

Reaction time test

Improve reaction times with this coding game and one day you could go to space, like the astronaut and Scout Ambassador Tim Peake

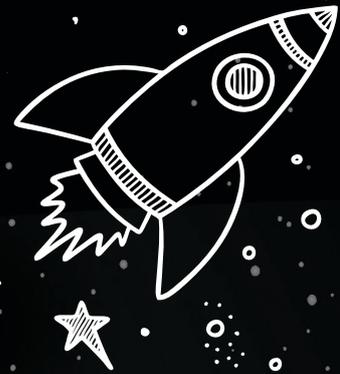
Suitable for Scouts

Astronauts are trained intensively to speed up their reactions to incidents, and to be prepared for all eventualities. Things happen quickly when you're travelling at 7.66 kilometres per second, and with space debris to avoid quick reaction times are essential. This activity will help young people develop faster reaction times and improve their fine motor skills.

Instructions

- 1** Go to rpf.io/astronaut-rt to open the starter project in Scratch.
- 2** Click on the Astronaut sprite below the Stage and add code to get Major Tim to test your reaction times.

```
when green flag clicked
say Hello, British ESA Astronaut Tim Peake here. Let's test your reaction times? for 2 seconds
wait 1 seconds
say Press the Space key when I say "GO!"
wait pick random 1 to 10 seconds
say GO!
reset timer
say join Your reaction time was join timer seconds
```

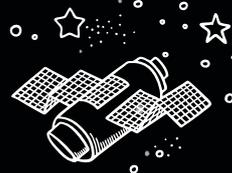


3 Test your project. Tap the 'space' bar on the keyboard as fast as you can when Major Tim says 'GO!' and find out how fast you were.

```
say join Your reaction time was join timer seconds
set kilometres to timer * 7.66
wait 2 seconds
say join join In that time the ISS travels about round kilometres kilometre
```

4 The ISS travels at about 7.66 kilometres a second. Add code below to find out how far the ISS would travel in the time it takes you to react.

5 Keep practising and improve your reaction times, and maybe you could be an astronaut like Tim Peake!



Time needed 30 minutes

Badge



Raspberry Pi partners the Digital Maker Staged Activity Badge

Partner



Outcomes

The young people will create a simple computer program to help with a Scouts activity, and try it out. The activity will help to improve fine motor skills and test reaction times.

More information

Scouts has partnered with the Raspberry Pi Foundation to produce resources for the Digital Maker Staged Activity Badge: rpf.io/scouts-digital-maker. The Astronaut Reaction Time Game is a Raspberry Pi Foundation project that is available for everyone. You can find detailed step-by-step instructions with more information at: rpf.io/astronaut-reaction-project. The completed project is available at: rpf.io/astronaut-reaction-soln.

