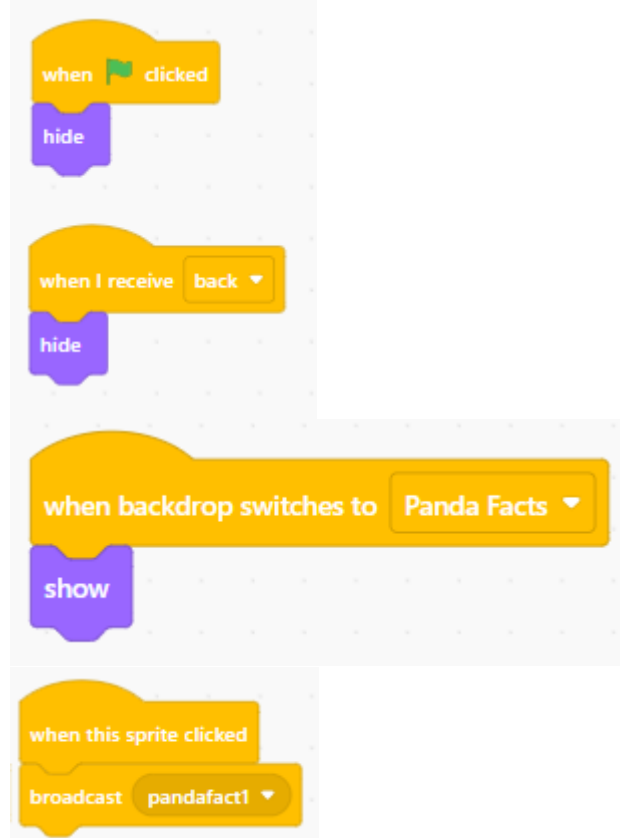
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Panda fact 1



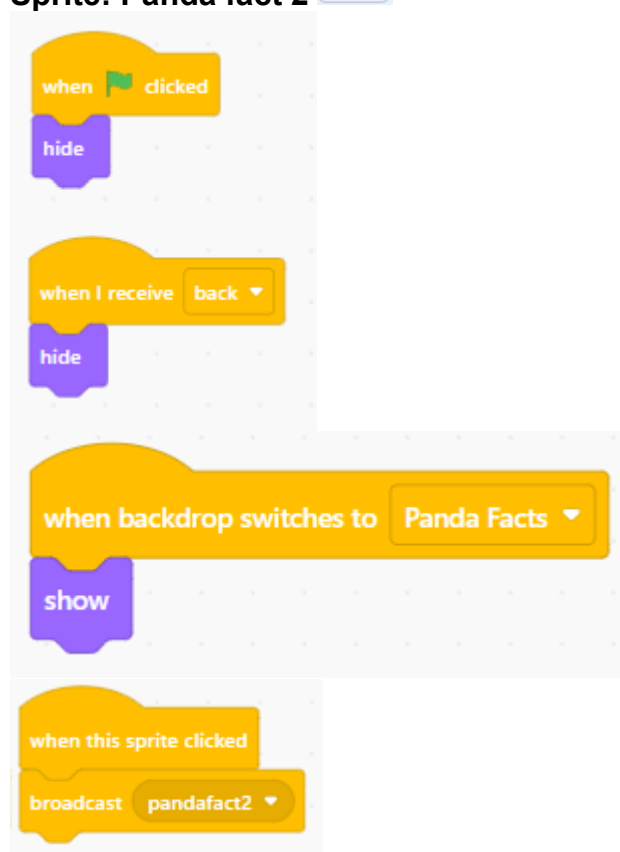
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Panda fact 2



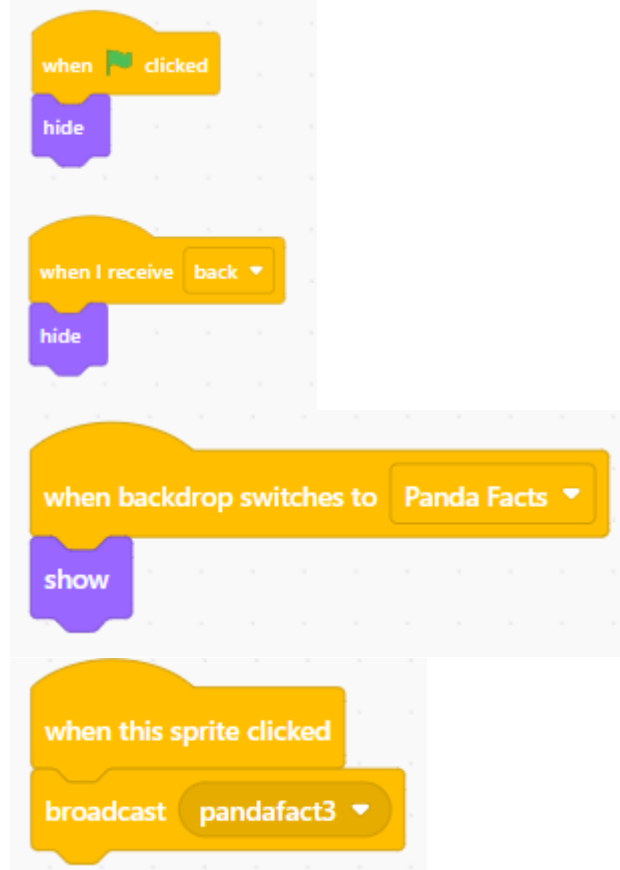
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Panda fact 3



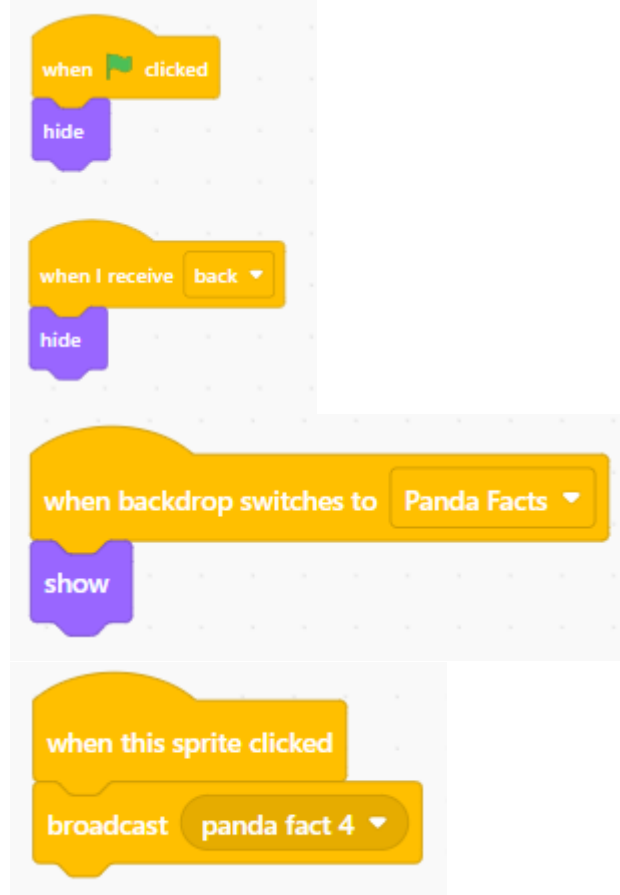
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Panda fact 4



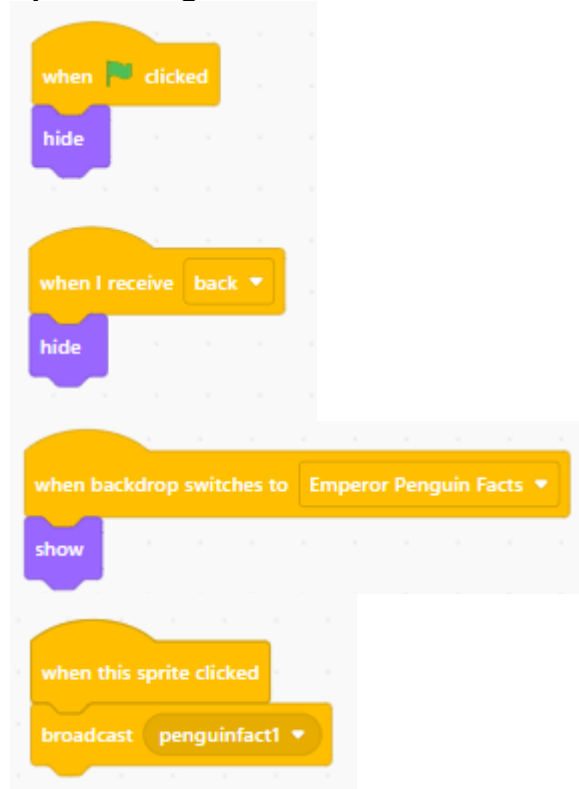
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Penguin fact 1



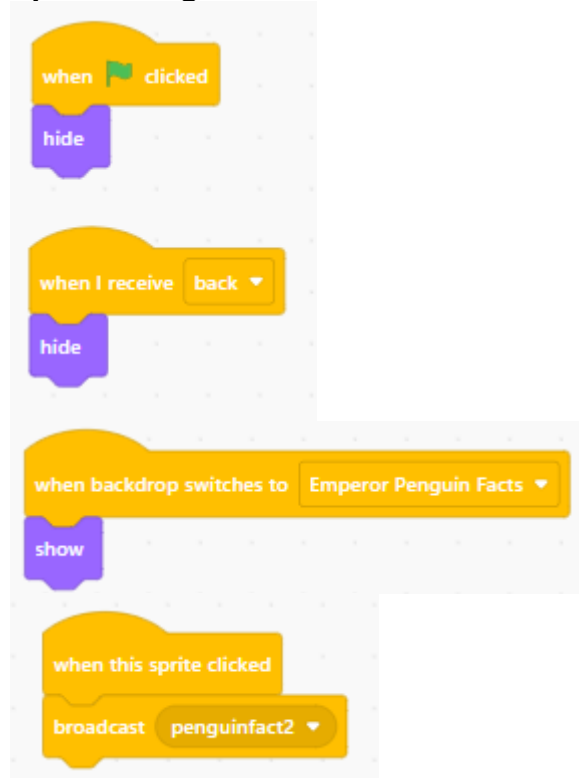
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Penguin fact 2



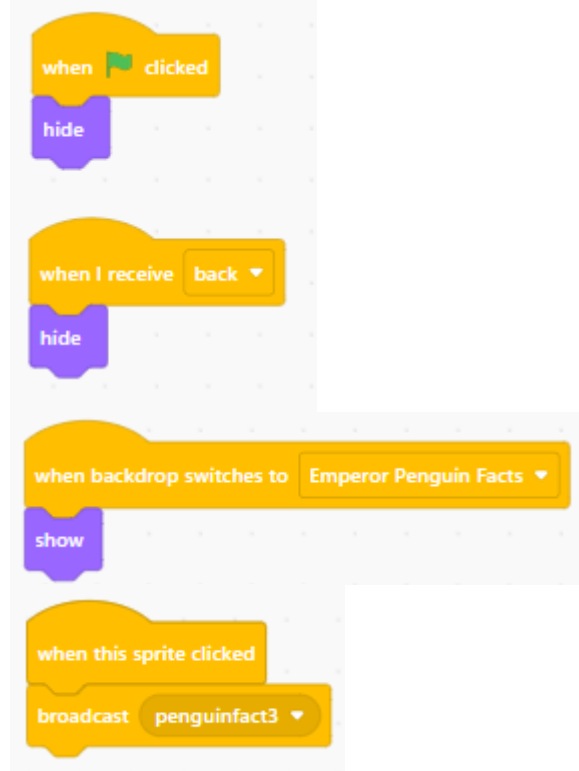
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Penguin fact 3



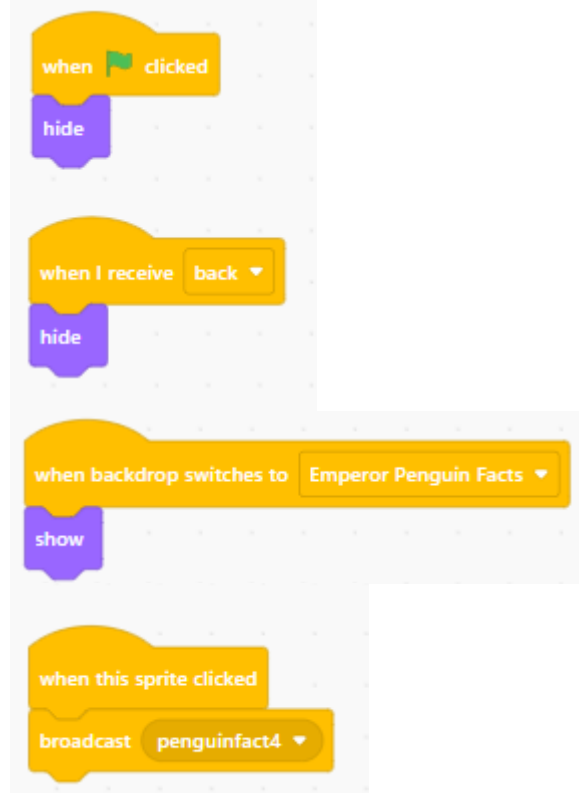
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Penguin fact 4



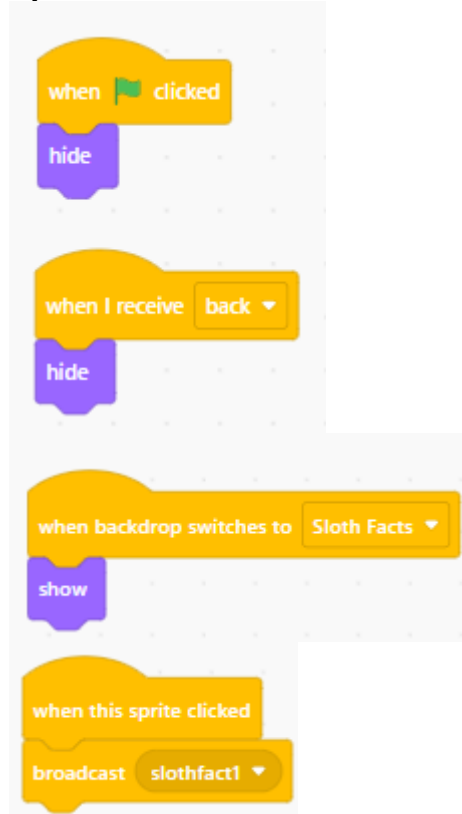
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Sloth fact 1



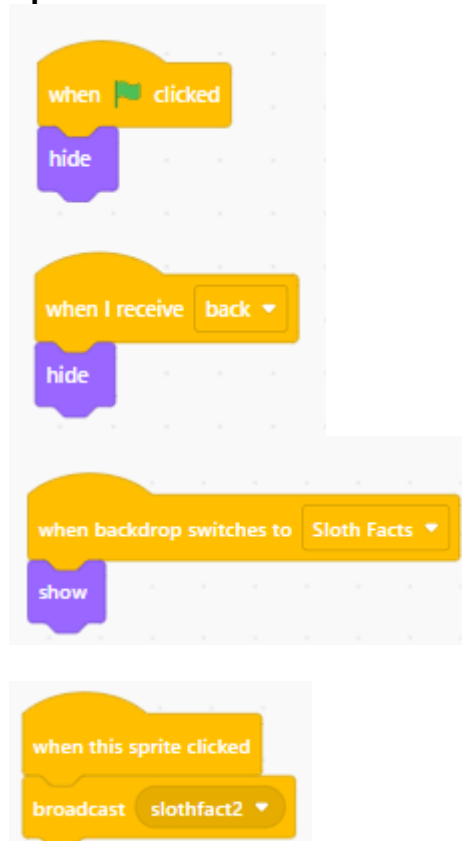
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Sloth fact 2



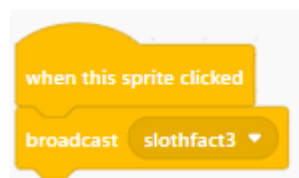
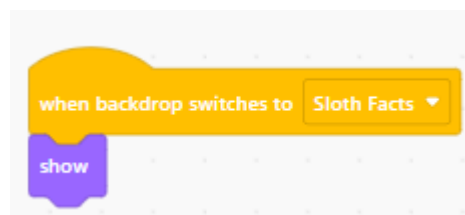
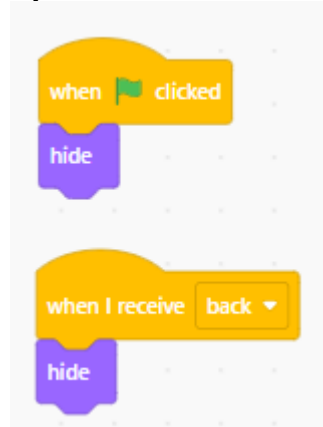
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Sloth fact 3



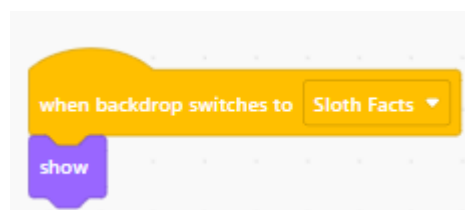
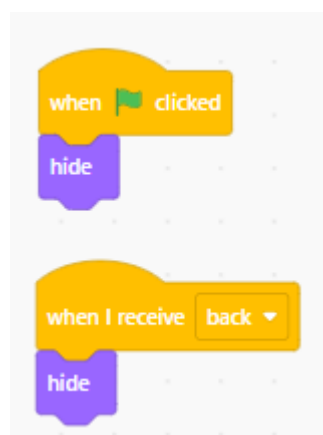
This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Sprite: Sloth fact 4



This code tells the sprite to hide when the game starts.

This code tells the star sprite to hide when you click back. This is because it should only show on the facts screen.

This code tells the start to appear when the background switches to the right background for this animal's facts.

This code tells the sprite what to do when it is clicked. It broadcasts a message with the fact number. This tells the snail fact sprite what fact to share. Each fact has its own fact number so a different fact is shared for each star.

Acknowledgement of Support

My mum helped me lots when I made this game. I can read and write, but I still find it hard reading long books and reading some words. My mum helped me find books at the library and we would read these together. She also helped me learn more about using computers because I didn't really use a computer before. Things like searching on the internet, copy and pasting, using a mouse, and typing. Sometimes I would do it, but sometimes I would tell my mum what I wanted her to do and she would do it for me.

Lots of my game has things that work the same, like the animals, or the location markers, or the foods. So, this needed lots of copying of the code and lots of copying of what the code did in my report. My mum helped me with lots of this copying because I'm still learning to use the computer fully.

When I made my first game on Scratch, my mum read the tutorial in the book and we made the game together. This helped me learn some of the things I could do on Scratch.

My mum would also ask me questions so that I would think more about what I wanted to do and this helped me figure things out. Sometimes she would say "what do you want the game to do?" and I would tell her, and she would ask me which code block sounded like it could do that thing and that would help me choose one when I was stuck or trying something new.

My mum wrote my bibliography for me from all the books and websites we looked at when I was researching. She also helped me write my report. She would ask me to explain what the code did, I would tell her what to write and she would type it.

My dad and my other family didn't really help me with the game, but they played the game for me and told me they liked it, and this helped me feel really good and helped me keep making it even when I was a bit frustrated or exhausted from all the work.

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This part was all done by my mum. I haven't made a bibliography before, but my mum taught me why it was important to say all the things that helped me learn how to make my game and she taught me where to find information about a book on one of the first pages.

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- **Title screen, success screens, and animal facts pages backgrounds** were made using Canva.
- **Animal sprites** were digitally drawn by me using Procreate.
- **'Bonnie' sprite and buttons** are built in Scratch sprites.
- Other images were digitally drawn by my mum, using Photoshop.

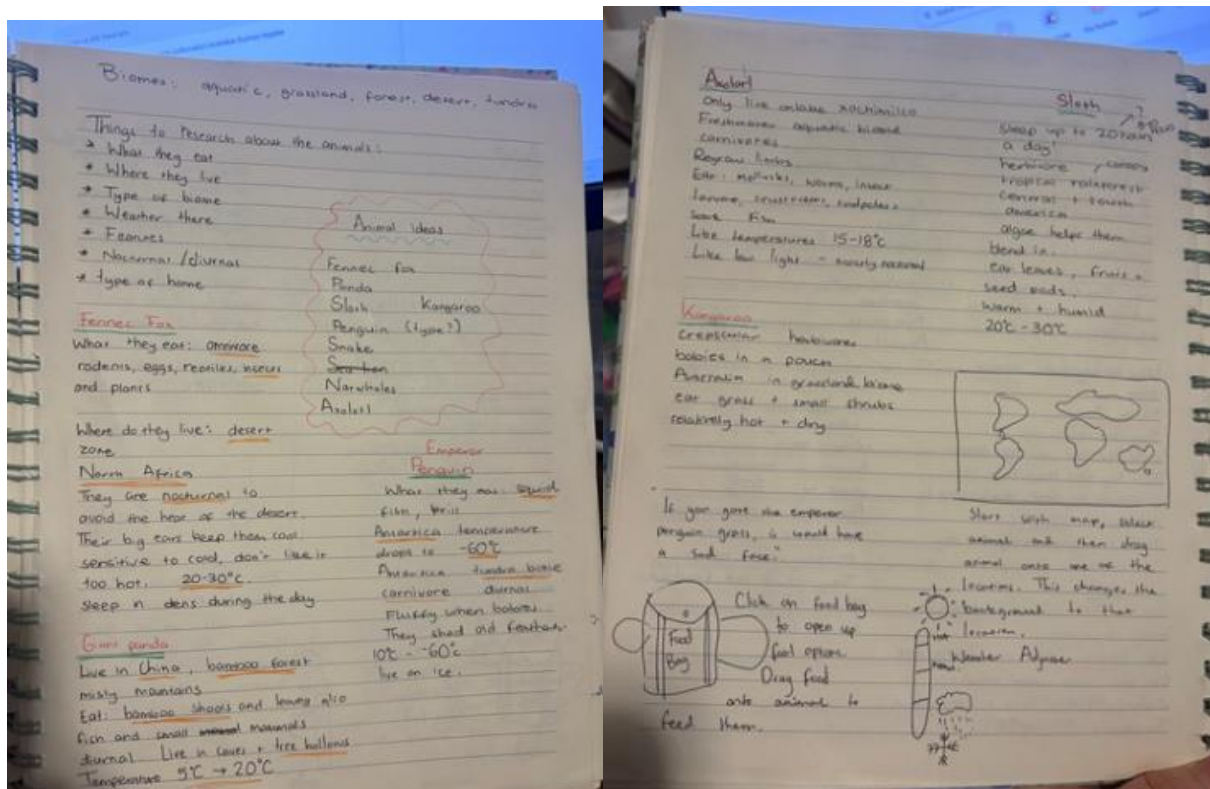
Images from my planning and my game

My Planning

These are notes from when I was planning my game. My mum asked me about my ideas and she took notes while I told her my ideas. My first bit of planning was deciding what things I wanted to find out about each animal, and what animals I might choose.

I wanted to choose animals from different biomes but also animals that I liked. At first, I had more animals, but 6 was a good number.

After that, we kept researching more animals. I read books with mum and we looked up the animals on the internet, and then we talked about what we had read and I answered my questions I wanted to research.

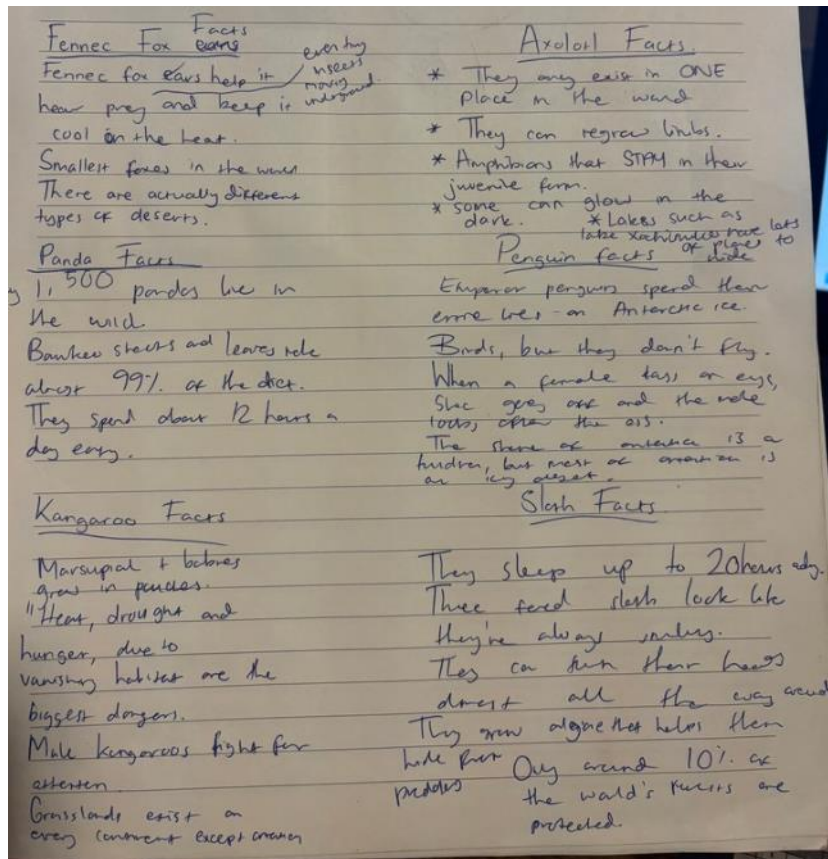


On the second page, there are also some notes and drawings about how I wanted the game to work. This helped with making my game, because I already knew what I wanted the game to do and look

like. It made the different code blocks make more sense, because I knew what I wanted the game to do.

Some things changed, like originally the game involved lots of dragging like dragging the animals to the country, or dragging the animal to the food. This didn't really work well, because I'd accidentally drag them over the wrong place or I'd accidentally move the food when I was trying to test the game. That's when I changed to using clicking and gliding or moving more than dragging.

There were other things I didn't end up using, like the weather adjuster. Instead, I just used an image showing information about the biome, because I already had so much stuff in my game that it was going to be too hard and long to add something else.



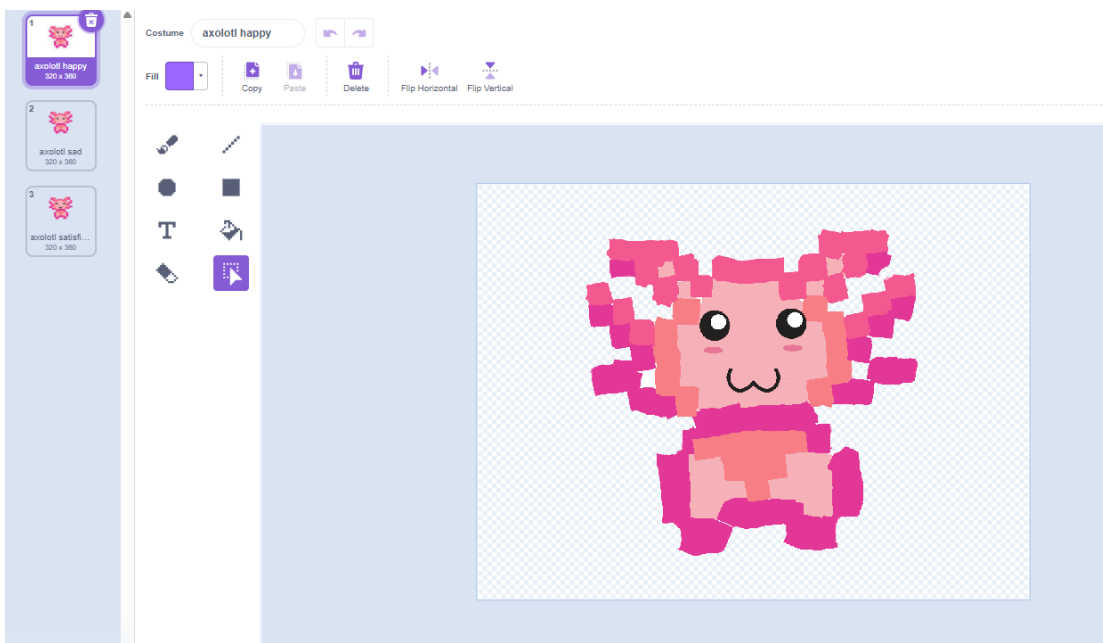
These were notes about the different facts for each animal. My mum took notes for each animal's facts and I remembered the things I had read about them. This helped because it meant I could plan some of the stuff when we were talking in bed or on the couch, rather than always having to be sitting at the computer.

My Sprites

These are all of the sprites in my game. There are so many of them. Lots of them use very similar code so I could do the code for one, and then I could drag it to copy it to another one and then just make some small changes.

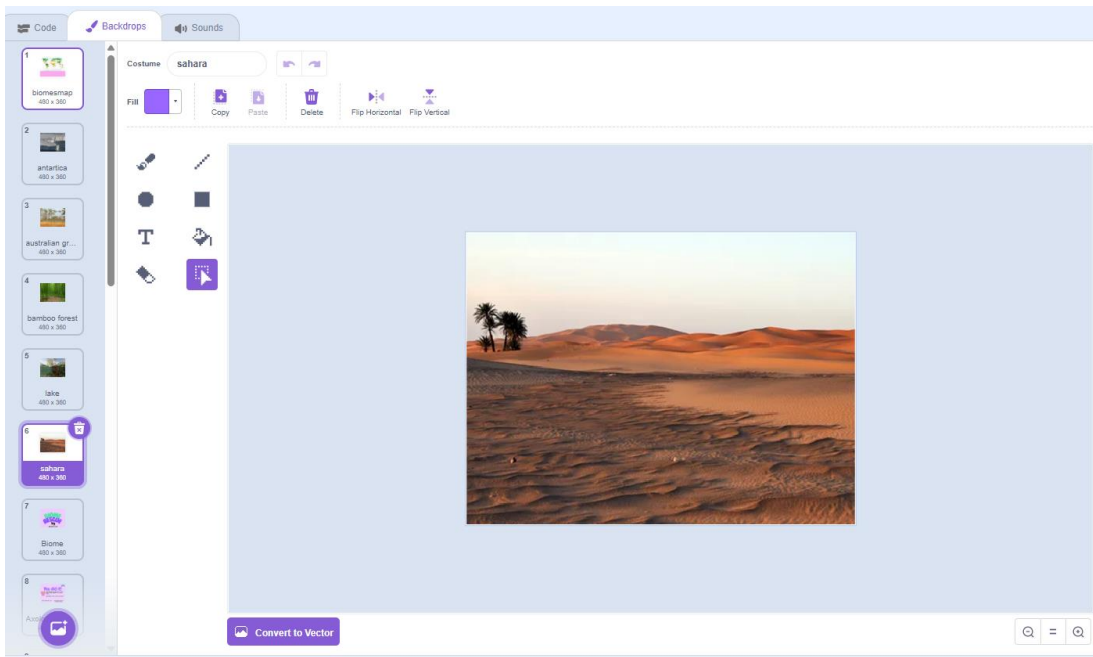


Sprites like my animals had different costumes. I did this because it was an easy way to show if they were happy or sad in their place you chose. If they got fed the right food they also got a satisfied face.



I made the sprites in Procreate trying to make them look like pixelated versions of themselves. My mum helped me add the faces afterwards so that the body was the same but the face would change.

My Backdrops



I had lots of backdrops too and then I had to use the blocks to change them and for different things to happen when the backgrounds changed. Some of the backgrounds were pictures from the internet. Others were made on Canva.

Sharing my game

I wanted to share my game with my friends at school and Girl Guides, so I learnt how to make a QR code on Canva and then I printed off pages to give out to my friends so that they could play the game. They can scan the code to play the game. It works on the computer and on iPads and phones.

**Please scan the QR code to enter my
game, Biome Rescue. Thank you!**

From Bonnie

