Scope of lesson plan:	Teacl	ner name:	Grade:	Subject:	Period(s) this lesson will be taught:		
Lessons 1-5			10	Geometry			
MONDAY							
EngageNY		Module 1 / Lesson 1: Construct an Equilateral Triangle (M) ¹					
module #/ lesson # / lesson title							
Long-term Targets:		G-CO.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line					
(Common Core		segment, based on the undefined notions of point, line, distance along a line, and distance					
standards addressed)		around a circula	ar arc.				
		G-CO.12 Make	formal geometr	ric constructions with	a variety of tools and methods (compass		
		and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.).					
		Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing					
		perpendicular lines, including the perpendicular bisector of a line segment; and constructing a					
		line parallel to a	a given line thro	ugh a point not on th	e line.		
		G-CO.13 Const	ruct an equilate	ral triangle, a square,	and a regular hexagon inscribed in a circle.		
Supporting target(s)		Daily Objectives:					
(These are daily targets. W	hat	Students learn to construct an equilateral triangle.					
will students know and be able		Students will communicate mathematic ideas effectively and efficiently.					
to do as a result of this lesson?)							
Agenda		1. Classwork					
(Activities / Tasks)		A. Opening exe	ercise (10 minut	tes)			
		B. Example 1 (10 minutes)				
		C. Example 2 (12 minutes)				
		D. Geometry as	sumptions (7 m	inutes)			
		E. Relevant voo	cabulary (3 minu	ites)			
		2. Assessment					
		A. Exit ticket (3	3 minutes)				
		= 45 minutes in	struction				
Resources/ Materials:	0	Worksheets					
(What texts, digital resourc	es, &	Exit ticket.					
materials will be used in the	18						
lesson?)							

Relevance/Rationale: (How do the strategies employed meet students' needs?)	The first module of Geometry incorporates and formalizes geometric concepts presented in all the different grade levels up to tenth grade. Topic A brings the relatively unfamiliar concept of construction to life by building upon ideas students are familiar with, such as the constant length of the radius within a circle. While the figures that are being constructed may not be novel, the process of using tools to create the figures is certainly new. Students use construction tools, such as a compass, straightedge, and patty paper, to create constructions of varying difficulty, including equilateral triangles, perpendicular bisectors, and angle bisectors. The constructions are embedded in models that require students to make sense of their space in addition to understanding how to find an appropriate solution with their tools. Students will also discover			
	the critical need for precise language when they articulate the steps necessary for each			
	construction. The figures covered throughout the topic provide a bridge to solving, then proving,			
TUESDAY				
EngageNY	Module 1 / Lesson 2: Construct an Equilateral Triangle II (E)			
module #/ lesson # / lesson title				
Long-term Targets:	G-CO.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line			
(Common Core	segment, based on the undefined notions of point, line, distance along a line, and distance			
standards addressed)	around a circular arc. G-CO 12 Make formal geometric constructions with a variety of tools and methods (compass			
	and straightedge string reflective devices paper folding dynamic geometric software etc.)			
	Copying a segment: copying an angle: bisecting a segment: bisecting an angle: constructing			
	perpendicular lines, including the perpendicular bisector of a line segment; and constructing a			
	line parallel to a given line through a point not on the line.			
	G-CO.13 Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.			
Supporting target(s)	Daily Objective s:			
(These are daily targets. What	Students apply the equilateral triangle construction to more challenging problems			
will students know and be able	Students will communicate mathematical concepts clearly and concisely			
to do as a result of this lesson?)				
Agenda	1. Classwork			
(Activities / Tasks)	A. Opening exercise (5 minutes)			
	B. Discussion (5 minutes)			
	C. Exploratory challenge (15 minutes)			
	D. Exploratory challenge 2 (16 minutes)			

2 Assessment				
A. Exit ticket (5 minutes)				
= 46 minutes instruction				
Workshoots				
Exit ticket.				
The continued lesson allows the class to review and assess understanding from Lesson 1. By the				
end of this lesson, students should be able to apply their knowledge of how to construct an				
equilateral triangle to more difficult constructions and write clear and precise steps to these				
constructions.				
WEDNESDAY				
Module 1 / Lesson 3: Copy and Bisect an Angle (M)				
G-CO.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line				
segment, based on the undefined notions of point, line, distance along a line, and distance				
around a circular arc.				
G-CO.12 Make formal geometric constructions with a variety of tools and methods (compass				
and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.).				
Copying a segment: copying an angle: bisecting a segment: bisecting an angle: constructing				
perpendicular lines, including the perpendicular bisector of a line segment: and constructing a				
line parallel to a given line through a point not on the line				
G-CO 13 Construct an equilateral triangle a square and a regular hexagon inscribed in a circle				
Daily Objective:				
Students learn how to bisect an angle as well as how to conv an angle				
1. Classwork				
A. Opening exercise (5 minutes)				
B. Discussion (5 minutes)				
C. Geometry assumptions (8 minutes)				
D. Example 1(12 minutes)				
D. Example 1(12 minutes)				

	2. Assessment			
	A. Exit ticket (3 minutes)			
	= 45 minutes instruction			
Resources/ Materials:	Worksheets			
(What texts, digital resources, &	Exit ticket			
materials will be used in this				
lesson?)				
Relevance/Rationale:	In Lesson 3, students learn to copy and bisect an angle. As with Lessons 1 and 2, vocabulary			
(How do the strategies	and precision in language are essential to these next constructions.			
employed meet students'				
needs?)				
THURSDAY				
EngageNY	Module 1 / Lesson 4: Construct a Perpendicular Bisector (M)			
module #/ lesson # / lesson title				
Long-term Targets:	G-CO.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line			
(Common Core	segment, based on the undefined notions of point, line, distance along a line, and distance			
standards addressed)	around a circular arc.			
	G-CO.12 Make formal geometric constructions with a variety of tools and methods (compass			
	and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.).			
	Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing			
	perpendicular lines, including the perpendicular bisector of a line segment; and constructing a			
	line parallel to a given line through a point not on the line.			
	G-CO.13 Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.			
Supporting target(s)	Daily Objective:			
(These are daily targets. What	Students learn to construct a perpendicular bisector and the relationship between symmetry with			
will students know and be able	respect to a line and a perpendicular bisector.			
to do as a result of this lesson?)				
Agenda	1. Classwork			
(Activities / Tasks)	A. Opening exercise (5 minutes)			
	B. Discussion (38 minutes)			
	2. Assessment			
	A. Exit ticket (3 minutes)			
	= 46 minutes instruction			

Resources/ Materials:	Worksheets
(What texts, digital resources, &	Exit ticket
materials will be used in this	
lesson?)	
Relevance/Rationale:	In Lesson 4, students learn to construct perpendicular bisectors and apply the construction to
(How do the strategies	problems. Students continue to write precise instructions for constructions. The importance of
employed meet students'	specific language continues throughout the construction lessons. The steps for constructing an
needs?)	angle bisector from the previous lesson flow nicely into the steps for constructing a
	perpendicular bisector.
	FRIDAY
EngageNY	Module 1 / Lesson 5: Points of Concurrencies (E)
module #/ lesson # / lesson title	
Long-term Targets:	G-CO.1 Know precise definitions of angle, circle, perpendicular line, parallel line, and line
(Common Core	segment, based on the undefined notions of point, line, distance along a line, and distance
standards addressed)	around a circular arc.
	G-CO.12 Make formal geometric constructions with a variety of tools and methods (compass
	and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.).
	Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing
	perpendicular lines, including the perpendicular bisector of a line segment; and constructing a
	line parallel to a given line through a point not on the line.
	G-CO.13 Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.
Supporting target(s)	Daily Objective:
(These are daily targets. What	Students become familiar with vocabulary regarding two points of concurrencies and understand
will students know and be able	why the points are concurrent.
to do as a result of this lesson?)	
Agenda	1. Classwork
(Activities / Tasks)	A. Opening exercise (7 minutes)
	B. Discussion (38 minutes)
	2. Closing
	= 45 minutes instruction
Resources/ Materials:	Worksheets
(What texts, digital resources, &	Exit ticket
materials will be used in this	

lesson?)	
Relevance/Rationale:	Lesson 5 is an application lesson of the constructions covered so far. The Lesson 5 Problem Set
(How do the strategies	is a preview for Lessons 6–11, but is based on previously taught geometry facts.
employed meet students'	
needs?)	