

Making Shapes



bit.ly/utbsphero7

GM2-3: Sort objects by their spatial features, with justification.

GM2-4: Identify and describe the plane shapes found in objects.;

- sort objects by selecting an attribute or attributes
- classify items, using attributes

CT PO1

- I can figure out how a simple task can be broken down into a series of steps (called decomposition).
- If I find my instructions don't work then I wonder why this is and correct them so that they work better next time (called debugging)

I can explain the attributes of a simple 2D shape.

I can say how many sides and how many corners a simple 2D shape has.

I can create a program for my sphero to travel to different shapes depending on their attributes.

I can create a program for my sphero to create a simple 2D shape.

	Resources
<p>Recap:</p> <p>What are the names of some simple 2D shapes?</p> <p>What can you tell me about those shapes?</p> <p>What makes them the same and what makes them different?</p>	
<p>Introduce the sphero.</p> <p>What do you think this is?</p> <p>What can robots do?</p> <p>Explain sphero in simple terms</p> <ul style="list-style-type: none"> • Sphero - sphere is a 3D circle • Has a battery • Uses bluetooth to talk to the ipad • LED lights • Needs a human to tell it what to do 	
<p>Demonstrate how to use the sphero</p> <ul style="list-style-type: none"> • Find the sphero EDU app • Pair ipad to a sphero • Create a new program • Aim your sphero • Code is read from the top block down • Different types of blocks - today we're using movement, sound, light • How to undo • How to change colour 	<p>Poster - Pair, Aim, Program</p>

- How to change LED lights to know which is yours
- start

Activity:

Allow time for experimentation with the sphero. Then:

Have a variety of different sized and coloured 2D shapes placed within an area - or allow the students to search for the objects themselves in the room.

Can you program your sphero to find the shape the teacher says.

Can you program your sphero to find a shape with four edges?

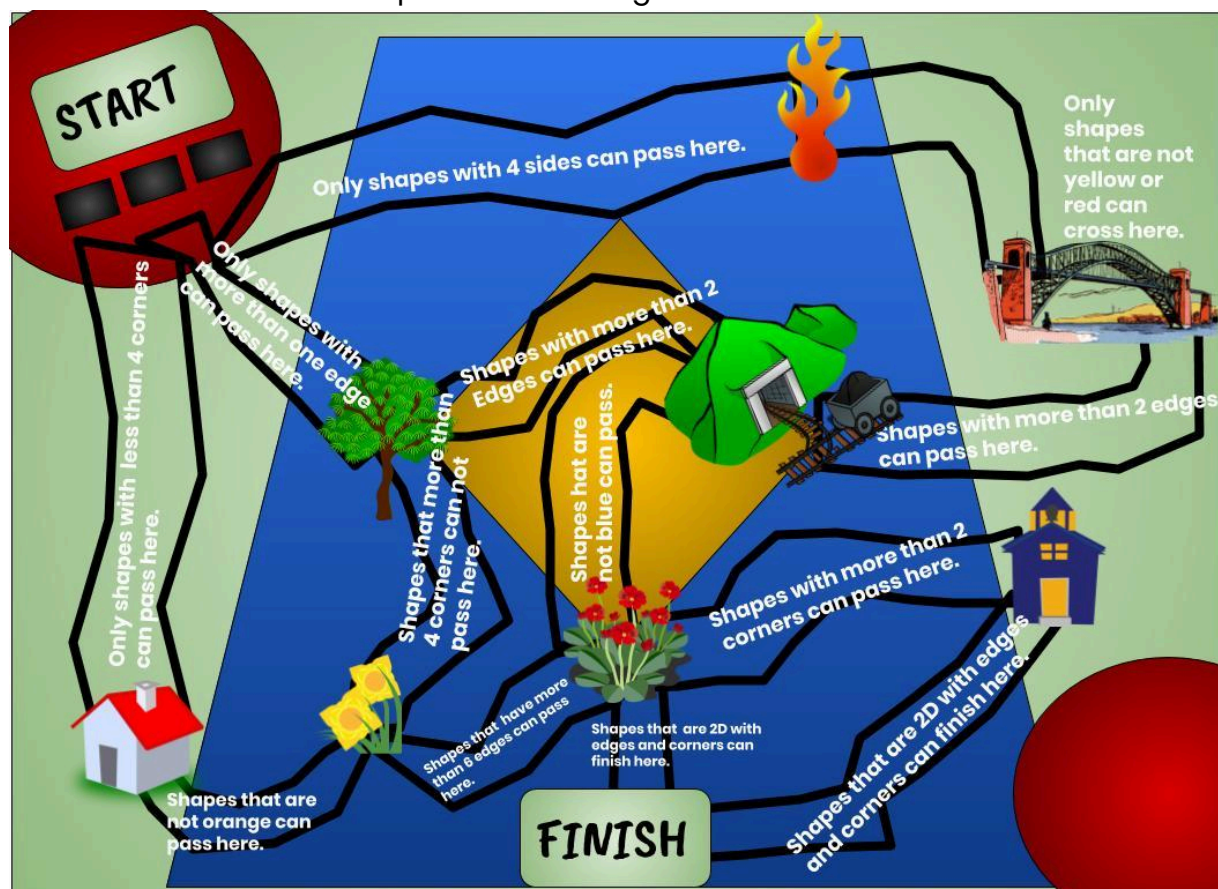
Can you program your sphero to find a yellow shape with more than 3 edges?

Can you program your sphero to make the shape - make a square etc....

Ext:

Can you program your sphero to find a 4 sided red shape - travel to it, then trace around the edges of it?

Scatter items from the Shape maze to navigate.



Reflection:

Could we identify the shapes and attributes correctly.?

Did our sphero go where we wanted it to?

What did we do if things didn't go right?

Did we work well with our buddy by listening to their ideas?

Selection of large 2D coloured shapes

