

# Some Circles

Evening CAMI Meeting  
with Sophie Griffith

11.13.20

5 - 7 pm

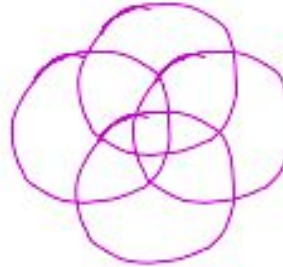
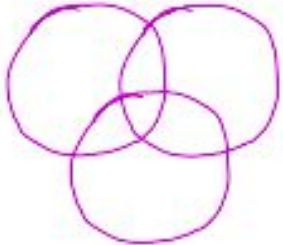
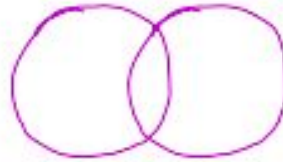
# Ways of wondering

- How many
- How many ways
- What do you see that relates to math?
- How do you see this?
- Is this always true?
- Could this pattern continue?
- Would it be possible to/What would happen if?
- Why would I show you this?
- What's the point?
-

What do you notice?



What do you wonder?



# Notice

- First circle is by itself, nothing to compare it to. After that you can see/identify a “common thread” or area where the circles are similar.
- Venn Diagram - the center area is what you have in common. No matter how many circles you add there’s always a common area.
- No matter how many circles you add, there always seems to be a central area. Then there are shapes, where the number of shapes in each layer is equal to the number of circles.
- Kind of like a flower or a mandala - inner core
- It seems like as you add more circles the inner shape gets rounder.
- “Orbits” like electrons?

# Wonder

- Can we have more than four circles? How could we show that? What would that look like?
- Is there a pattern in the number of sides of the shapes?
- What are the shapes called? “Lemons”
- Does the number of layers get bigger as you add a circle? Every time you add a circle does it add a layer?
- Do the circumferences intersect in a special place - is there a reason they’re at that place - what does it look like as you add more?
- Can the 5th one fit in? Does it go on the next “orbit”
- If it were to continue on does adding the circles would it become a spherical shape?
- Is every possible intersection/combination between the circles represented? Is it possible to have all possible combinations represented with more numbers of circles?
- Does it matter/how much does it matter if the circles aren’t perfectly round?
- Where do I put the circles in relation to each other? Using a compass, where do you put the point of the circle? How would it change what I’m looking at if they’re overlapping a different amount?

# Exploration

Jamboard Link:

<https://jamboard.google.com/d/1hWOdKIHIPZ-J42ENTMsIkSBaW-zJidgd2x1sJYHUYxl/edit?usp=sharing>