

Mini-Map for M.EE.7.G.2

Subject: Mathematics

Geometry (G)

Grade: 7

Learning Outcome


DLM Essential Element	Grade-Level Standard
M.EE.7.G.2 Recognize geometric shapes with given conditions.	M.7.G.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.

Linkage Level Descriptions

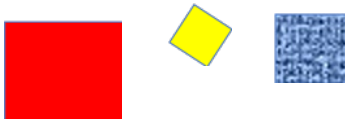
Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Recognize "same" as the object that shares all of the same attributes as other objects in a group. Recognize "different" as the object that shares some or none of the attributes as other objects in a group.	Recognize two-dimensional shapes such as square, circle, triangle, or rectangle or three-dimensional shapes such as cube, cone, cylinder, or sphere.	Communicate attribute values of a shape, such as number of sides or number of corners (e.g., a square has four sides).	Recognize shapes with specified attributes (e.g., number of sides, number of vertices).	Group together shapes with specified attributes (e.g., number of sides, number of vertices).

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

Being able to recognize shapes given certain conditions 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 (e.g., focusing student attention on the characteristics that 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?

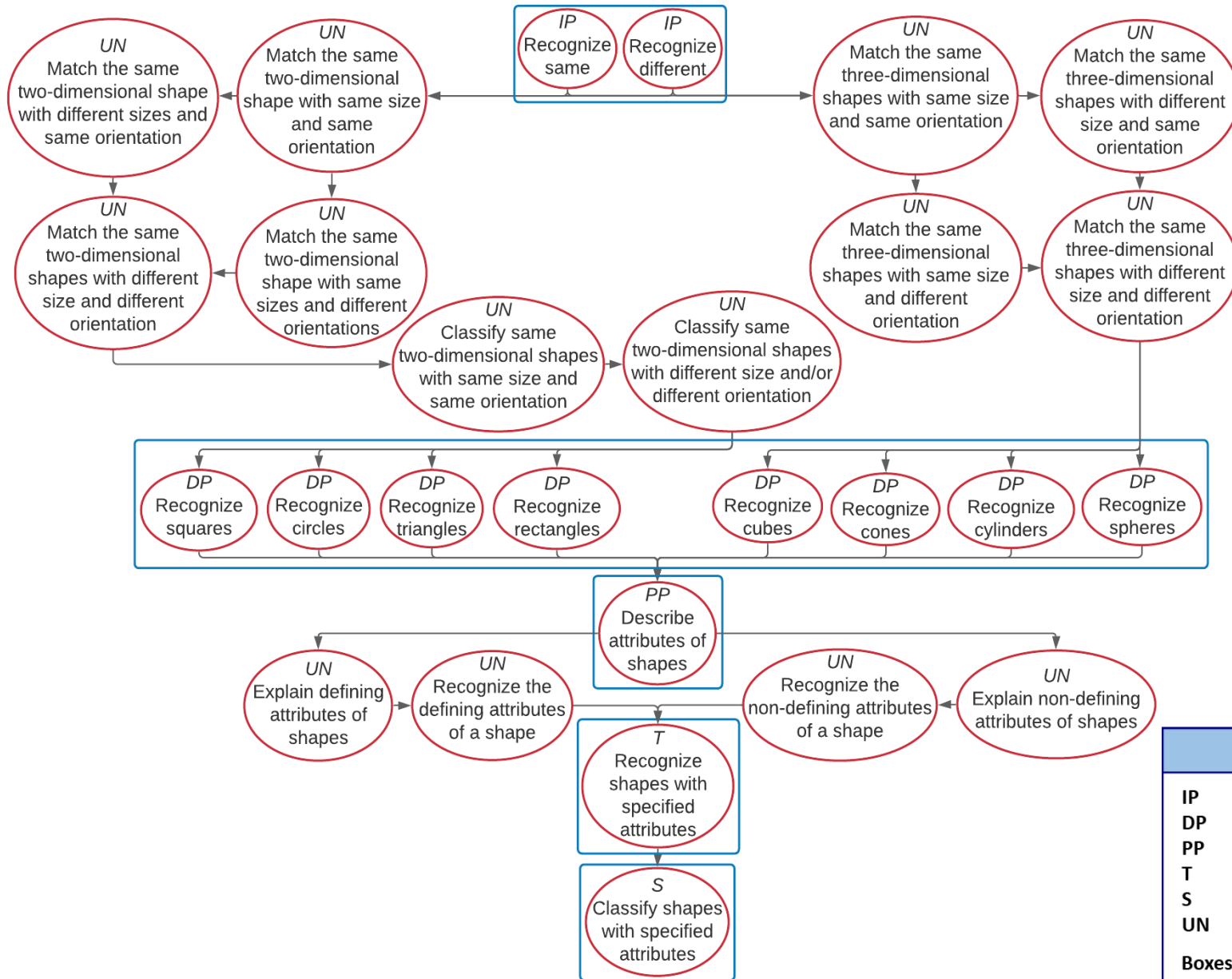
Now that students have experience identifying shapes as “same” and “different”, provide instruction that focuses on the attribute of a given shape and making comparisons with other shapes. Educators should take care to use the names of the shapes while defining and describing the attributes. While students do not need to say the shape names, they do need to learn what makes a shape a shape (e.g., a square has four equal straight sides, a triangle has three straight sides, and a cone is an object that narrows from a circular base to a point).

Instructional Resources

Released Testlets
See the Guide to Practice Activities and Released Testlets .
Using Untested (UN) Nodes
See the document Using Mini-Maps to Plan Instruction .

[Link to Text-Only Map](#)

M.EE.7.G.2 Recognize geometric shapes with given conditions.



Map Key	
IP	Initial Precursor
DP	Distal Precursor
PP	Proximal Precursor
T	Target
S	Successor
UN	Untested
Boxes indicate tested nodes	