Transformations

Students	Learning Continuum Statements:
Students:	**RIT 171-180:** • Performs a slide, flip, or turn without using a grid
Students:	**RIT 181-190:** • Performs a slide, flip, or turn without using a grid
Students:	**RIT 191-200:** • Identifies a slide, flip, or turn that will carry a given figure onto another, without a grid • Performs a slide, flip, or turn without using a grid
Students:	**RIT 201-210:** • Identifies a slide, flip, or turn that will carry a given figure onto another, without a grid • Knows the definition of a slide, a flip, or a turn • Performs a slide, flip, or turn without using a grid • Performs a translation, reflection, or rotation, without the coordinate plane
Students:	**RIT 211-220:** • Describes a single transformation that will map one figure onto another, without the coordinate plane • Identifies a slide, flip, or turn that will carry a given figure onto another, without a grid • Identifies the degree of rotation that shows that two given figures are congruent, without a coordinate plane • Identifies the degree of rotation that will map one figure onto another, without the coordinate plane • Performs a slide, flip, or turn without using a grid • Performs a translation, reflection, or rotation, without the coordinate plane
Students:	**RIT 221-230:** • Describes a single transformation that will map one figure onto another on the coordinate plane • Describes a single transformation that will map one figure onto another, without the coordinate plane

- Determines the coordinates of the vertices of a polygon after a dilation or a series of dilations, with center at the origin
- Determines the coordinates of the vertices of a polygon after a translation or a series of translations
- Determines the image of a polygon on a coordinate plane after a reflection or a series of reflections
- Determines the image of a polygon on a coordinate plane after a rotation or a series of rotations
- Identifies corresponding sides and angles in an image and pre-image of a figure after a rigid transformation
- Identifies the degree of rotation that will map one figure onto another, without the coordinate plane
- Performs a slide, flip, or turn without using a grid
- Performs a translation, reflection, or rotation, without the coordinate plane
- Understands that rigid transformations preserve congruency

Students:	**RIT 231-240:** • Describes a single transformation that will map one figure onto another on the coordinate plane • Describes a single transformation that will map one figure onto another, without the coordinate plane • Describes a single transformation that will map one figure onto itself, without the coordinate plane • Describes the effects of dilation on lengths and angle measures • Determines the coordinates of the vertices of a polygon after a dilation or a series of dilations, with center at the origin • Determines the coordinates of the vertices of a polygon after a reflection or a series of reflections • Determines the coordinates of the vertices of a polygon after a rotation or a series of rotations • Determines the image of a polygon on a coordinate plane after a reflection or a series of reflections • Determines the image of a translation represented in coordinate notation • Performs a series of translations, reflections, and rotations, without the coordinate plane • Understands that rigid transformations preserve congruency
Students:	**RIT 241-250:** • Describes a series of transformations that will map one figure onto itself on the coordinate plane • Describes a single transformation that will map one figure onto another on the coordinate plane • Describes a single transformation that will map one figure onto itself, without the coordinate plane • Describes a translation using coordinate notation • Describes the effects of dilation on lengths and angle measures • Determines the coordinates of the vertices of a polygon after a dilation or a series of dilations, with center at the origin • Determines the coordinates of the vertices of a polygon after a reflection or a series of reflections

- Determines the coordinates of the vertices of a polygon after a rotation or a series of rotations
- Determines the image of a polygon on a coordinate plane after a reflection or a series of reflections
- Determines the image of a polygon on a coordinate plane after a series of translations, reflections, or rotations

Students:	**RIT 251-260:** • Applies the scale factor in a dilation to solve for unknown lengths • Describes a single transformation that will map one figure onto itself, without the coordinate plane • Describes a translation using coordinate notation • Determines the coordinates of the vertices of a polygon after a dilation or a series of dilations, with center at the origin • Determines the coordinates of the vertices of a polygon after a reflection or a series of reflections • Determines the image of a dilation represented in coordinate notation • Determines the image of a polygon on a coordinate plane after a reflection or a series of reflections • Identifies the center and scale factor used in a dilation represented in the coordinate plane
Students:	**RIT 261-270:** • Describes a single transformation that will map one figure onto itself, without the coordinate plane • Describes a translation using coordinate notation • Determines the image of a reflection represented in coordinate notation
Students:	**RIT 271-280:** • Describes a single transformation that will map one figure onto itself, without the coordinate plane
Students:	**RIT 281-290:** • Describes the effects of dilation on areas • Determines the coordinates of the vertices of a polygon after a dilation or a series of dilations, with center at point other than the origin