

Transformations – Symmetry

G.CO.A.3

Hw Section 19.2 Activity 2

Name _____

Flags are often great example of symmetry. Search in the internet to find the flags of the world. Find flags that meet the criteria provided below. Sketch and color the flag and provide the name of the county. For example, the Canadian Flag has 1 line of symmetry. You are not allowed use this Canada, Trinidad & Tobago, Thailand, Ukraine, or Qatar for your answers because I use them as examples. Also you cannot use a flag more than once on this activity.



(Flag Site)



(Introduction)

Possible URL: <http://www.sciencekids.co.nz/pictures/flags.html>

1. LINE SYMMETRY

0 LINES OF SYMMETRY	1 LINE OF SYMMETRY	2 LINES OF SYMMETRY	2 LINES OF SYMMETRY
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Country _____



Country _____



Country _____



Country _____

2. ROTATION SYMMETRY

ORDER 2	ORDER 2	2 LINES & ORDER 2	2 LINES & ORDER 2
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Country _____



Country _____



Country _____



Country _____

3. Determine the reflection and rotation symmetries of the provided flags.

(Colors must match to be symmetrical and you can NOT use these flags for questions #1 and #2)

Trinidad & Tobago	Thailand	Ukraine	Qatar
Lines of Symmetry _____	Lines of Symmetry _____	Lines of Symmetry _____	Lines of Symmetry _____
Rotation Order _____	Rotation Order _____	Rotation Order _____	Rotation Order _____

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4. Most flags are rectangular in shape. Can you find countries that have:

a) a square flag _____

b) a non-rectangular/square flag _____

5. What does the all white flag mean? _____

6. What is the study of flags called? _____

7. What is the name of the flag that is black and has a skull and cross bones on it? _____

8. Which country once had a national flag that was a solid green color and nothing else? _____

9. a) **Design your own flag.** The flag must have symmetry – you can choose how much symmetry it has and whether it is rotational or reflectional symmetry. Color and Detail the Flag!! Use symbols, colors and shapes that somehow represent you and your country.



b) Explain why you designed it the way you did.

c) Describe the symmetries found in your flag.



Online flag designer kit (<http://www.flag-designer.appspot.com/>)