



# SIMPLE SPHERO IDEA 2

## SPHERO MATS

### RESOURCES

Box of Spheros

iPad with Sphero Edu app

Sphero mat



### RACETRACK CHALLENGE

Students work together to program the Sphero SPRK+ around the track on the outside of the mat. Two teams of students can compete against each other to complete the reversible racetrack. Students can use the Block or Text projects to create their own code to power the SPRK+. They will have to take account of headings, angles, speed, distance and time while programming the SPRK+ around the track.

### CIRCLES CHALLENGE 1

Students will answer mathematics questions by programming the SPRK+ to move to one of the numbers. The teacher may ask '5+6' or 'square root of 81' and students of any age can use a Draw, Blocks or Text project to program the SPRK+ to the correct number.

### CIRCLES CHALLENGE 2

Each coloured circle is a vertices of a 2D shape. The route between each same coloured circle is a side of a 2D shape.

Yellow = Square

Red = Rectangle

Blue = Hexagon

Purple = Right Angle Triangle

Green = Scalene Triangle

Students can use a Draw, Blocks or Text project to use code to explore the properties of the 2D shapes.

### GATES CHALLENGE

A really interactive challenge that develops problem-solving skills, collaboration between students, computational thinking and knowledge of angles and shape and space. Beginning at 'START HERE' and finishing at 'FINISH HERE' students have to use a Blocks or Text project and follow the instructions at each gate. Students will really enjoy extending their mathematical knowledge while exploring sound, movement and light with the SPRK+.