



## Radial Symmetry Pictures

(2nd-4th Grade)

**Big Questions:** Marker ink sometimes goes through paper and leaves marks on the table or paper below, like this!

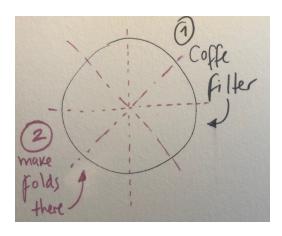


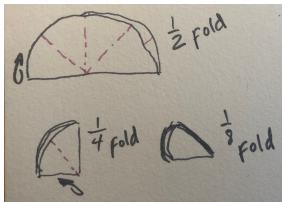
**Learning Objectives**: What if you could <u>turn that annoying problem into a technique</u> to create a work of art?!

## **Activity Plan:**

- Get some paper coffee filters from home. They can be white, brown, any color! (mine are brown.)
- Get some markers. Make sure you have a black or dark blue one because you can see it so well.
- Get a piece of paper or newspaper to use as a table cloth because the markers will pass through onto the table if you don't cover it!
- Try to flatten out your coffee filter a bit so it lays flat.
  It's OK if it doesn't work too well.
- Fold your round coffee filter 3 times like this:







## Mine went this way:



- You should end up with a piece like that one 
   <sup>↑</sup>, which is a bit hard to keep closed.
- Use your dark marker (blue or black) to draw any type of design on that little piece. Draw slowly so that marker ink can pass through other parts of the coffee filter. It will look more complex if you make sure to have your designs touch all edges of the coffee section you are drawing on.

Check out how mine started out:



• Then unfold the coffee filter completely and see where marker ink passed onto.



 From here on, your goal is to EITHER fold pie sections of the coffee filter over the one you drew first OR under the one where the ink passed onto AND THEN trace over. Look at the photos of my process:



- Once your entire coffee filter has become an abstract radial design feel free to color however you want to!
- EXTENSION OPTION 1: If you want a second try, or are feeling brave, try this harder version: Instead of drawings, you can write your name in block letters and by the time you are done tracing over, the name will be hidden like in this example: Can you read the name?!
- EXTENSION OPTION 2: What if you make your designs using dots? Afterwards, you can get a cotton swab (the one to clean your ears...EW!) and wet the tip to later blur out some dots of your design! Like this:





## **Sharing:**

Send me any photos of your process or your results and let me know what was something that surprised you, and something that challenged you!