Discussion Problems
Step 6: Symmetric Figures

National Curriculum Objectives:

Mathematics Year 4: (4G2b) Identify lines of symmetry in 2-D shapes presented in different orientations.
Mathematics Year 4: (4G2c) Complete a simple symmetric figure with respect to a specific line of symmetry.

About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

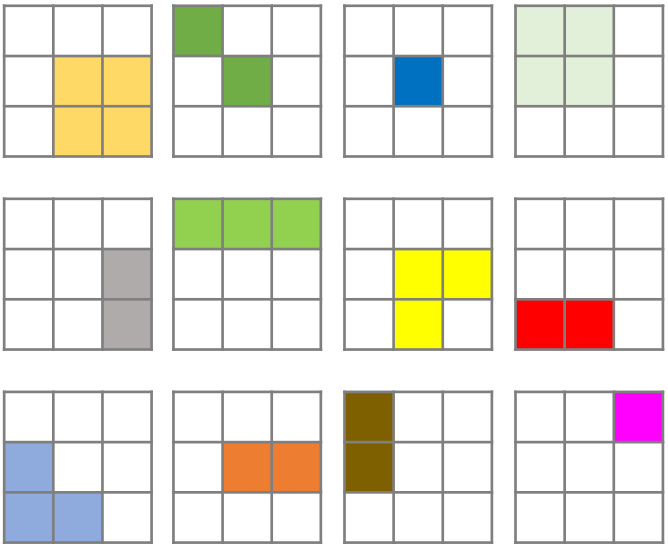
More Year 4 Properties of Shape resources.

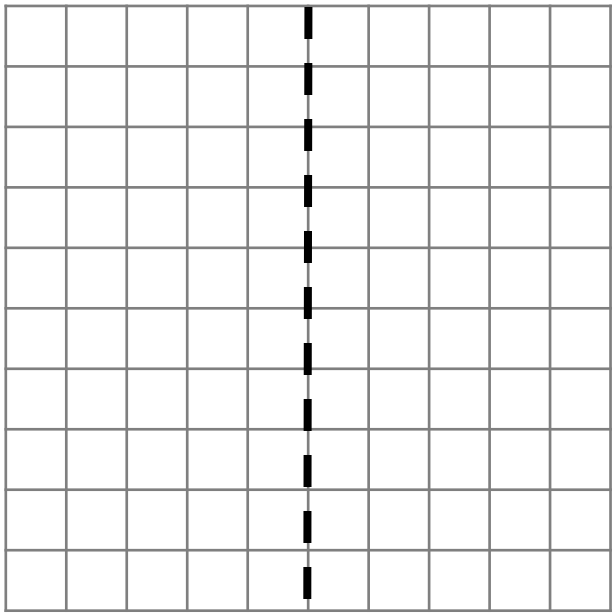
Did you like this resource? Don't forget to review it on our website.

Symmetric Figures

1. Kyle is trying to create a symmetrical picture of a face using the patterns below.

Explore a variety of different symmetrical pictures that Kyle could create.
You must use at least three different patterns and can use each more than once.
You can not rotate any of the patterns shown.





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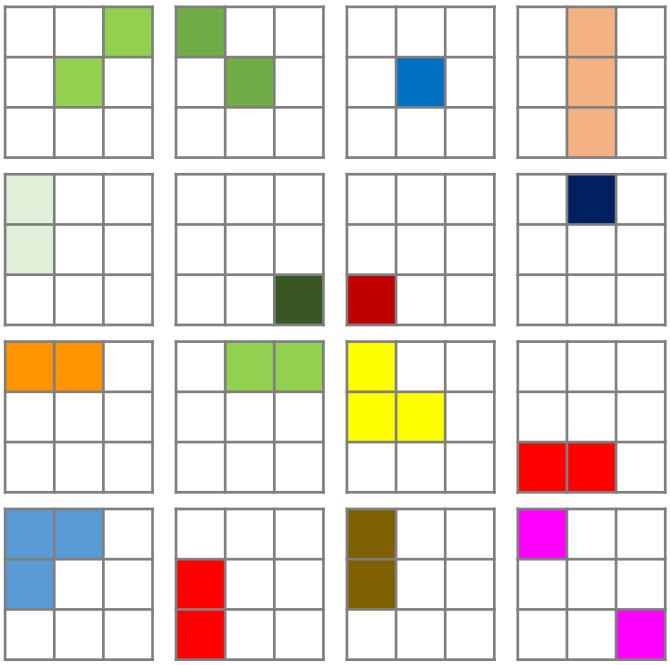
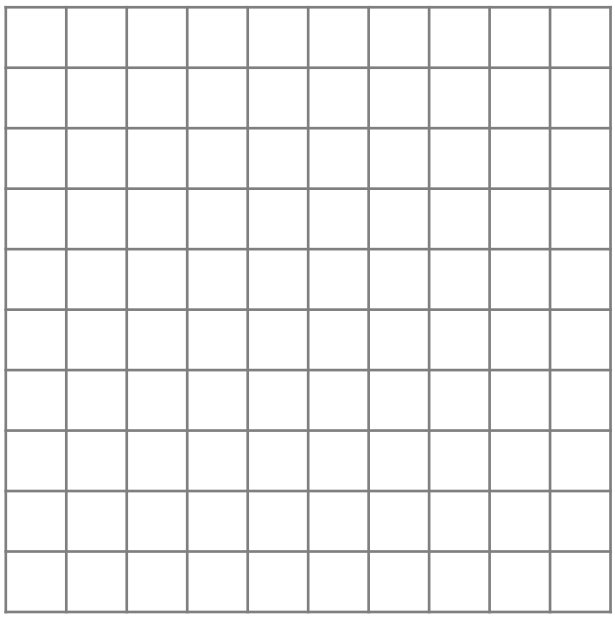
2. Using the patterns below, investigate the different possible symmetric patterns you can create.
You must use 2 lines of symmetry and at least 5 different patterns shown. Each pattern must not overlap with another one.





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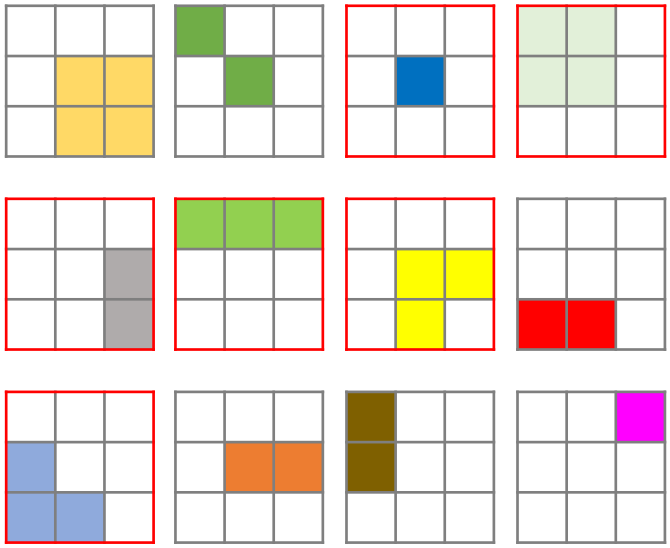
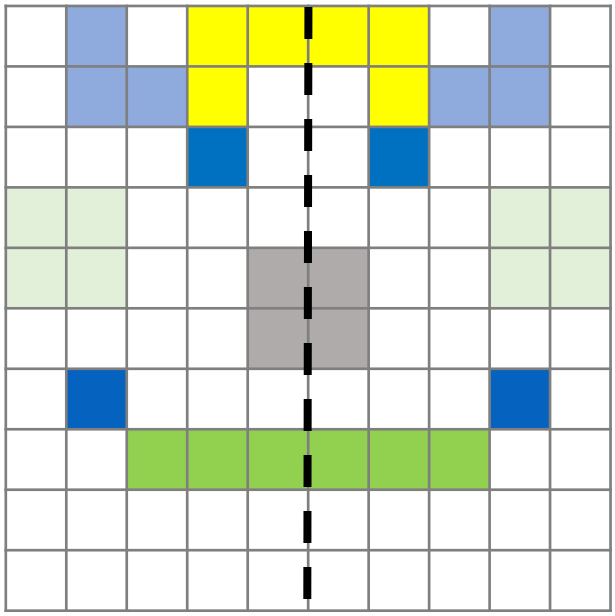
Various possible answers, for example:





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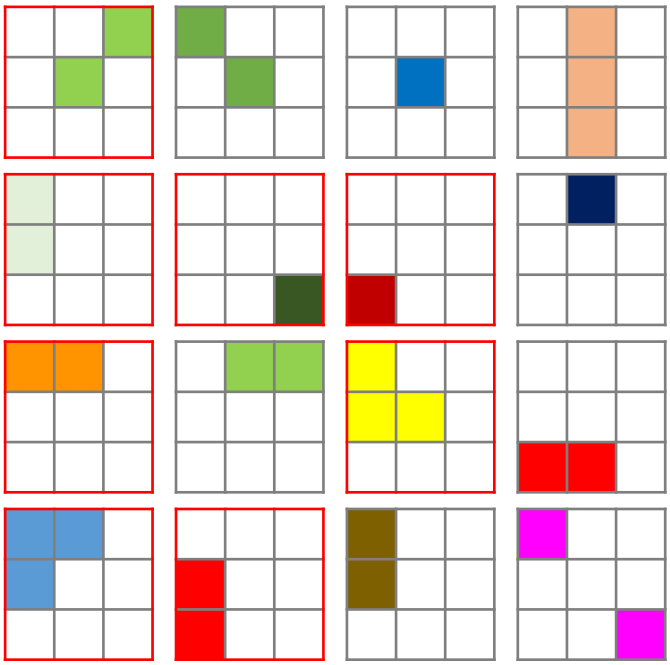

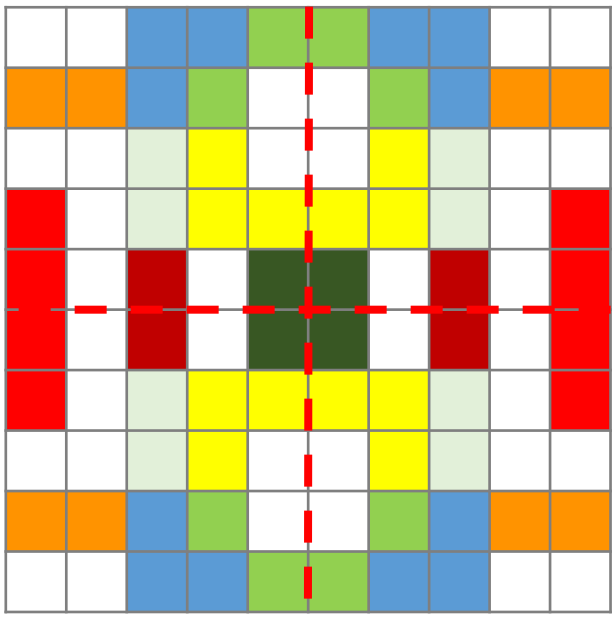

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