

Introduction

On 15 December 2015, British astronaut Tim Peake set off on the Principia mission to the International Space Station which is in orbit around Earth. This project ties in with the The Principia Space Diary, a free resource for UK schools, produced as part of European Space Agency Astronaut Tim Peake's Principia Mission. For more information about the Space Diary, visit

<http://principiaspacediary.org>.



You are going to create your own space quiz using facts about your body in space. This quiz is based on the activity on page 6 of the Space Diary.

Try the Quiz: Before you begin this project, have a go at the Your Body in Space Quiz. If you are viewing this project online then you can try the project below. If you have a printed copy of then you can go to: jumpto.cc/your-body to try it.



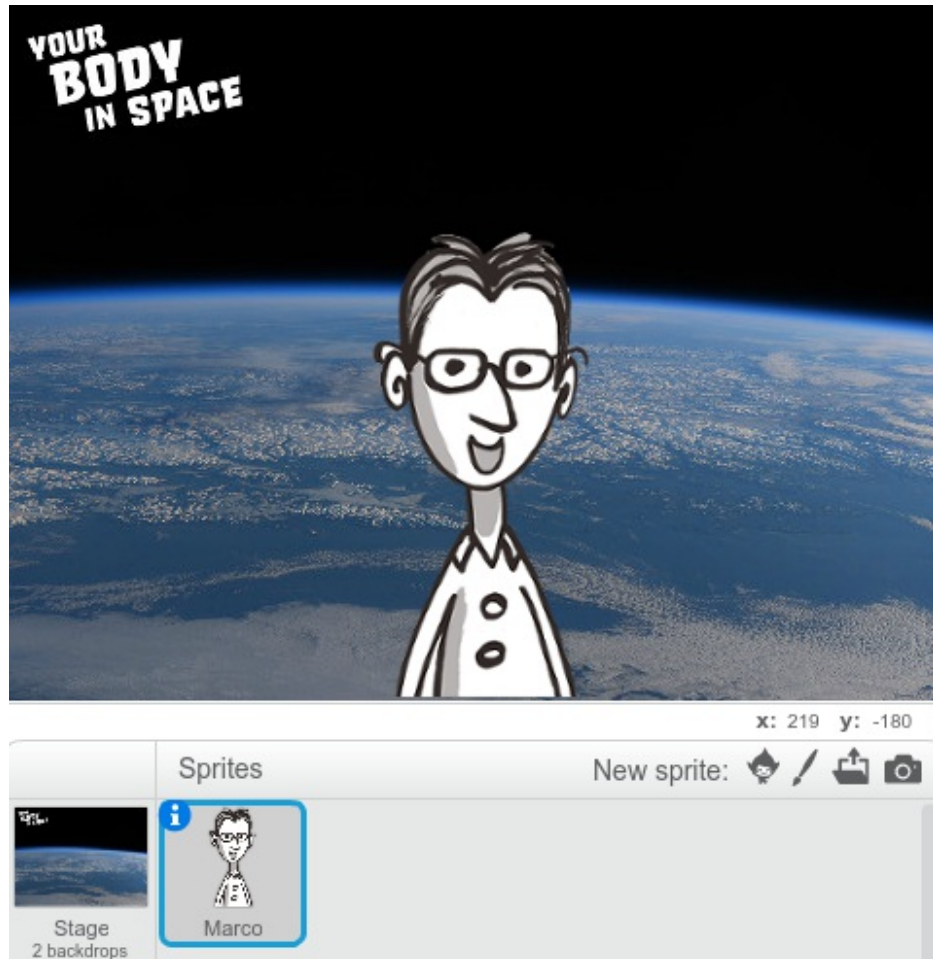
Step 1: Let's meet Marco.

Let's introduce Marco, he teaches astronauts like you how your body will change in space.

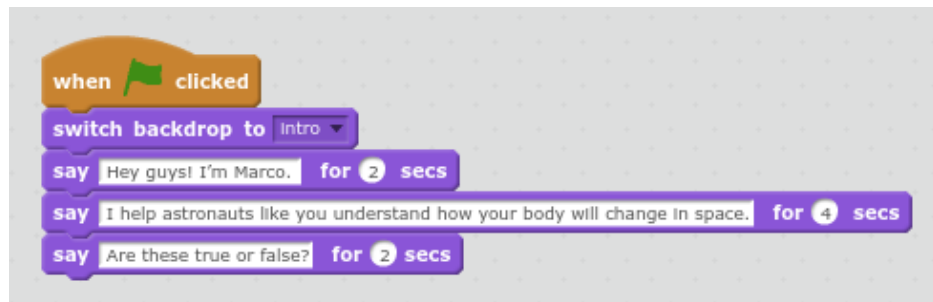
✔ Activity Checklist

- Open the 'Space Diary Quiz' Scratch project. Your club leader will give you a copy of this project, or you can open it online at jumpto.cc/body-go.

Your project should look like this:



- Click on your 'Marco' sprite, and add the following code to make sure the intro backdrop is displaying and get Marco to introduce himself:



- Click the green flag to run your project. If you like you can change the amount of time Marco says each thing for.

Step 2: Add the first question.

Now let's get Marco to ask a true/false question about your body in space.

✔ Activity Checklist

- First let's change the backdrop and add a pause before the first question. Add the highlighted code at the end of Marco's code:

```
when green flag clicked
  switch backdrop to Intro
  say Hey guys! I'm Marco. for 2 secs
  say I help astronauts like you understand how your body will change in space. for 4 secs
  say Are these true or false? for 2 secs
  switch backdrop to question
  wait 2 secs
```

- Add the highlighted code to complete the first question:

```
when green flag clicked
  switch backdrop to Intro
  say Hey guys! I'm Marco. for 2 secs
  say I help astronauts like you understand how your body will change in space. for 4 secs
  say Are these true or false? for 2 secs
  switch backdrop to question
  wait 2 secs
  ask 1. Your nose will fall off. and wait
```

- Now you need to check the answer. An **if/else** block allows you to do something different depending on whether the question is answered correctly or not.

Add the highlighted code:

```
switch backdrop to question
  wait 2 secs
  ask 1. Your nose will fall off. and wait
  if answer = false then
    say Nice one! That's false. for 2 secs
  else
    say Sorry, that's actually false. for 2 secs
```

- Click the green flag to test your quiz question. Make sure you try the correct answer (false) and an incorrect one (true or anything else.) You can use capital letters or lower case letters. Try it.
- Now add another question. This time the correct answer is 'true'.

Add the highlighted code:



```
else
  say Sorry, that's actually false. for 2 secs
ask 2. You don't know which way is up! This can make you feel sick. and wait
if answer = true then
  say Nice one! You got it right. for 2 secs
else
  say Sorry, that's actually true. for 2 secs
```

[Save your project](#)

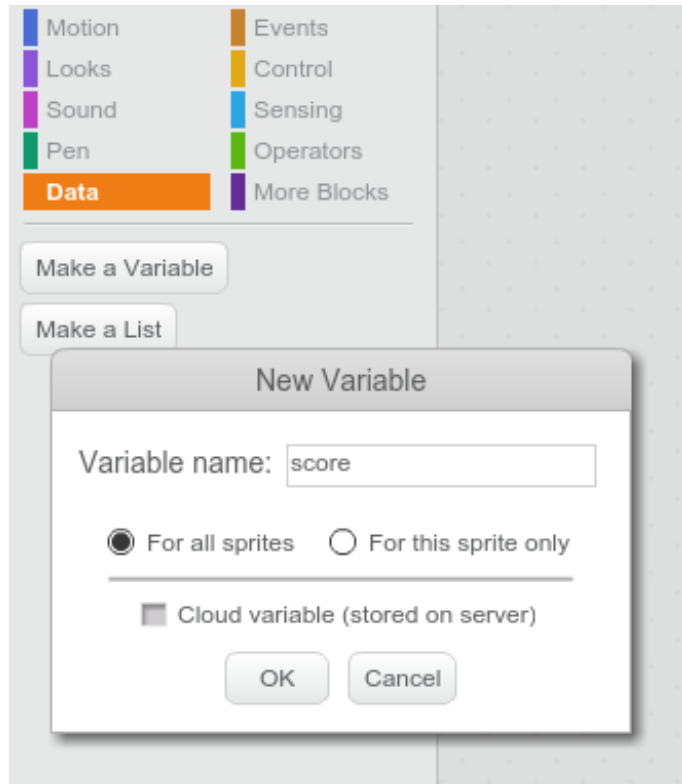
Step 3: Add a score

Let's add a score that goes up by one point when you get a question correct.

✔ Activity Checklist

- A variable is a place to store data. Let's create a variable to store the score.

Click **Data** and then click 'Make a Variable'. Call this variable **score**.



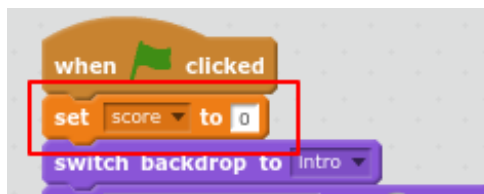
The score variable will be displayed on the stage.

- Move the score to a better place on the stage by dragging it:



- You will need to set the score to zero at the beginning of the quiz.

Add a **set** block to Marco's code:



- When a question is answered correctly you need to increase the score by 1.

Add **change** blocks to your quiz questions:

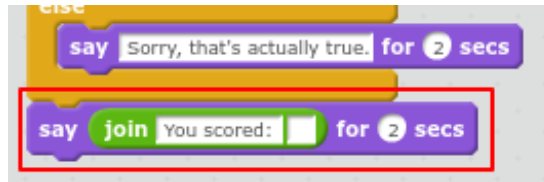


- And let's have Marco say the score at the end.

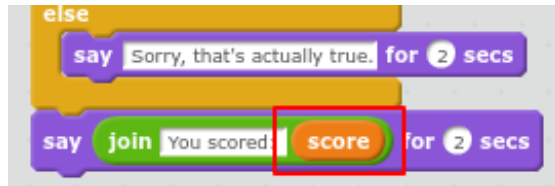
Add a **say** block at the end of Marco's code:



You want the Marco to say “You scored:” followed by the score. To do this, firstly add a **join** block into your Marco's **say** block and type “You scored:” (without the quotes, but with a space at the end.) in the first box of the **join** block:



Now drag the **score** variable from **Data** into the second box of the **join** block.



- Now click the green flag and test your code. Make sure that the score goes up when you get the answer correct and stays the same when you get it incorrect.

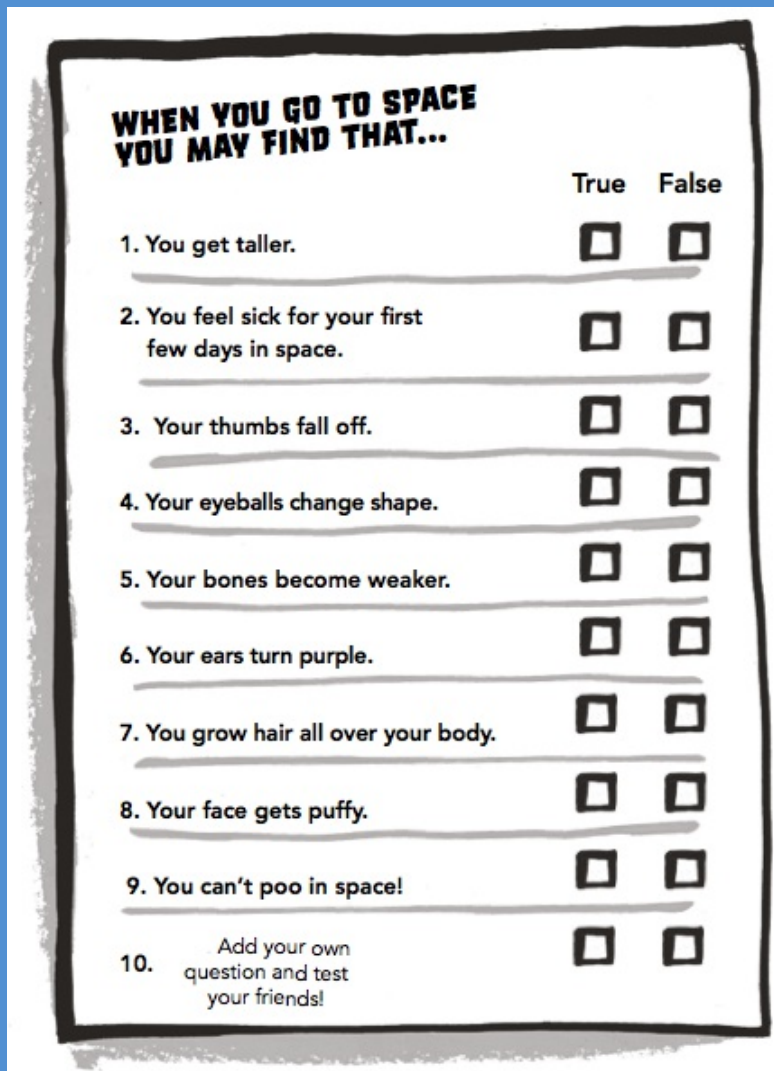


[Save your project](#)

Challenge: Add more questions

Can you add more true/false questions to your quiz?

You could use the questions from the space diary. You could also research your own questions.



**WHEN YOU GO TO SPACE
YOU MAY FIND THAT...**

	True	False
1. You get taller.	<input type="checkbox"/>	<input type="checkbox"/>
2. You feel sick for your first few days in space.	<input type="checkbox"/>	<input type="checkbox"/>
3. Your thumbs fall off.	<input type="checkbox"/>	<input type="checkbox"/>
4. Your eyeballs change shape.	<input type="checkbox"/>	<input type="checkbox"/>
5. Your bones become weaker.	<input type="checkbox"/>	<input type="checkbox"/>
6. Your ears turn purple.	<input type="checkbox"/>	<input type="checkbox"/>
7. You grow hair all over your body.	<input type="checkbox"/>	<input type="checkbox"/>
8. Your face gets puffy.	<input type="checkbox"/>	<input type="checkbox"/>
9. You can't poo in space!	<input type="checkbox"/>	<input type="checkbox"/>
10. Add your own question and test your friends!	<input type="checkbox"/>	<input type="checkbox"/>

And here are the answers:

The following questions are all true:

- You get taller;
- You feel sick for your first few days in space;
- Your eyeballs change shape;
- Your bones become weaker;
- Your face gets puffy.

Save your project