

# Flexigons

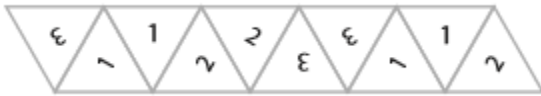
Due: Thursday, May 16<sup>th</sup>, 2019 at the start of class

Instructions for constructing and folding a trihexaflexagon

- Using a strip of cardstock, ruler, and compass construct 10 equilateral triangles in a net as shown. The edge length of each triangle should be 2 inches.



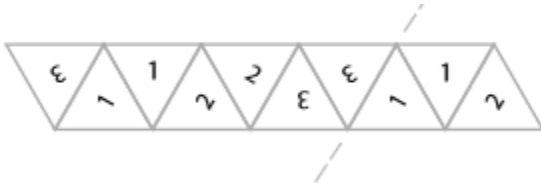
- Orient the template as shown in step 1.
- Write numbers on it as shown below:



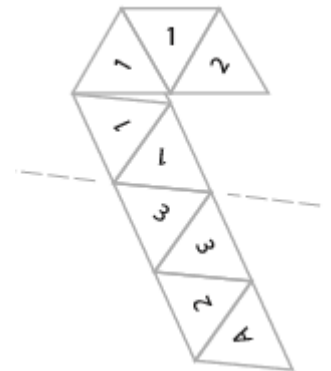
- Flip the template over from top to bottom, so the triangle at the left (with the 3 on it) stays to the left. Label the second side as shown below:



- Turn the template back to the front and fold it once as shown. The left side should go behind the right side, as shown in the illustration below.



- Fold the bottom part of the strip up and away from you, as shown. Be sure the numbers look like the illustration at the right. Note that the "1" face goes in front of the "2" face (see arrow below). The flexagon should now look like the last illustration below. It should now have all "1"s showing and one tab with a "3".



- The last step is to fold tab 3 away from you. It has a letter "a" on back. Glue face "A" to face "B" in back.
- Make sure you can cycle your flexagon through all 3 sides.
- Erase the numbers 1 – 3 and decorate the faces for each triangle on 2 of the 3 sides. One side should be left blank for teacher comments.
- Write your name on your flexagon and come show me that you can flip through all 3 sides before turning it in.

