

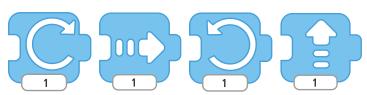
## Spaceman

I can use a repeat instruction to make a sequence of instructions run more than once.

Open the ScratchJr app and start a new project in the My Projects screen.

Choose the **Space** background and add an **Astronaut** sprite.

Drag some of the movement blocks into the working area and try them out.





1. Make a sequence of movements. Connect them together. Start with the GREEN FLAG and use an END BLOCK. Copy this sequence and then click the GREEN FLAG to try it out.



- 2. Add extra blocks or remove some, to make a new movement sequence. Try it out.
- **3.** What do you think will happen if we change the **END BLOCK** for a **REPEAT FOREVER** block?



Try it out.



- **4.** Start a new sequence of your own. Use the **GREEN FLAG** to start and **REPEAT FOREVER** to end.
- 5. What happens to the spaceman when he reaches the edge of the screen?



- **6.** Use the Red Hexagon to stop running the code.
- **7.** Make a new sequence for a partner to copy or create. Can you **predict** what the spaceman will do before you try it out?





# Spaceman

I can use a repeat instruction to make a sequence of instructions run more than once.

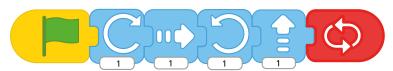
You need to have a ScratchJr project with the **Space** background and add an **Astronaut** sprite.

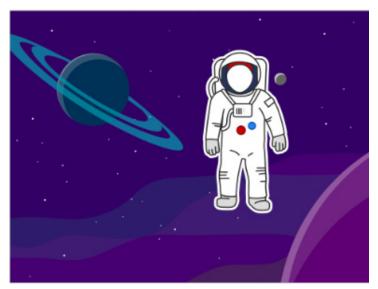
Either copy the sequence below or use your own sequence of movement blocks.

You should have at between 4 and 8 movement blocks in your sequence.

Remember the **GREEN FLAG** to start and the **REPEAT FOREVER** at the end.

Can you **predict** what the spaceman will do before you run the sequence?





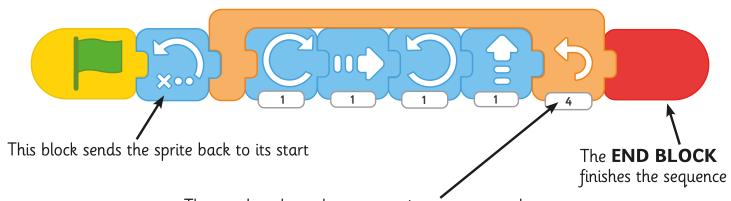
What if you change the values of the numbers underneath the blocks?

What will happen?

Try it and test your code.

When we use **REPEAT FOREVER**, the sequence just keeps running in a **loop** forever or until we stop the program.

We can make the sequence run for a particular number of times. Use the **REPEAT** block to make this sequence instead:



The number shows how many times to repeat the sequence

Try some different sequences using the **REPEAT BLOCK**. Any code inside the **REPEAT BLOCK** will be done the number of times shown underneath.





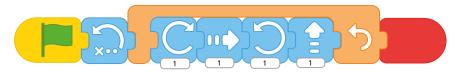
# Spaceman

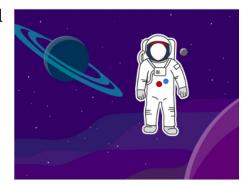
I can use a repeat instruction to make a sequence of instructions run more than once.

You need to have a ScratchJr project with the **Space** background and add an **Astronaut** sprite.

Check that you already have a sequence using the **REPEAT** block.

It might look something like this:







#### Challenge 1

Can you add a block inside the **REPEAT SEQUENCE** to make the spaceman **SHRINK** each time. Predict what will happen, then test your code to try it out!



#### Challenge 2

Edit your **REPEAT** block so that the sequence inside is repeated 9 times. Can you remember how to do it?



### Challenge 3

Add a block at the end to make the spaceman become **INVISIBLE**. Make sure it is outside the **REPEAT SEQUENCE**.



### Challenge 4

Add a new background. Select the **Moon** background and add the spaceman again.



#### Challenge 5

Go back to your code by selecting the spaceman on the first background. Choose a new **END** block. You should have a new block to choose with a picture of the second background. Predict what will happen when you run your code, then try it out!



