## **Flipbook Animation**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

<u>Animators use geometric transformations</u> to create the illusion of motion when designing movies and video games,.



You can use transformations and <u>http://flipanim.com/</u> to make your own animation. This animation can be a cartoon or a patterned design.

## Your task is to:

- Create an animation that uses geometric transformations
- Write a "behind-the-scenes" guide to your animation

Your "behind-the-scenes" guide must include your responses to all of the following.

- 1. Identify an example within your animation for each of the following geometric concepts:
  - a. Reflection
  - b. Rotation
  - c. Translation
  - d. Dilation
  - e. Congruent Figures
  - f. Similar Triangles
- 2. Select **one** of the transformations listed in question 1 (reflection, rotation, translation, dilation).
  - a. Describe the shape that was transformed and how it moved. Refer to the coordinate plane in your description.
  - b. Include what aspects of the shape changed, and what remained the same. Be specific.
  - c. Describe the visual effect of motion that the transformation had in your overall animation (e.g., rotation of pupil looks like eye rolling, dilation of heart looks like heart beating).

- 3. Describe either two figures that are congruent or two figures that are similar.
  - a. Describe how you know the figures are either congruent or similar.
  - b. Describe the visual effect the congruent or similar figures had on your overall animation.
- 4. Identify an example of a line segment within your animation.
  - a. Describe the slope of that line segment. Use similar triangles to justify your answer.
  - b. Describe the visual effect the slope of the line segment had on your overall animation