





## African Art Worksheet

The wall painting on the house in this photo shows geometric transformations. Assuming that the parts of the design that look the same are identical and that they only appear different because of the perspective in the photo, describe in detail all the transformations and symmetries that you see in the different parts of the painting.

What transformation maps panel 1 to panel 2?

Is there a transformation mapping panel 3 to the panel above it?

Is there a transformation mapping panel 3 to the panel on the left of the doorway?



Describe all the symmetries and transformations that you see in this strip pattern.

Explain how the strip pattern illustrates the property that the combination of two reflections is a translation and draw the mirror lines for the two reflections on the diagram.



Describe the image of this part of the pattern rotated by 180 degrees about a point at its centre?



Describe the symmetries and transformations that you see in this part of the pattern?