**Content:** Transformations

**Instructor:** Christy Miller

**Materials:** patty paper, Miras, protractors, computer with Geogebra

**Objective(s):** Students will 1) explore rigid transformations (translations, reflections, rotations) using 1) patty paper, Miras, coordinate planes, Geogebra

**CCSS Content:**

[CCSS.Math.Content.8.G.A.2](http://www.corestandards.org/Math/Content/8/G/A/2/)  
Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.

[CCSS.Math.Content.8.G.A.3](http://www.corestandards.org/Math/Content/8/G/A/3/)  
Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.

**CCSS Practice:**

**Warm-Up:** Play “Simon Says” using transformation terms (slide, turn, flip).

**Lesson Body:** See attached activity. (Transformations)

**Closing (for CAMP):** Discussion on this lesson including 1) how it could be improved via UDL 2)how it could be improved for teachers’ student make-up 3) how SMP was addressed.

**Assessment:** “Simon Says” using transformation terms (translation, rotation, reflection) and Exit Ticket

Have students create their own “How did I get here?” using rigid transformations with or without Geogebra.