Visual Patterns in Tessellations Worksheet

1. Think of three different objects in the world around you that have tessellating patterns.

   ❍ Item 1:

   ❍ Item 2:

   ❍ Item 3:

2. Try drawing each of these patterns using the Tessellate! activity. Choose a starting polygon shape, then bend the lines until they look like the design you are re-creating, then click the "tessellate" button.

3. Which starting polygon shapes did you use for your three tessellations?

   ❍ Item 1 polygon:

   ❍ Item 2 polygon:

   ❍ Item 3 polygon:

4. Which types of symmetry does each tessellation use?

   ❍ Item 1 uses _____

   ❍ Item 2 uses _____

   ❍ Item 3 uses _____

5. Now choose one of your designs and experiment further by changing the colors.

   ❍ Do you notice a difference when you use colors with a strong contrast rather than colors with little contrast? Describe the difference:

❍ Observe your tessellations using warm colors (reds and oranges). Then try using cool colors (greens and blues). What differences are there?

❍ Now mix a warm color with a cool color in the tessellation. How does this combination look compared to using two warm or two cool colors?