Learning Targets

## Learning Targets

### Constructions and Rigid Transformations

### Lesson 1: Build It

* I can create diagrams using a straightedge.
* I know to use a compass to construct a circle.

### Lesson 2: Constructing Patterns

* I can follow instructions to create a construction.
* I can use precise mathematical language to describe a construction.

### Lesson 3: Construction Techniques 1: Perpendicular Bisectors

* I can construct a perpendicular bisector.
* I understand what is special about the set of points equidistant from two given points.

### Lesson 4: Construction Techniques 2: Equilateral Triangles

* I can construct an equilateral triangle.
* I can identify congruent segments in figures and explain why they are congruent.

### Lesson 5: Construction Techniques 3: Perpendicular Lines and Angle Bisectors

* I can construct a line that is perpendicular to a given line through a point on the line.
* I can construct an angle bisector.

### Lesson 6: Construction Techniques 4: Parallel and Perpendicular Lines

* I can construct a parallel line through a given point.
* I can construct a perpendicular line through a given point.

### Lesson 7: Construction Techniques 5: Squares

* I can construct a square inscribed in a circle.
* I can construct a square using a given segment for one of its sides.

### Lesson 8: Using Technology for Constructions

* I can use technology to help me construct specific diagrams.

### Lesson 9: Speedy Delivery

* I can construct perpendicular bisectors to help solve problems.
* I can use my geometry knowledge to solve problems.

### Lesson 10: Rigid Transformations

* Given a figure and the description of a transformation, I can draw the figure's image after the transformation.
* I can describe the sequence of transformations necessary to take a figure onto another figure.
* I know that rigid transformations result in congruent figures.

### Lesson 11: Defining Reflections

* I can describe a reflection by specifying the line of reflection.
* I can draw reflections.

### Lesson 12: Defining Translations

* I can describe a reflection by stating the directed line segment.
* I can draw translations.

### Lesson 13: Incorporating Rotations

* Given a figure and the description of a transformation, I can draw the figure's image after the transformation.
* I can describe the sequence of transformations necessary to take a figure onto another figure.
* I know that rigid transformations result in congruent figures.

### Lesson 14: Defining Rotations

* I can describe a rotation by stating the center and angle of rotation.
* I can draw rotations.

### Lesson 15: Symmetry

* I can describe the reflections that take a figure onto itself.

### Lesson 16: More Symmetry

* I can describe the rotations that take a figure onto itself.

### Lesson 17: Working with Rigid Transformations

* I can describe a transformation that takes given points to another set of points.

### Lesson 18: Practicing Point by Point Transformations

* Given a figure and the description of a transformation, I can draw the figure's image after the transformation.
* I can describe a transformation that takes given points to another set of points.

### Lesson 19: Evidence, Angles, and Proof

* I can label and make conjectures from diagrams.
* I can prove vertical angles are congruent.

### Lesson 20: Transformations, Transversals, and Proof

* I can prove alternate interior angles are congruent.
* I can prove corresponding angles are congruent.

### Lesson 21: One Hundred and Eighty

* I can prove the angles in a triangle sum to 180 degrees.

### Lesson 22: Now What Can You Build?

* I can follow directions to construct a pattern.



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