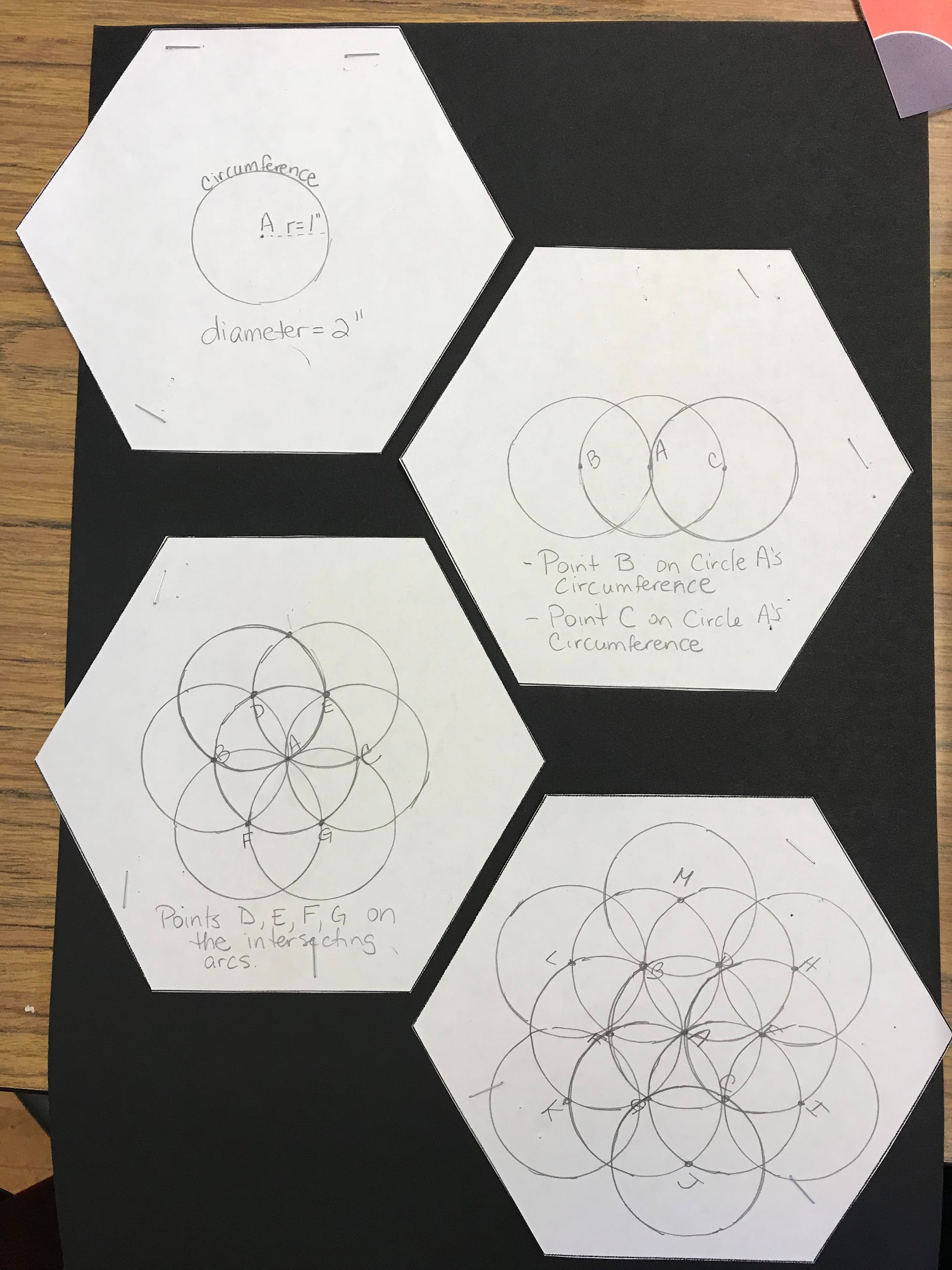
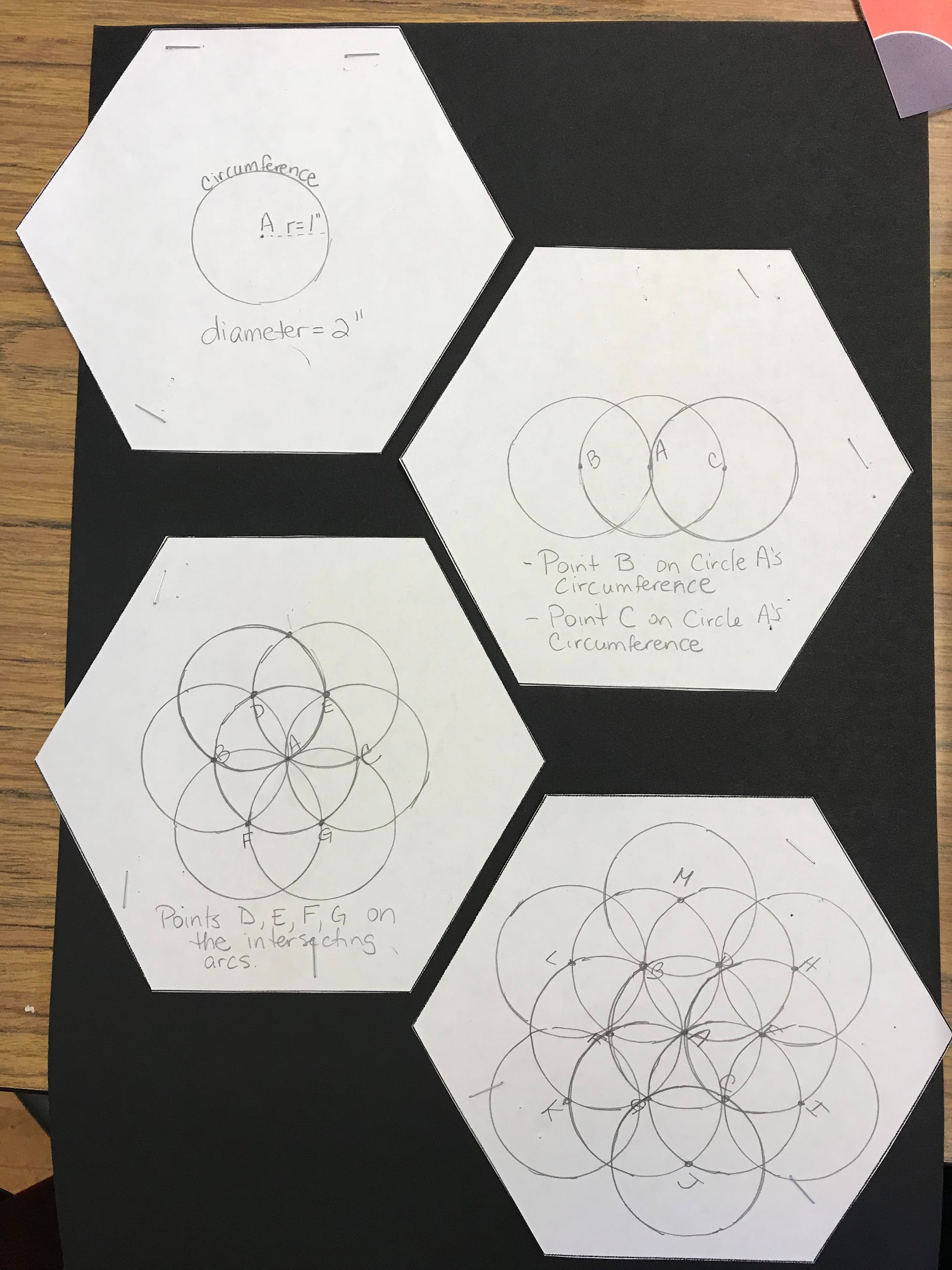
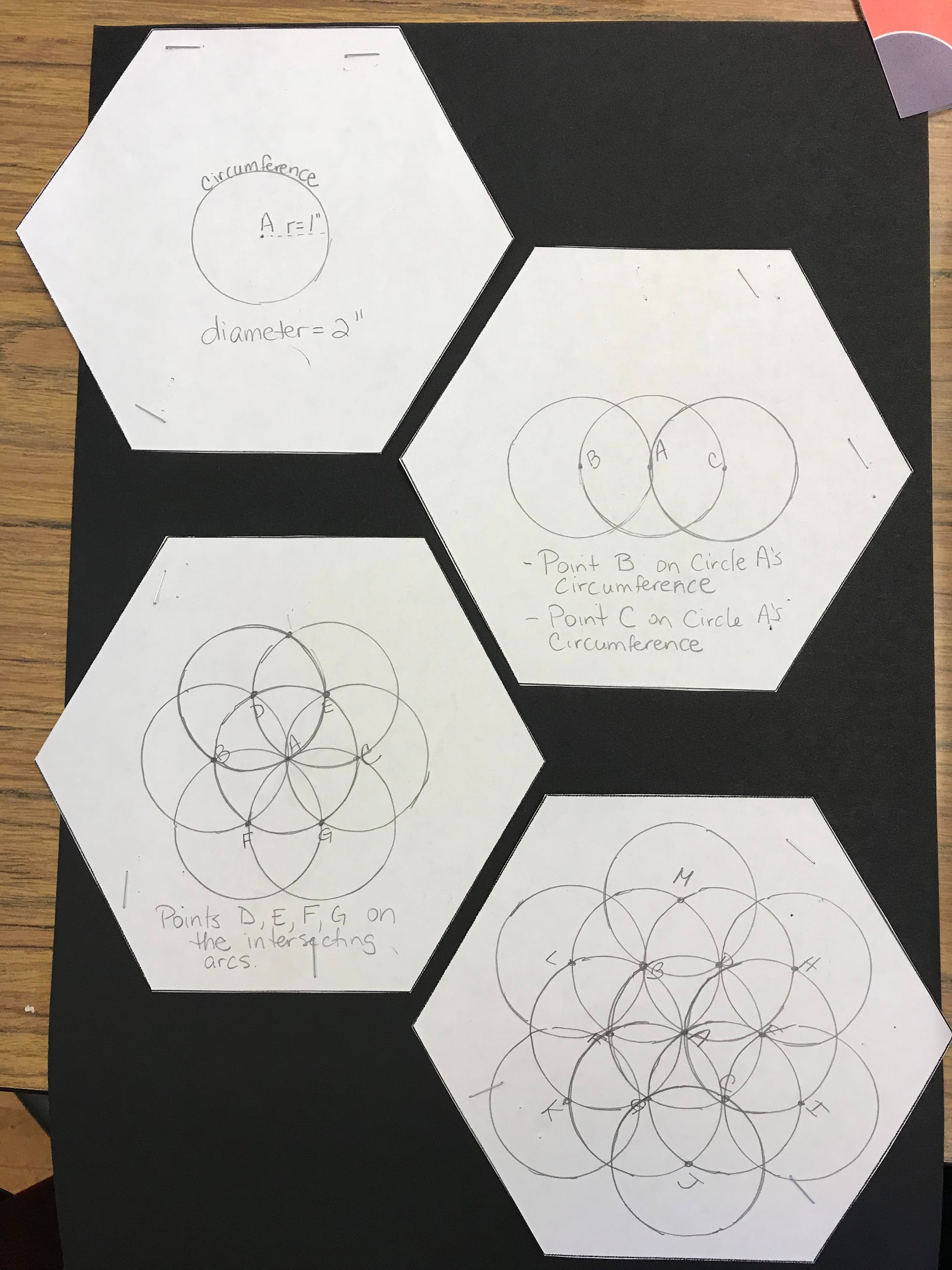
**Mathterpiece # One**

**Goals**: Learn to use a compass. Work on following directions and drawing with precision.

**Procedure:**

1. Practice using your compass to make circles.
2. Make a circle with a radius of 1 inch in the center of the page. Label the center point as A.



1. Using a ruler mark two points that are directly across from each other on the circle. Label these two points as B and C. Using the compass make a circle with a radius of 1 inch with the center point with center points of B and C. These circle should intersect with point A.
2. Label these four points where the circles intersect D, E, F and G.. Using the compass make a circle with a radius of 1 inch with the center point with center points of D, E, F and G. These circle should create a regular design with intersecting arcs.
3. Color the resulting pattern. Color the design so that no two shapes that share a side are the same color.
4. Cut out your design and past it on a colored sheet of construction paper. Make sure you include your name on the paper in the lower right-hand corner.
5. Bonus continue the design out from the center.

Quick Grade Requirements:

1. Design is accurately rendered, with points clearly labeled. (7 points)
2. Design is neatly colored with no two colors sharing and edge. (5 points)
3. Design is neatly cut out and glued on backing paper with name clearly displayed in lower right-hand corner. (3 points)
4. Design continues and expands out in a regular pattern. (Up to 5 points - if first three criteria are met)

\* Misuse of the compass will result in a 5 point reduction in your project score.