

## Making Mandalas: Radial Symmetry



**Materials**: Mandala Template or Concentric circle template, pencil, eraser, ruler, markers, crayons, or colored pencils.

<u>Mandala</u>- Sanskrit for "circle", a circular geometric design that holds a great deal of symbolism in Hindu and Buddhist cultures

Concentric circles - Circles that share a center point

<u>Symmetry</u>- When an object looks exactly the same on one side as the other <u>Radial Symmetry</u> (circular symmetry)- Symmetry around a central point

## **Directions:**

- 1a. Print concentric circle template and put a dot in the center.
- 1b. Using your ruler, draw a straight line through the circle, making sure to go through the center dot, dividing it in half
- 1c. Draw another straight line through the center of the circle, in the opposite direction (perpendicularly), dividing it into fourths.
- 1d. Draw straight lines going out from the center between each of the fourths, dividing each section in half to create eighths, like slicing a pizza!

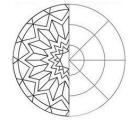
OR

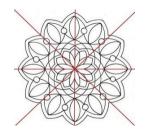
- 1. Print Mandala Template, already divided into eight equal sections.
- 2. In one section draw a design using simple geometric or organic shapes.
- 3. Copy that design into each of the eight sections, making sure that each section is exactly the same.

This creates radial symmetry!

4. Color your beautiful mandala in whatever colors you like!









Lesson Plan by CCAA Education Planner Casey Egan. Consider the following summer camps:

- Science of Art (grades 3-5), July 13 July 17, 9AM to 12:15PM
- <u>S.T.E.A.M. A is for Art</u> (grades K-2), Aug. 17 Aug. 21, 9AM to 12:15 PM

