

L.O. To investigate 2D shapes.

Success Criteria:

I can name and describe a 2D shape and its properties.

I can sort 2D shapes by comparing their properties.

To round off our exploration of Shape, here's a nice investigation inspired by your flag designs earlier this week.

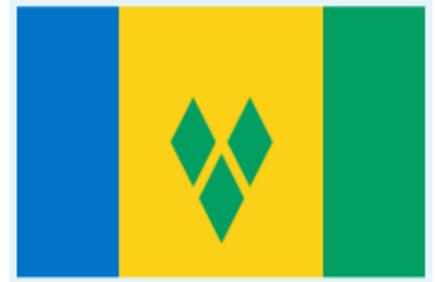
Choose one of these flags: (there are other flags to choose in the separate FLAGS document)



Guyana



South Africa



Saint Vincent and Grenadines

Answer the following questions about the properties of the one you choose:

- ❖ What shapes can you see in your flag?
- ❖ Can you describe their **angles**? (**Acute**, **obtuse** and **right angles**)
- ❖ Does the flag have any **lines of symmetry**? (**Horizontal**, **vertical** or both)
- ❖ Does the flag have **parallel lines**? **Perpendicular lines**?*

*Decide if the **edges** count or not.

I chose the Saint Vincent flag. I can see three **rectangles** and three **rhombuses**. I can see **perpendicular lines** where the stripes meet the **edges** of the flag. I can see lots of **parallel lines** in the green **rhombus** shapes in the middle. I can see **acute** and **obtuse angles** in the green **rhombus** shapes too.

Challenge 1:

Copy a flag (there are several in the FLAGS attachment) and describe all the 2D shapes you can see. Then mark up the flag with different coloured pencils and make a key to show the different features – obtuse, acute or right angles, parallel and/or perpendicular, horizontal and/or vertical lines of symmetry. (REMEMBER: Some of these link together – perpendicular lines and right angles)

Challenge 2:

Choose a selection of 10 flags. Sort them by their features into hoops (like the Horizontal and Vertical Shape lesson) e.g. Triangles and Parallel Lines. Do some flags have both features? South Africa does? Do some of your flags not go into the hoops? For example, Japan wouldn't go.

Challenge 3: 2 (or more) player game.

Choose a selection of 10 flags. One player chooses a flag and the other player(s) take turns to ask questions about its features? 'Does it have four triangles?' 'Is it Guyana?'

Challenge 4: Design your own flag.

Create one or more rules for your flag e.g. (12 obtuse angles, 9 rectangles, 16 parallel lines). Draw your flag twice, one with as it is and one marked up with its features. The most creative flags will be featured in the next newsletter.