

This month we're focusing on everything in space! It might be planets, moons, stars, astronauts, rockets or even aliens! We've got 2 Scratch challenges you can pick from.

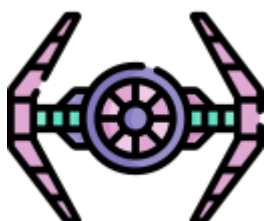
There are some space and alien images built into Scratch, and If you're using a Dojo laptop, we've found some more, these are on the **desktop**. If you've brought your own laptop let one of the volunteers know and we'll give you a copy of the images.

Some pictures in Scratch don't work on some of our laptops. Jpegs (real photos of real things) won't load properly, it's not you, it's the computer!

Challenge 1 - For Scratch beginners

Make a space themed animation or picture in Scratch! It can include lots of rockets, aliens and planets all flying around, or it might be a far away planet full of aliens and other funny creatures!

- Use **control** blocks to start and control the animation:
 - **When green flag clicked** will start your animation
 - **Forever** and **repeat** blocks will repeat whatever you put in them
- Use **motion** blocks
 - In the **move** block use a minus number of steps to go backwards
 - **Turn** and **point** let your sprites change direction
 - **Go to** moves the sprite instantly, but...
 - **Glide** will make the sprite slide smoothly across the screen
- Use **look** blocks like
 - Use **change size** or **set size** to shrink sprites that are too big
 - Use **show** and **hide** to make sprites appear and disappear
 - Use **say** and **think** to show your sprite
- Play with new blocks you've never tried before to see what they do!



Challenge 2 - For Scratch pros

There is too much junk like old satellites, rockets and bits of rock in space! Can you make a game where your space ship captures the rubbish?



Choose a rocket or spaceship as your first sprite, and create other sprites to be the junk in space. When the rocket touches the rubbish, the rubbish should disappear.

- You will need to create a script to move your space ship around
- Create code which constantly checks if your spaceship is touching another sprite
- Create code which makes the other sprite disappear if it does
- You will need to use **control**, **motion**, **looks** and **sensing** blocks.

If you want to go even more pro:

- Use a **variable** to keep a track of how many bits of rubbish you collect
- Create additional levels with more rubbish to collect
- Moving rubbish is even harder to capture!
- Use alien spaceship sprites that you need to avoid



Remember at CoderDojo, if you make it, you can play it, and if you get stuck, ask another Ninja to see if they can help!