| Subject and Grade Level:<br><br>8th grade Math<br>Transformations Review | TEKS:<br>(1)  Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:<br>(D)  communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;<br><br>(10)  Two-dimensional shapes. The student applies mathematical process standards to develop transformational geometry concepts. The student is expected to:<br><br>(A)  generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane;<br><br>(B)  differentiate between transformations that preserve congruence and those that do not;<br><br>(C)  explain the effect of translations, reflections over the *x*- or *y*-axis, and rotations limited to 90°, 180°, 270°, and 360° as applied to two-dimensional shapes on a coordinate plane using an algebraic representation; and |
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| ELPS:<br>c2C: Learn new language heard in classroom interactions and instruction<br><br>c2E: Use visual, contextual linguistic support to confirm and enhance understanding<br>c3D: Speak using grade level content area vocabulary in context<br><br>c3E: Share in cooperative groups | CCRS:<br>IX . Communication and Representation<br>    A. Language, terms, and symbols of mathematics<br>      1. Use mathematical symbols, terminology, and notation to represent given and unknown information in a problem.<br><br>X . Connections<br>    B. Connections of mathematics to nature, real world situations, and everyday life<br>      1. Use multiple representations to demonstrate links between mathematical and real world situations.<br>      2. Understand and use appropriate mathematical models in the natural, physical, and social sciences. |

Objective:
Students will be able to identify and compare the three congruence transformations, apply the three congruence transformations to coordinates of the vertices of figures, identify and apply dilations, and apply transformations to real-world situations.

| Visual | Auditory | Kinesthetic | Group Learner | Expressiveness | Individual |
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| | | | Each student will get into partners and perform a card math game with the rules. Each student will together match the | 1. What's the Rules<br>-Each group must make a poster with at least 3 of the 4 transformation. Poster most have a minimum of 3 | 1. Math on the move<br>-Each student will by themselves walk around the room and solve problems and move to the |

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| | | | rules with a picture. Once all cards are matched record the answers on the answer sheet provided. 100 pts | pictures and 3 colors. 100 pts | station based on their answers. 100 pts |
| | | | 2. Transformation Gesture -Student will get into groups in pick 2 rules and come up with a gesture that can be used for future transformations. Each group must first okay the rule picked with a teacher. 100 pts | 2. My Translations Flip Book -Each student will make a book that includes the 4 transformations with a description of what the transformation are, and a picture of the transformation. 100 pts | 2. Transformation Picture pack -Each student will get a transformation pack where they will perform transformations to create a new picture. 100 pts |