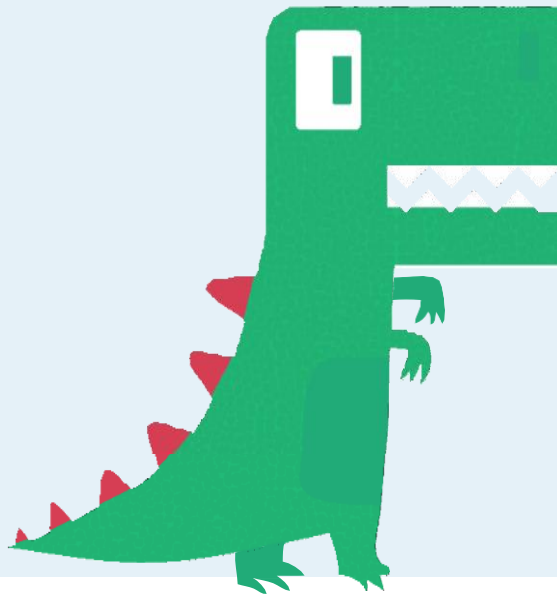


Student workbook

# Halloween hunt

Code Playground



Next page



# Halloween hunt

Scratch project

Our 'Wanda the Witch' is getting ready for Halloween but the pesky bat keeps getting in the way. Can you help her catch it?

This project will take you through an introduction to coding and is designed for Scratch 3.0.

Hope you enjoy the game!

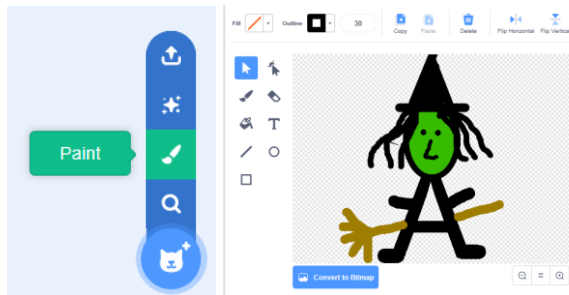
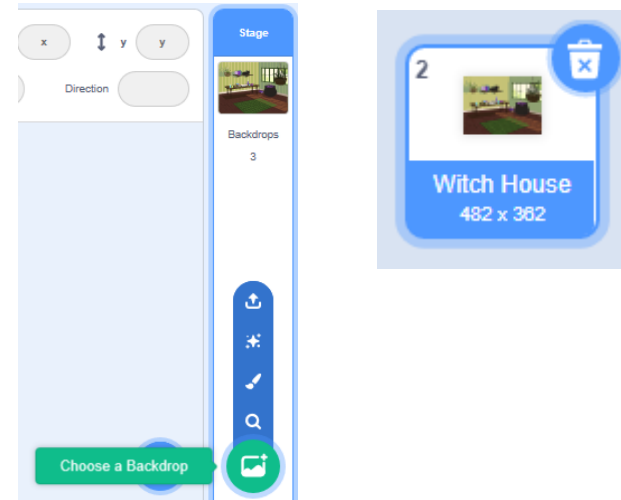


# Halloween hunt

Scratch project

## Step 1

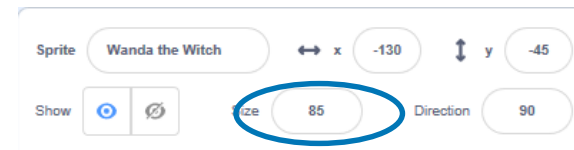
You'll need to add a backdrop for this project. Choose from the backdrop library to use as your stage. We've used the 'witch house' backdrop.



\*\*Top tip: use the 'size' sprite tool to help make your sprites fit on the screen

## Step 2

Let's create your character, first click 'Paint' and use the paint editor to create a hero for your game, we've used the text editor to create our 'Wanda the Witch'. If you're short on time, you can use the 'Witch' sprite from the library.



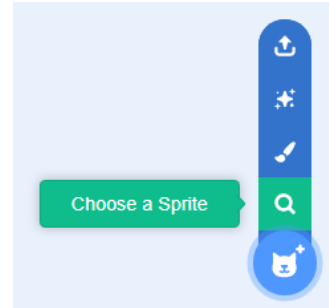
# Halloween hunt

Scratch project

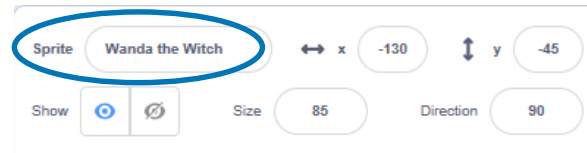
## Step 3

Next click 'Choose sprite from library' and select the 'bat'.

Now you're ready to start coding!



\*\*Top tip: rename your sprites as you create / import them to keep track of your coding



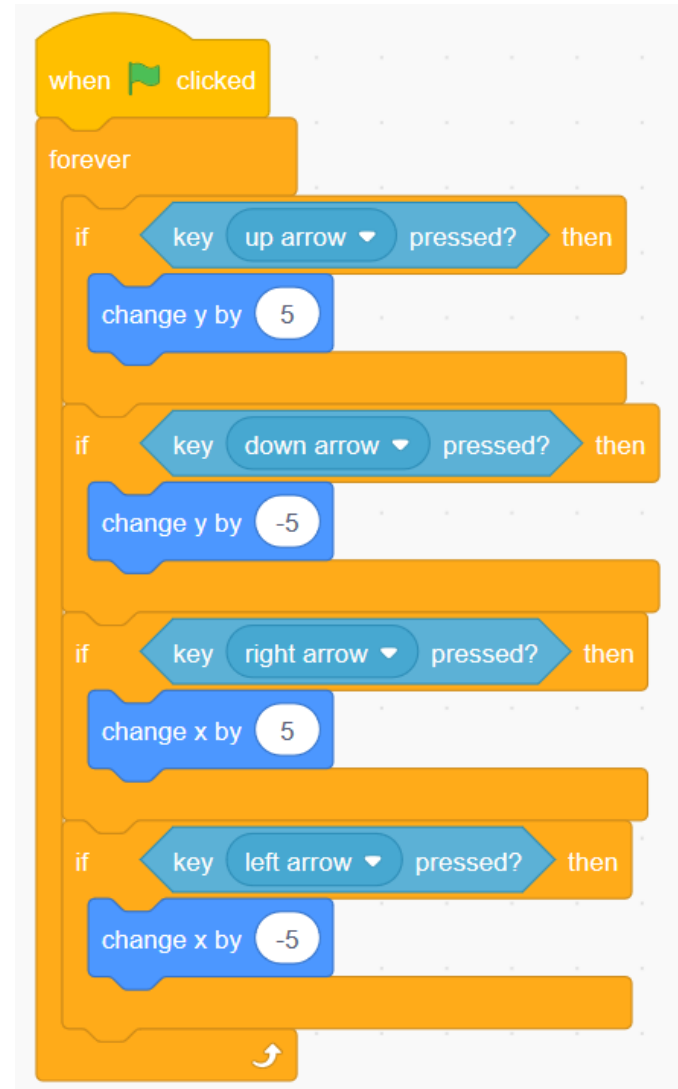
# Halloween hunt

Scratch project

## Step 4

First we will make our new friend move using this code...

When you've added this code to Wanda, have a go at making your witch sprite move around the screen.

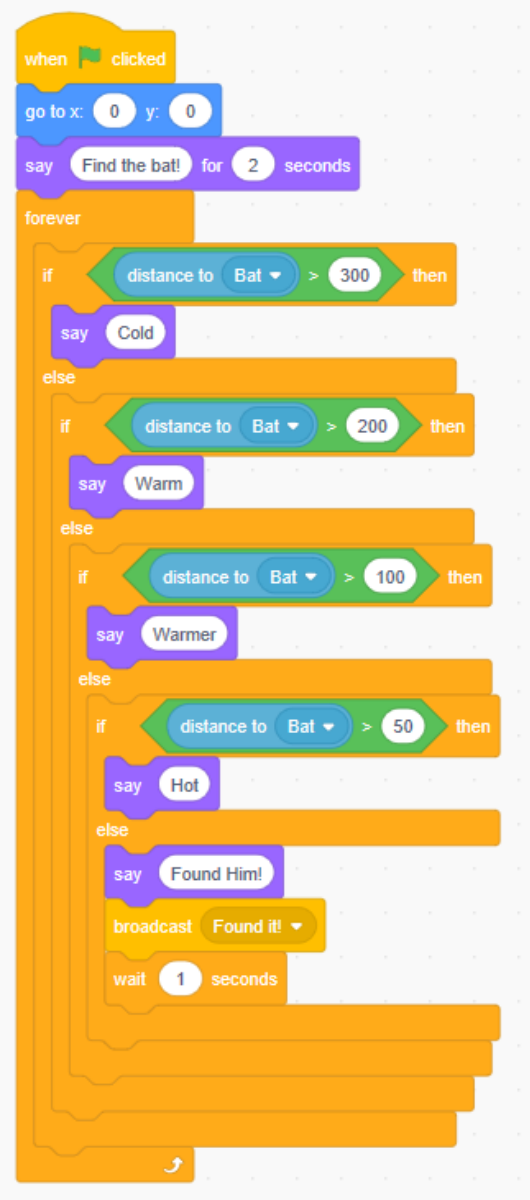


# Halloween hunt

Scratch project

## Step 5

This code gives Wanda clues to where the bat is.



```
when clicked
go to x: 0 y: 0
say Find the bat! for 2 seconds
forever
  if distance to Bat > 300 then
    say Cold
  else
    if distance to Bat > 200 then
      say Warm
    else
      if distance to Bat > 100 then
        say Warmer
      else
        if distance to Bat > 50 then
          say Hot
        else
          say Found Him!
          broadcast Found it!
          wait 1 seconds
```

The image shows a Scratch code editor with the following blocks:

- when clicked** (yellow)
- go to x: 0 y: 0** (blue)
- say Find the bat! for 2 seconds** (purple)
- forever** (orange) loop containing:
  - if distance to Bat > 300 then** (green) block with **say Cold** (purple) block.
  - else** (orange) block containing:
    - if distance to Bat > 200 then** (green) block with **say Warm** (purple) block.
    - else** (orange) block containing:
      - if distance to Bat > 100 then** (green) block with **say Warmer** (purple) block.
      - else** (orange) block containing:
        - if distance to Bat > 50 then** (green) block with **say Hot** (purple) block.
        - else** (orange) block containing:
          - say Found Him!** (purple)
          - broadcast Found it!** (yellow)
          - wait 1 seconds** (purple)

# Halloween hunt

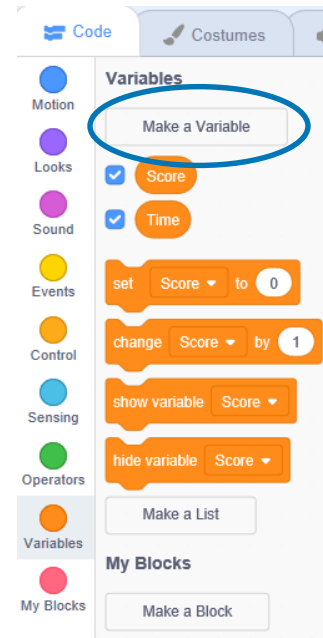
Scratch project

## Step 6

Now we need to set up our timer and our scoring system.

**Variables:** In coding a variable is something that can change throughout the program or game, things like score and time are variables. Now we need to make some for our game. Use the orange Variables tab and select 'Make a Variable'. Create one called 'score' and another one called 'time'

\*\*Top Tip - Not sure where to find the coding blocks you need? Use the colour code on the tabs as a handy hint!

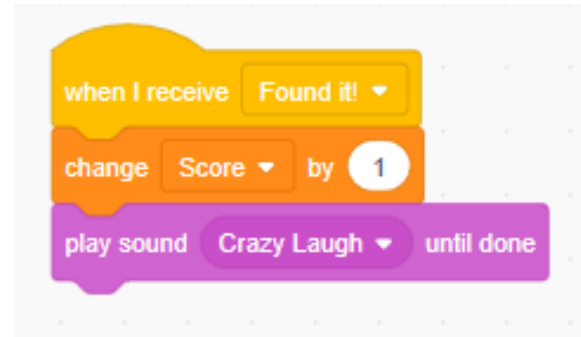
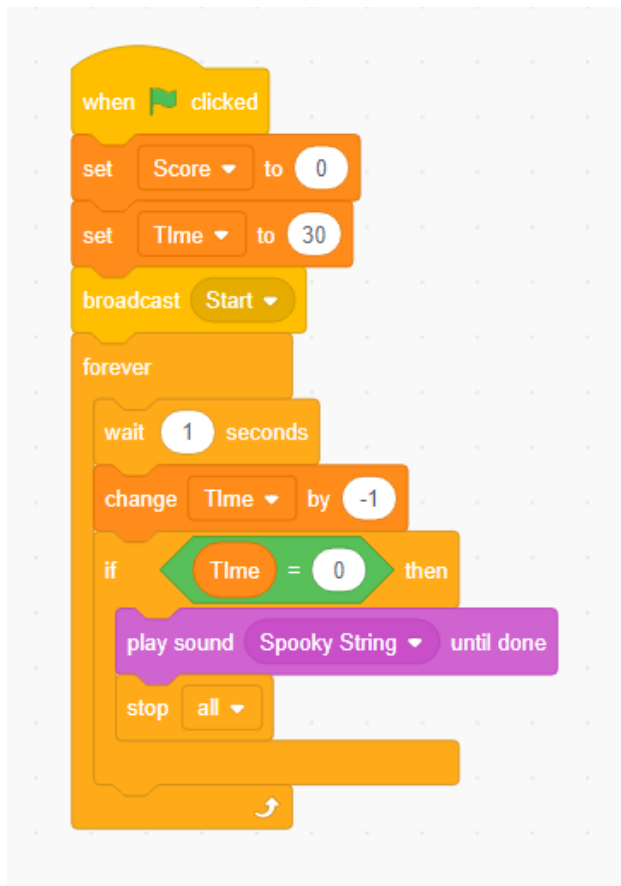


# Halloween hunt

Scratch project

## Step 7

Next, add these scripts to the stage



The script to the left controls the timer by setting a countdown from 30 seconds. The 'stop all' tells the game to end when the timer reaches 0. The script above keeps track of how many times you catch the bat in 30 seconds.




# Halloween hunt

Scratch project

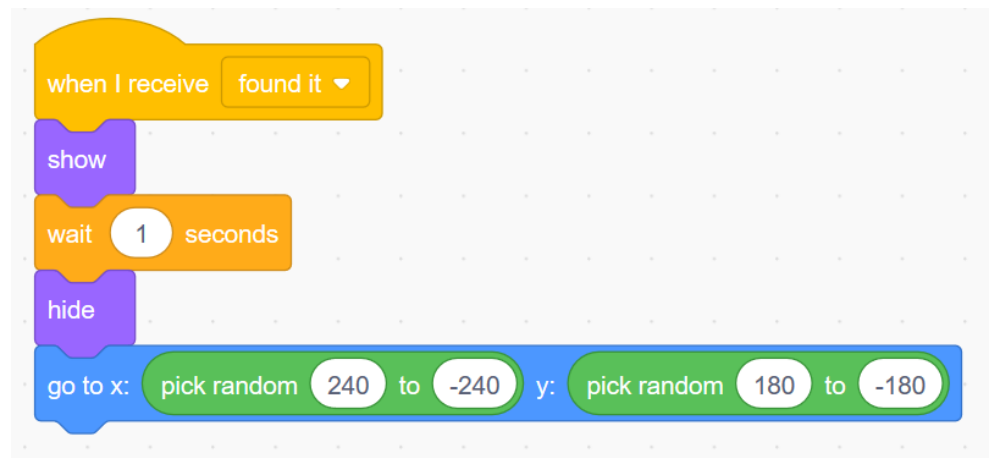
## Step 8

Now we need to hide the bat for Wanda to find! Add these scripts to your bat sprite.

When you have added these scripts, your game is ready to play. Click the green flag to see how many times you can catch the bat!



```
when green flag clicked
hide
go to x: pick random 240 to -240 y: pick random 180 to -180
```



```
when I receive found it
show
wait 1 seconds
hide
go to x: pick random 240 to -240 y: pick random 180 to -180
```

# Halloween hunt

Scratch project

## Level up!

- Can you make the score change by 10 every time Wanda the Witch finds the bat?
- Can you change the game time to 60 seconds?
- Can you make the timer start after the instructions?
- Can you make the game play a drum beat if you reach 5 points?
- Can you add in a second level?

# Notes

## Code Playground

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