Vocabulary

Gizmos

- <u>Clockwise</u> rotating in the same direction as the hands of a clock.
- <u>Congruent</u> having the same size and shape.
 - Two images are congruent if one image can perfectly match another after being rotated, reflected, and/or translated.
- <u>Counterclockwise</u> rotating in the opposite direction as the hands of a clock.
- <u>Image</u> the new figure produced after one or more transformations.
- <u>Preimage</u> the original image before being transformed.
- <u>Reflection</u> flipping an object or image to create a mirror image.
 - When an image is reflected, the preimage and the image have the same size and shape.
 - In a reflected image, one set of directions is reversed. For example, left could be right, or up could be down.
- <u>Rotation</u> turning an object or image around a point.
 - When an image is rotated, the preimage and the image have the same size and shape.
 - A rotated image looks the same as the preimage, but it is facing a different direction.
- <u>Transformation</u> a change in the size, shape, direction, or position of an image.
 - Transformations that don't change the size or shape of images are called *isometric*. These include reflections, rotations, and translations.
 - Other transformations, such as dilating (resizing), are not isometric.
- <u>Translation</u> moving an object or image.
 - When an image is translated, the preimage and the image have the same size and shape.
 - o A translated image looks the same as the preimage but has a different location.

