

## Extra Credit/Replacement POW – Flexagons

**DUE: Tuesday May 22<sup>nd</sup>, 2019 at the start of class**

In class we constructed and made the trihexaflexagon. For this POW you will research the other types of flexagons. You will have to pick another flexagon to construct and fold.

1. Do a little online research about the following flexagons
  - Tetrahexaflexagon
  - Hexahexaflexagon
  - Pentahehexaflexagon
  - Heptahehexaflexagon \*
  - Tetraflexagon
  -
2. Choose one of the above flexagons that you will create.
  - Construct the template for your flexagon using a compass and ruler.
- 3.

Your Flexagon must meet the following requirements:

- Accurately constructed
- Flips easily through the different faces
- Different decorations/art/coloring for each of the different faces (Ex: the trihexaflexagon had three different faces so it would have 3 different decorations that popped up as it flipped).

Write up Expectations:

- Neatly typed or handwritten
- Explains the process of constructing the flexagon
  - o What challenges did you encounter?
  - o What was easy about this assignment?
- Cites the website(s) that you used for your research

Point Breakdown (out of 10 points):

- 4 points – accurate constructions and smooth flipping through each face of the flexagon
- 3 points – Decorations are neat and well done (not scribbled colored pencil/crayon etc).
- 3 points – write up is clear, concise, and addresses all of the questions and process you used.

**This POW will be a replacement for one missing POW from this semester (or the lowest grade earned if this grade is higher).**