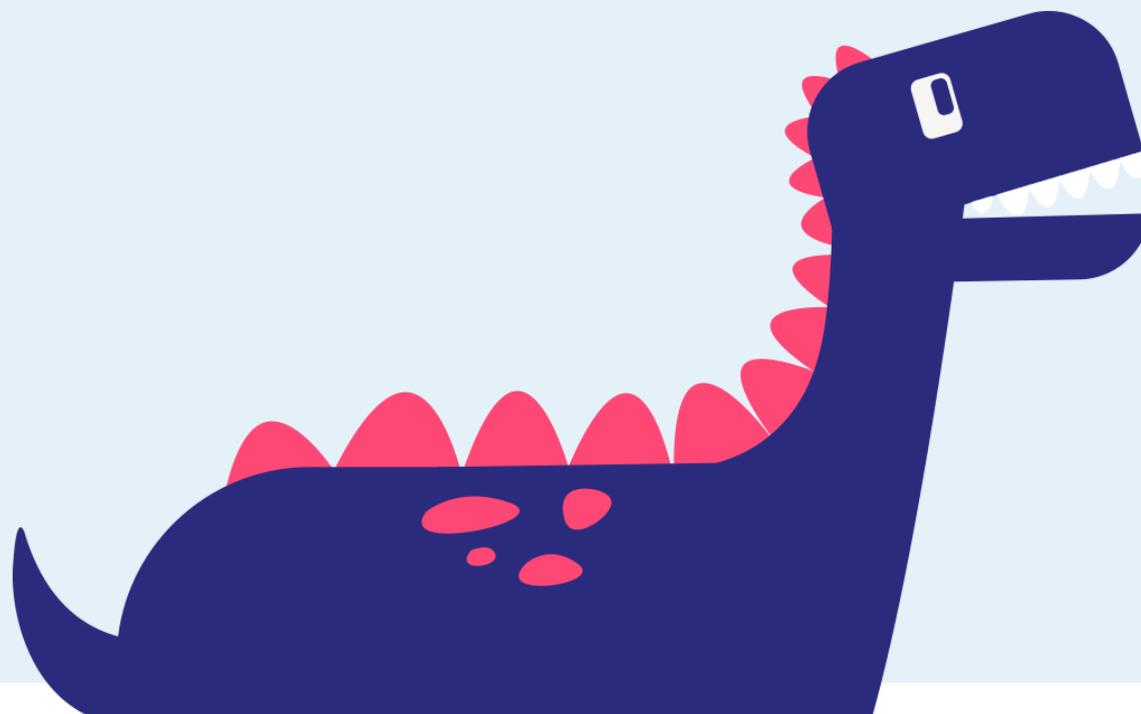


Student workbook

Batter up

Code Playground



Batter up

Scratch project

Let's knock this out of the park! Tap the space bar at the right time to hit the baseball. Can you hit a homerun? Let's make our simple baseball game to find out.

This project is designed for Scratch 3.0.

Hope you enjoy the game!

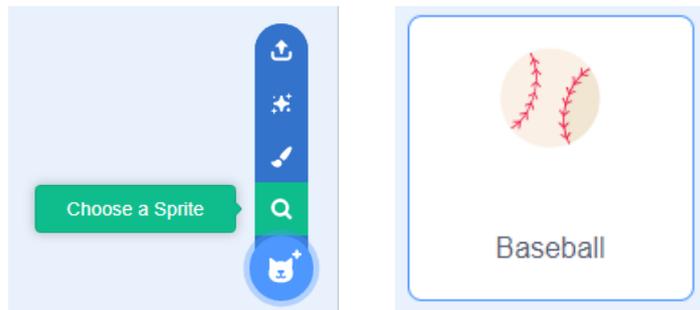
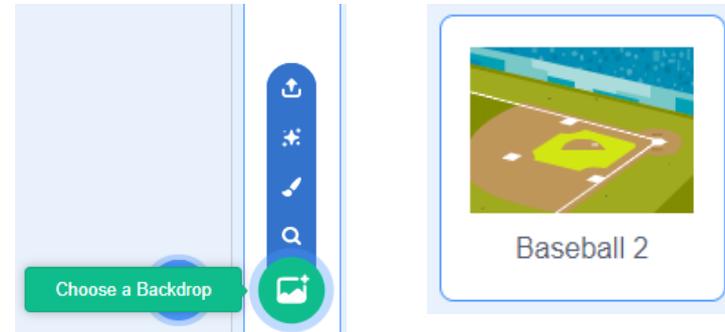


Batter up

Scratch project

Step 1

You'll need to add a backdrop for this project. Choose from the backdrop library. We've used the 'Baseball 2' backdrop.



Step 2

Next you need to get the first sprite for the project. Click 'Choose sprite from library' and select the 'Baseball' sprite.

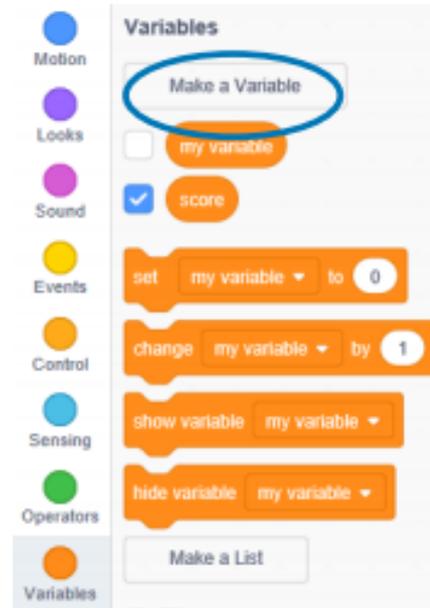
Batter up

Scratch project

Step 3

Let's code the baseball.

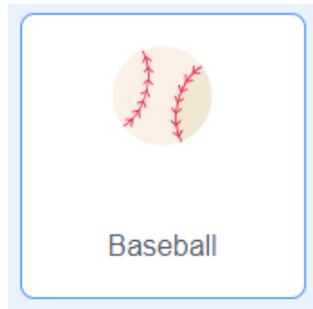
For this, we will need two variables – speed and score
Use the orange Variables tab, click 'Make a Variable' and call it 'score'. Keep 'for all sprites' selected. Repeat this for a second variable called 'speed'.



Batter up

Scratch project

This code controls how the baseball moves and what happens when the player misses the ball, gets a hit or hits a homerun. Add this to your baseball sprite.



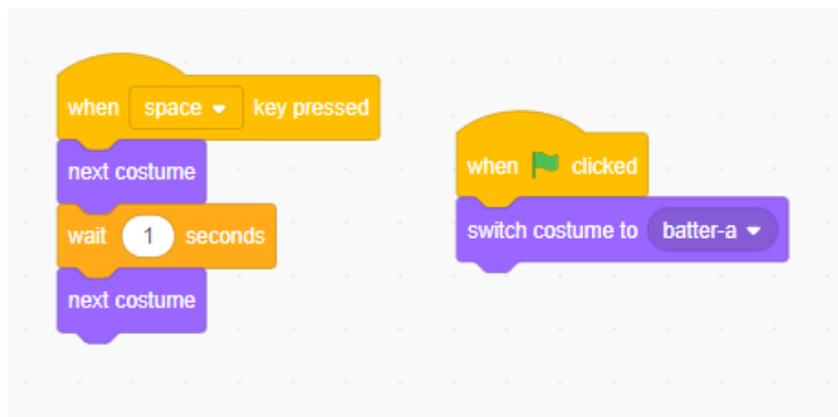
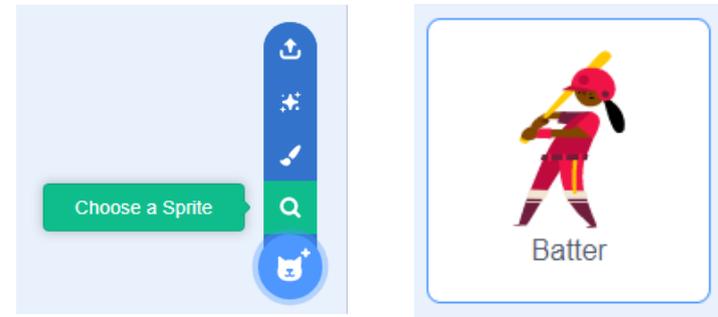
```
when clicked
  set size to 100 %
  set speed to 5
  set score to 0
  repeat 5
    go to x: -250 y: -40
    repeat until key space pressed? or x position > 250
      move speed steps
    if x position < 75 and x position > 35 then
      if x position < 80 and x position > 50 then
        repeat 10
          change size by 20
          wait .1 seconds
        broadcast homerun
        set score to 5
        stop all
      glide 1 secs to x: -250 y: 140
      broadcast hit
      change speed by 3
      change score by 1
    else
      broadcast miss
  wait 1 seconds
  go to x: 0 y: 0
  wait 1 seconds
  say join You scored score for 2 seconds
```

Batter up

Scratch project

Step 4

Now let's add a character to hit the ball. Click 'Choose sprite from library' and this time add in the 'Batter' sprite.



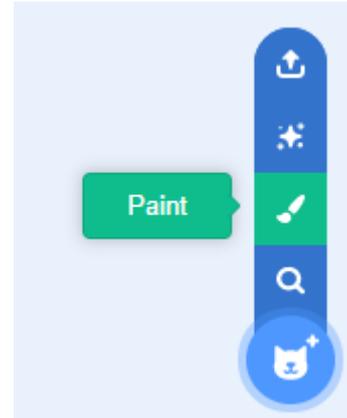
Add this code to your batter to control how they look at the start of the project and how the batter hits the baseball.

Batter up

Scratch project

Step 5

Next let's add some more detail to show when the batter hits or misses the ball, or hits a homerun. For this we will create new sprites. Click 'Paint' to draw your own sprites. Here we've used the text tool to create three sprites – 'Hit!' 'Miss!' and 'HomeRun!'

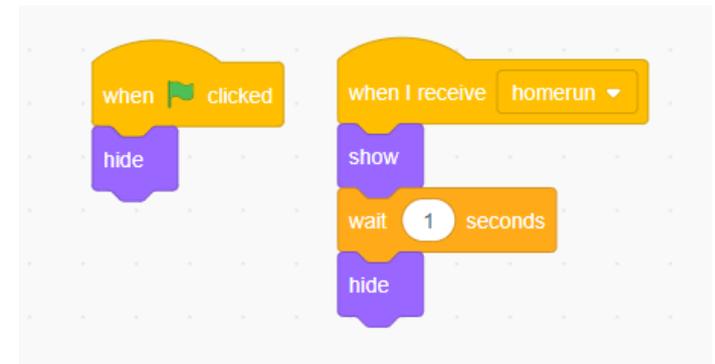
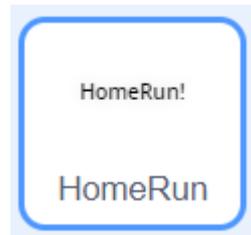
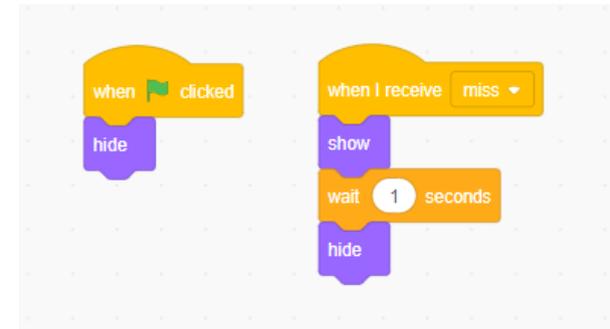
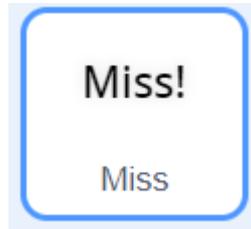
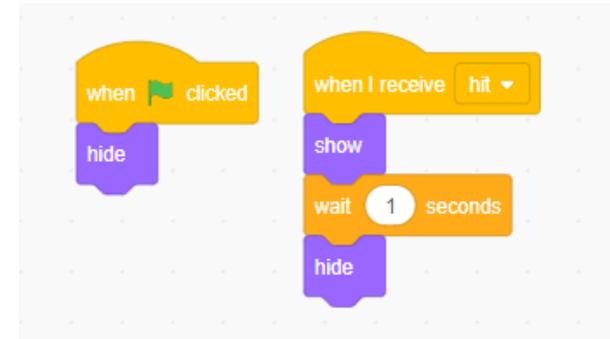


Batter up

Scratch project

Step 6

Add this code to your new sprites to finish the game.



Batter up

Scratch project

Level up!

- Can you add instructions on how to play and also a game over screen?
- Can you make the same project with less blocks and make it more efficient?
- Can you add the coding for a foul ball?
- Can you code the baseball to have different style pitches? I.e fast ball, curve ball etc.
- What other features can you add to the project?

Notes

Code Playground

Barclays Bank UK PLC is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (Financial Services Register No. 759676). Registered in England, Registered No. 9740322. Registered Office 1 Churchill Place, London E14 5HP.