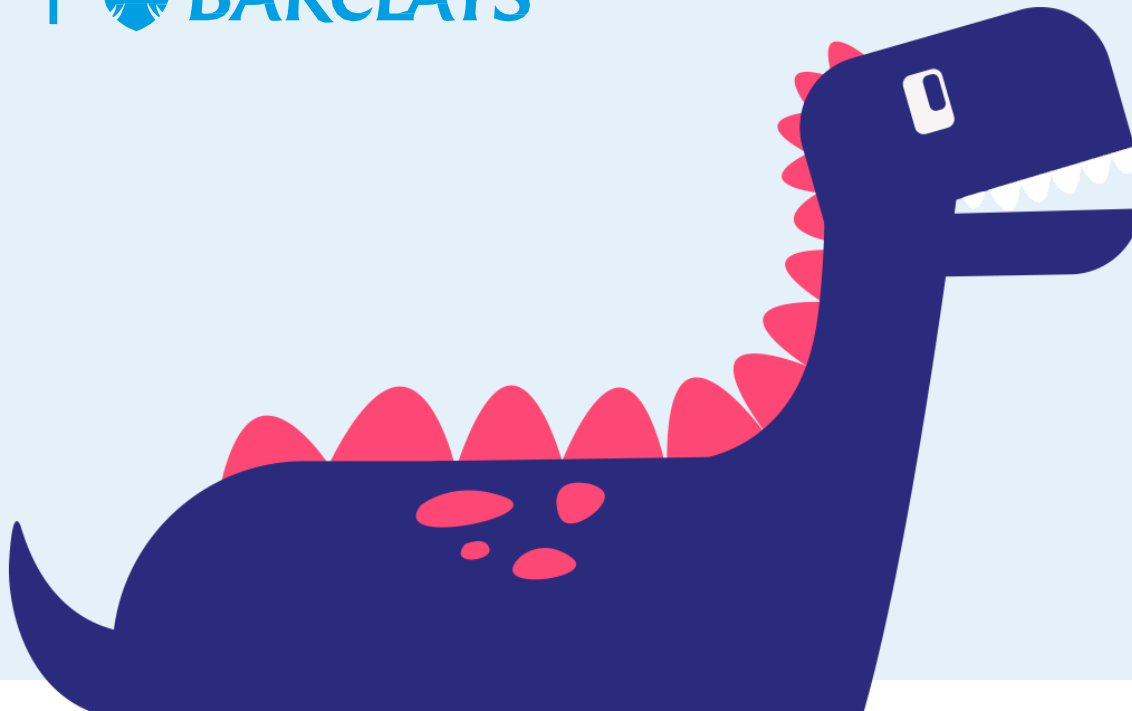


Student workbook

Monsters multiplication

Code Playground



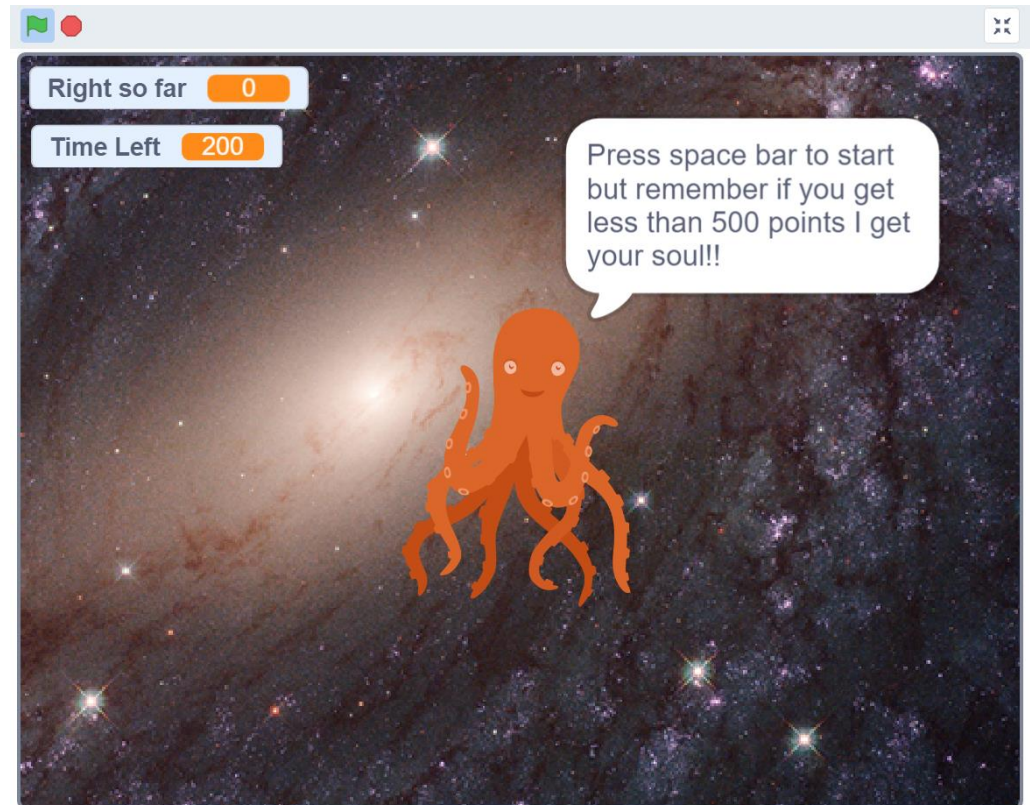
Monsters multiplication

Scratch project

Here's a project we've borrowed for a game to test multiplication skills ... but we think it could be a lot better! So use this as a starter to make it even more awesome!

This project is designed for Scratch 3.0.

Hope you enjoy the game!

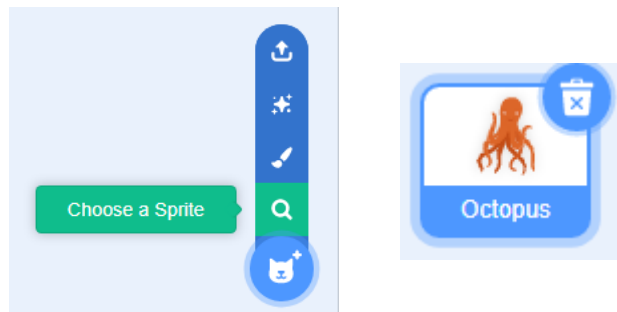
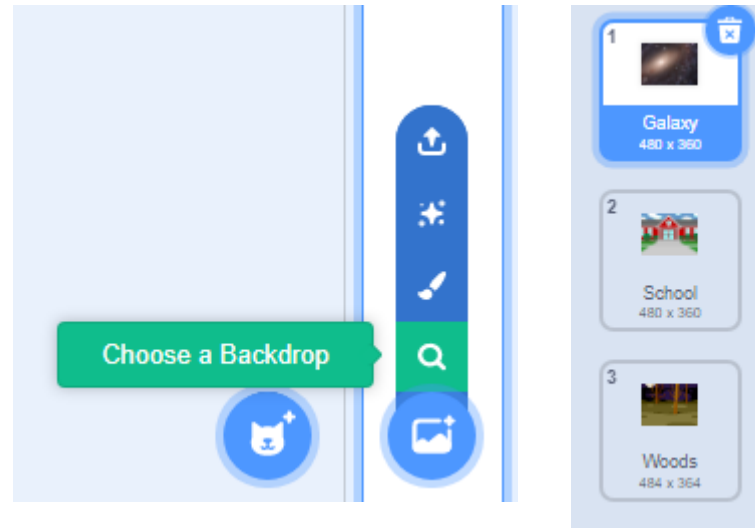


Monsters multiplication

Scratch project

Step 1

You'll need to add 3 backdrops for this project. Choose from the backdrop library to use as your stage. We've used the 'Galaxy', 'School' and 'Woods' backdrops for this project.



Step 2

Let's choose your character, first click on the magnifying glass to go to the sprite library. From there select any sprite to be your monster, we've used the 'Octopus' sprite for this.

Monsters multiplication

Scratch project

Step 3

This script controls the monster and how the questions are created within the project. Add this to your monster sprite

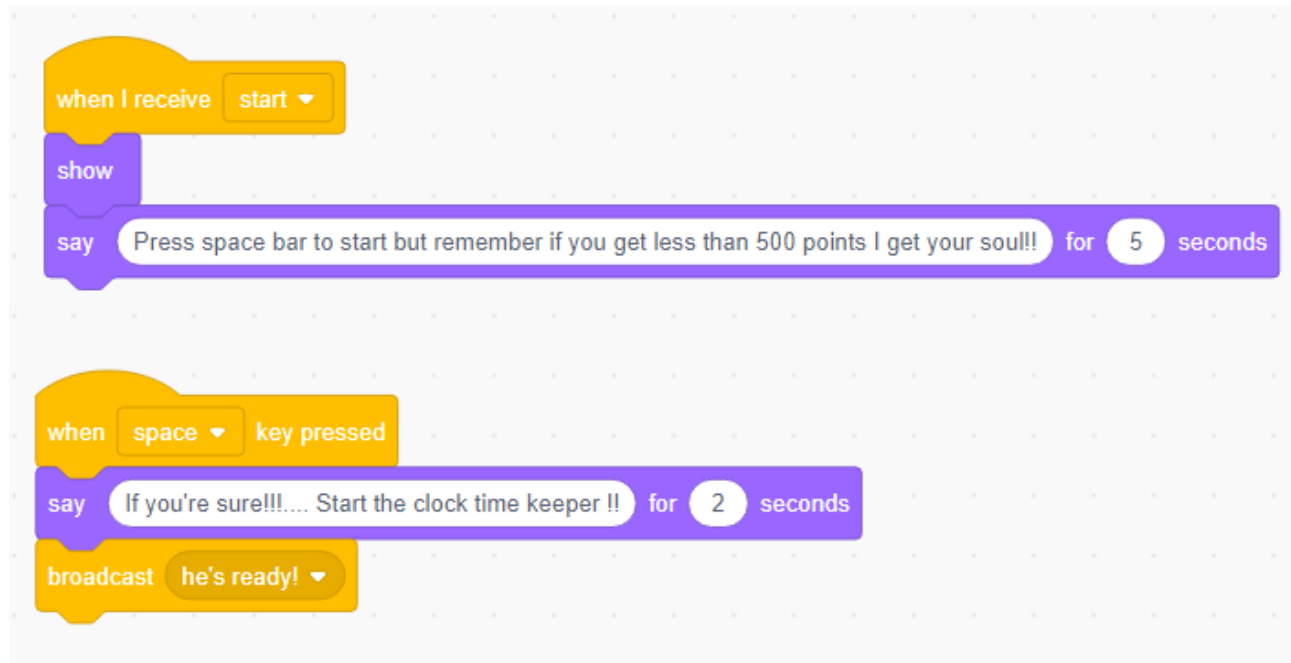
```
when I receive he's ready!
repeat 5
  set First to pick random 1 to 10
  set Second to pick random 1 to 10
  say join First join X Second for 1 seconds
  set Number to First * Second
  ask What's your answer? and wait
  if answer = Number then
    say Good! for 2 seconds
    change Right so far by 1
  else
    say Too bad! for 2 seconds
broadcast done
set Score to Right so far * Time Left
if Score > 500 then
  broadcast you won
  say join Well done! You got Score for 5 seconds
  hide
else
  broadcast you lost
  say join You lose! I got you! You got Score for 5 seconds
  hide
```

Monsters multiplication

Scratch project

Step 4

Next you'll need to add these scripts to your monster sprite.



Monsters multiplication

Scratch project

Step 5

These scripts control the start and end of the game, add them to your stage and you're ready to go.

Click the green flag to get started.

The image displays four Scratch scripts on a light gray grid background. The top-left script is triggered by 'when green flag clicked' and contains: 'switch backdrop to stars', 'set Time Left to 200', 'set First to 0', 'set Second to 0', 'set Right so far to 0', 'set Score to 0', and 'broadcast start'. The top-right script is triggered by 'when I receive he's ready!' and contains a 'forever' loop with an 'if Time Left > 0 then' block, which includes 'wait 1 seconds' and 'change Time Left by -1'. The bottom-left script is triggered by 'when I receive you lost' and contains 'switch backdrop to woods' and 'stop all'. The bottom-right script is triggered by 'when I receive you won' and contains 'switch backdrop to school1' and 'stop all'.

Monsters multiplication

Scratch project

Level up!

- Can you make the code neater and more efficient?
- Change the project so that it keeps going until the timer runs out
- Can you make the project touch screen with a keypad in the display area?
- Add a function to reset without clicking the green flag?

Notes

Code Playground

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