

### Mini-Map for M.EE.8.G.2 Subject: Mathematics Geometry (G) Grade: 8

# Learning Outcome

DLM Essential Element	Grade-Level Standard
<b>M.EE.8.G.2</b> Identify shapes that are congruent.	<b>M.8.G.2</b> Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.

## Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Recognize "same" as	Match a familiar shape	Describe attributes or	Recognize two shapes	Communicate
the object that shares	(e.g., square, circle,	characteristics of the	that are congruent with	understanding that two
all of the same	triangle, rectangle) to a	shape (e.g., size,	or without rotation or	shapes are congruent if
attributes as other	congruent shape (i.e.,	orientation, the number	reflection.	the second can be
objects in a group.	the shape with same	of sides). Compare		obtained from the first
Recognize "different" as	size and orientation), or	shapes and identify		by a sequence of
the object that shares	match a familiar shape	attributes shared by the		rotations, reflections,
some or none of the	(e.g., square, circle,	two shapes (e.g., a		and translations.
attributes as other	triangle, rectangle) to a	rectangle and a square		Describe a sequence of
objects in a group.	similar shape (i.e., the	each have four sides).		transformations that
	shape shown in a			would result in one
	different size but same			figure being
	orientation).			superimposed precisely
				over the other figure.

### Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target? Being able to recognize congruent figures requires a student to recognize when basic objects and shapes are the same or different. Work on this understanding by providing students with a shape and naming it (e.g., "this is a square"). Then, provide multiple examples of the same shape so students can make comparisons, focusing student attention on the characteristics make this a particular shape (e.g., a square has 4 sides that are the same size). As students explore shapes, label them and describe them as same or different.

NOTE: When presenting the same shape for comparison, do use shapes with different colors, textures, sizes, and orientation so that students understand the attribute that makes it that shape (e.g., 4 sides that are the same size).



How is the Distal Precursor related to the Target? As students develop an understanding of same and different shapes, provide opportunities for students to match or group the same shapes based on the shape size (e.g., "this is a big square", "this is a little square"). As students progress with identifying the size of shapes, the educator can begin to introduce different orientations of the shape.

NOTE: As new attributes (e.g., size and orientation) are introduced, be sure to support the student in remembering that the attribute doesn't change the name of the shape.

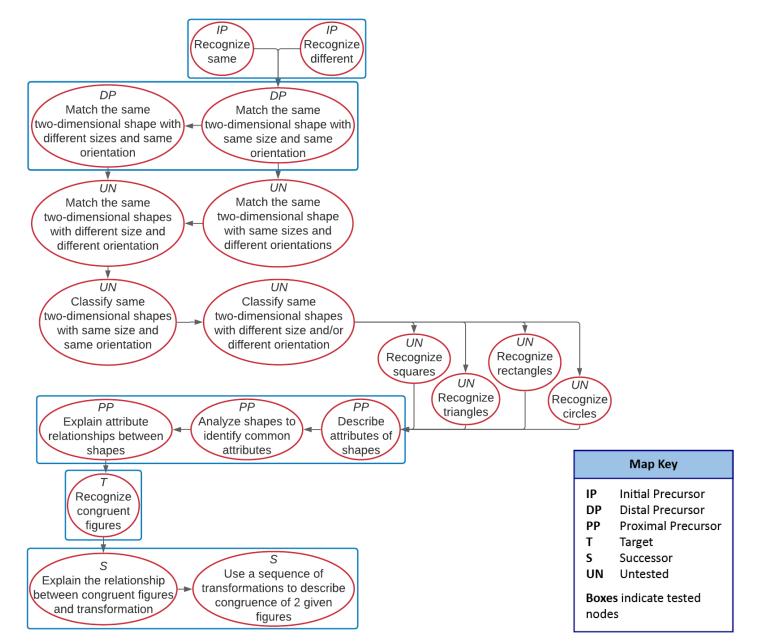
### **Instructional Resources**

**Released Testlets** 

See the <u>Guide to Practice Activities and Released Testlets</u>.

Using Untested (UN) Nodes

See the document <u>Using Mini-Maps to Plan Instruction</u>.



M.EE.8.G.2 Identify shapes that are congruent.