## **Robot Dance Recital**

Explore coding through choreography as you command your robot to move and turn to perform a basic dance.

## The Main Idea



As a mobile robotics platform, one of the Create 3 robot's main features is the ability to move precisely on flat surfaces. In this project, you'll practice moving your robot forwards and backwards, as well as turning left and right. Once you're comfortable driving your robot around, you'll be able to create all sorts of projects, such as basic maze-solvers, a robot-waiter, or even a full-scale multi-robot dance recital.

- 1. Use the command **await robot.move(16)** to drive your robot forward 16cm. Edit the parameter to adjust the number of centimeters driven and the robot's direction (positive values will send the robot forward; negative values will be backward.
- 2. Use the commands **await robot.turn\_left(90)** and **await robot.turn\_right(90)** to rotate the robot 90 degrees to the left (counter-clockwise) and right (clockwise). Edit the parameters to adjust the number of degrees turned.
- **3.** With the above commands, program your robot to dance along to the song "Hokey Pokey." We included our own choreography to use as inspiration, based on a version of the <u>Hokey Pokey</u> by <u>The Learning Station</u> (our choreography starts at 0:16)

Lyrics	Robot Actions
You put your right foot in	Drive 30cm forward
You put your right foot out	Drive 30cm backward
You put your right foot in	Drive 30cm forward
And you shake it all about	Turn 5•to the right Turn 5•to the left Turn 5•to the right Turn 5•to the left
You do the Hokey Pokey and you turn yourself around	Turn 360• to the right
That's what it's all about!	Drive 5cm forward Drive 5cm backward Turn 5•to the right Turn 5•to the left

## **Going Further**

Ready to create a more intricate program? Try coding your robot to dance along to other popular songs or linedances. Take it to the next level by performing alongside your robot partner or using play\_note commands to code your robot to perform music while dancing!