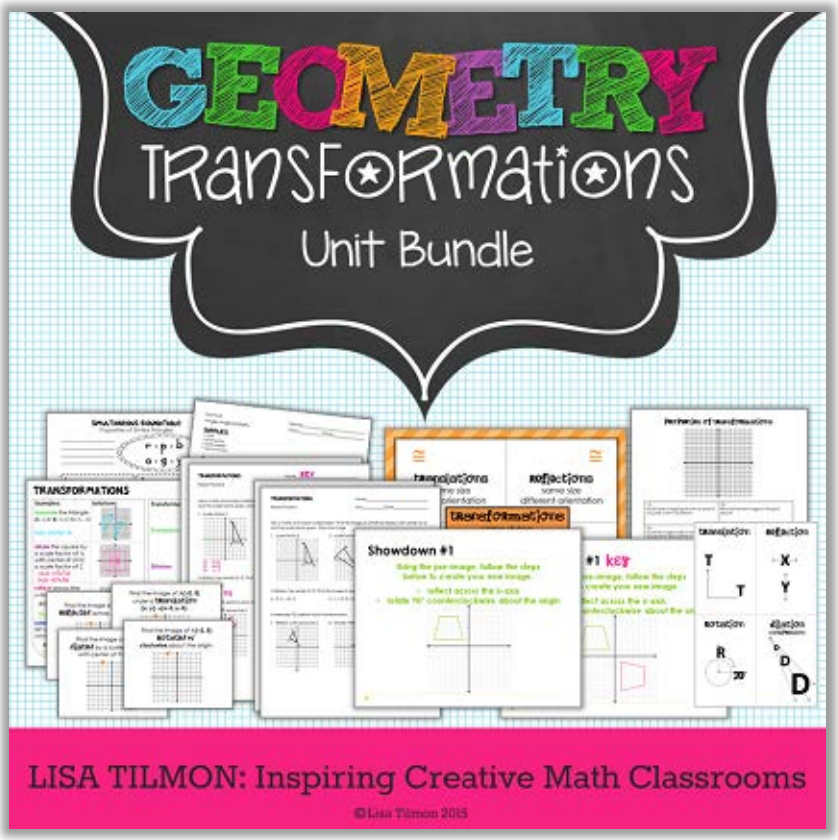
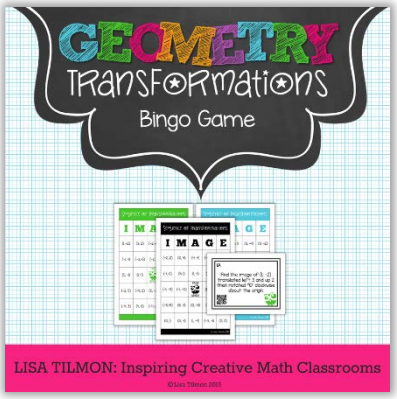
Selected just for YOU!



Click the sample above to check out this great resource!

Coming Soon...



Follow my TpT Store for updates on new releases!

© Lisa Tilmon 2015

GUESS THIS! TRANSFORMATION

Objective:
Understand congruence and similarity.

Content Standards:
Given two congruent two-dimensional figures, describe a sequence of translations, reflections, and rotations that exhibits the congruence between them.
(CCSS.8.G.A.2)

Given two similar two-dimensional figures, describe a sequence of translations, reflections, rotations, and dilations that exhibits the similarity between them.
(CCSS.8.G.A.4)

Procedure:
Each student receives a game board with 20 transformations and chooses one transformation to circle. In pairs, students take turns asking the other player a "Yes" or "No" question about which transformation they selected. As players gather responses and eliminate transformations, the opponent's selection will become evident. The first player to make a correct guess wins!

Sample Discussion:
1. Ask your opponent questions like "Does your sequence of transformations include a dilation with a scale factor greater than one?" If the answer is "No" cross out any transformations with a dilation whose scale factor is greater than one.

2. "Does your sequence of transformations include a reflection across the x-axis?" If the answer is "Yes" cross out any transformations who do not include an x-axis reflection.

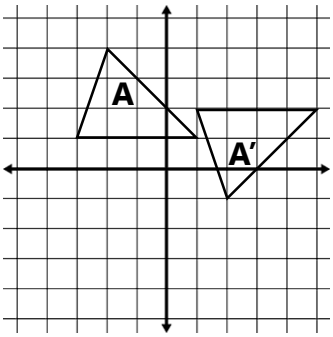
3. Continue until you find the transformation they selected. Make a guess: "Is it image N'?" If the answer is "Yes" you've won!

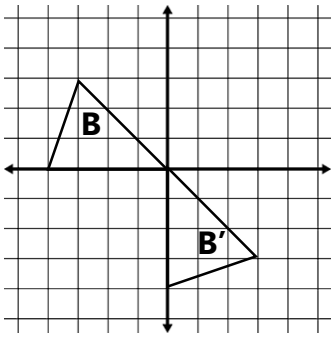
Note:
Each sequence on the game board includes two transformations. Reflections are restricted to the x-axis or y-axis. Rotations are multiples of 90 degrees. Dilations are centered at the origin. When playing Guess This! to build vocabulary, students should include both the transformation and a detail in each question. For example, "translation to the left and up" or "reflection across the y-axis" or "rotation clockwise 90 degrees" or "dilation with a scale factor less than one."

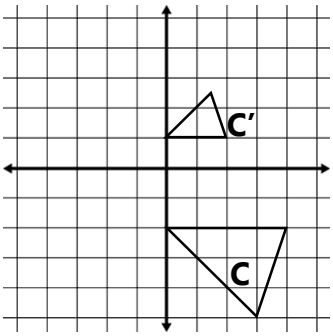
TEACHER NOTES

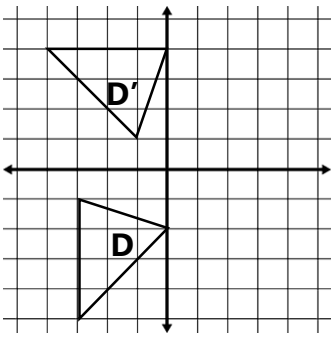
© Lisa Tilmon 2015

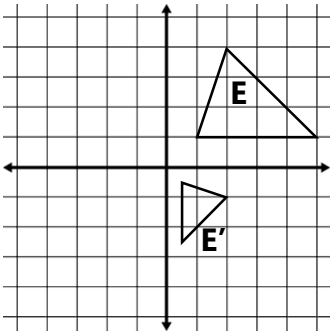
GUESS THIS! TRANSFORMATION

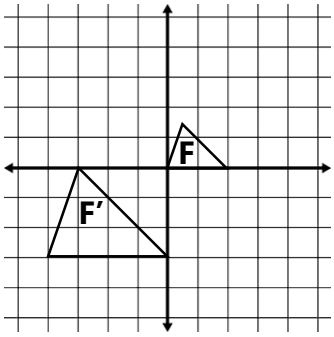


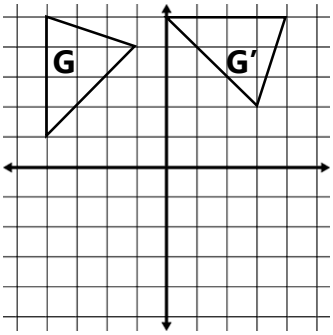


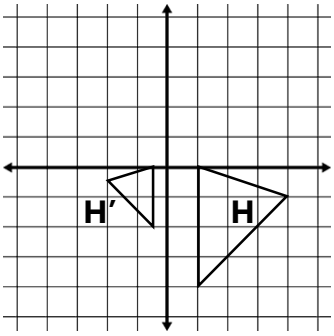


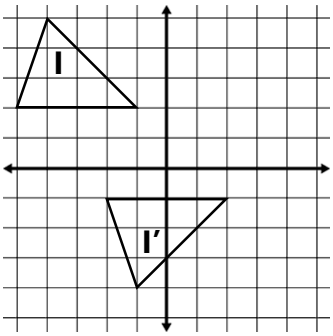


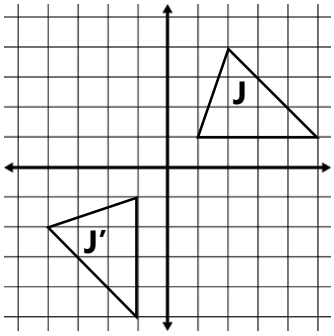


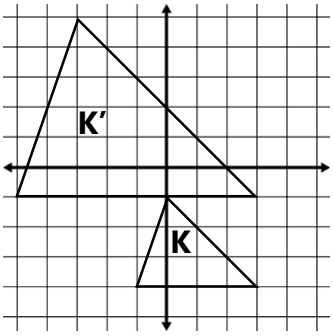


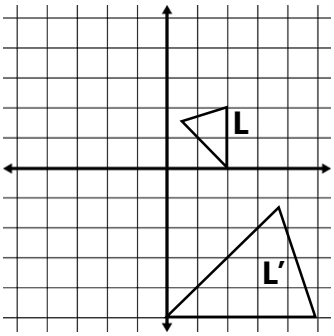


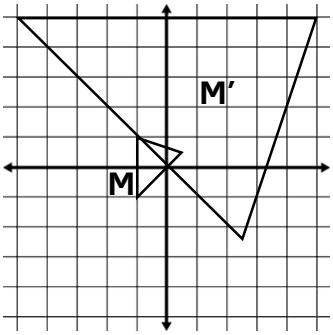


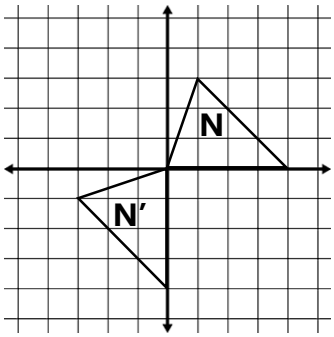


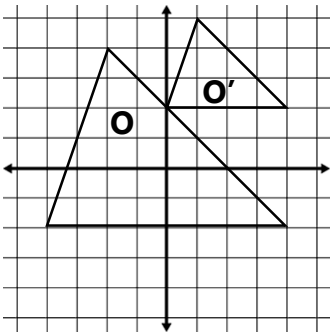


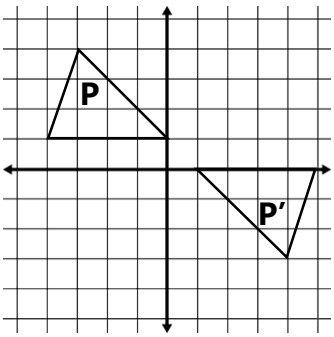


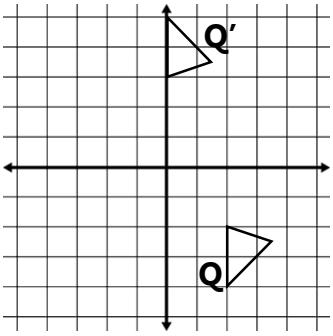


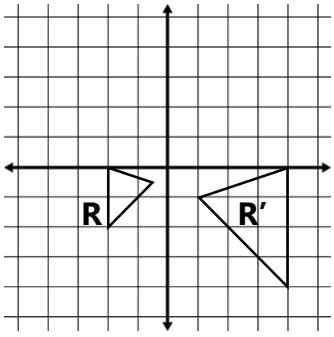


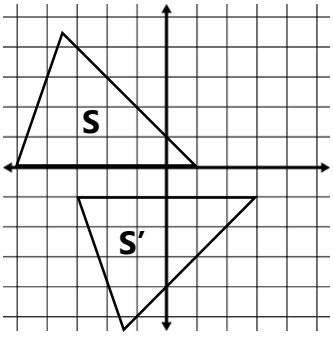


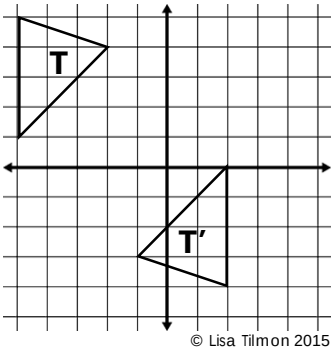












© Lisa Tilmon 2015

GUESS THIS! TRANSFORMATION KEY

reflection and translation $(x, y)\rightarrow(x+4, -y+3)$ **A**	rotation and reflection $(x, y)\rightarrow(y, x)$ **B**	reflection and dilation $(x, y)\rightarrow(\frac{1}{2}x, -\frac{1}{2}y)$ **C**	rotation and translation $(x, y)\rightarrow(y+1, -x+1)$ **D**
rotation and dilation $(x, y)\rightarrow(\frac{1}{2}y, -\frac{1}{2}x)$ **E**	dilation and translation $(x, y)\rightarrow(2x-4, 2y-3)$ **F**	rotation and translation $(x, y)\rightarrow(y-1, -x+1)$ **G**	reflection and dilation $(x, y)\rightarrow(-\frac{1}{2}x, \frac{1}{2}y)$ **H**
translation and reflection $(x, y)\rightarrow(x+3, -y+1)$ **I**	reflection and rotation $(x, y)\rightarrow(-y, -x)$ **J**	dilation and translation $(x, y)\rightarrow(2x-3, 2y+7)$ **K**	dilation and rotation $(x, y)\rightarrow(\frac{5}{2}y, -\frac{5}{2}x)$ **L**
dilation and rotation $(x, y)\rightarrow(5y, -5x)$ **M**	rotation and reflection $(x, y)\rightarrow(-y, -x)$ **N**	dilation and translation $(x, y)\rightarrow(\frac{1}{2}x+2, -\frac{1}{2}y)+3$ **O**	rotation and translation $(x, y)\rightarrow(-x+1, -y+1)$ **P**
reflection and translation $(x, y)\rightarrow(x-2, -y+1)$ **Q**	reflection and dilation $(x, y)\rightarrow(-2x, 2y)$ **R**	reflection and translation $(x, y)\rightarrow(x+2, -y-1)$ **S**	translation and rotation $(x, y)\rightarrow(-x-3, -y+1)$ **T**

© Lisa Tilmon 2015