Geometry Unit 1: Constructions and Rigid Transformations
Lessons 1–9: Constructions

Explore, Play, and Discuss

- I can create diagrams using a straightedge.
- I know how to use a compass to construct a circle.
- I understand what is special about the set of points equidistant from two given points.

Activity Suggestions:	Assessment Suggestions:
➢ Lesson 1: Students respond to questions in an online or paper journal, or talk them over with someone at home. ➢ Activity 3.3: How Well Can You Slice It?	➢ Lesson 1 and Lesson 3 cool-downs ○ Lesson 1 ○ Lesson 3

Deep Dive

- I can construct an equilateral triangle.
- I can identify congruent segments in figures and explain why they are congruent.
- I can construct a line that is perpendicular to a given line through a point on the line.

Activity Suggestions:	Assessment Suggestions:
➢ Lesson 4: Synchronous discussion ➢ Activity 5.2: Synchronous discussion	➢ Lesson 4 cool-down ○ Lesson 4

Explore, Play, and Discuss

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

Activity Suggestions:	Assessment Suggestions:
➢ Lesson 8 students learn to use technology to build constructions ➢ Activity 5.3 Bisect This, now that students have learned to use technology for constructions they can do this either paper/pencil or with geometry software.	➢ Lesson 8 cool-down ○ Lesson 8

Dive Deep

- I can construct a parallel line through a given point.
- I can construct a perpendicular line through a given point.
- I can construct a square using a given segment for one of its sides.

Activity Suggestions:

- ➢ Lesson 6 - Activities 6.1, 6.2, 6.4: Synchronous discussion
- ➢ Activity 7.2: Students can do this activity digitally or paper and pencil.

Assessment Suggestions:

- ➢ Lesson 6 cool-down
  - Lesson 6

Synthesize and Apply

- I can construct a perpendicular bisector.
- I can construct a parallel line through a given point.
- I can construct a square inscribed in a circle.
- I can construct a square using a given segment for one of its sides.

Activity Suggestions:

For all activities: Students respond to questions in an online or paper journal, communicate with a classmate, or talk them over with someone at home.

- ➢ Activity 3.4
- ➢ Activity 6.3
- ➢ Activities 7.3 and 7.4

Assessment Suggestions:

- ➢ Activity 3.4
- ➢ Activity 7.4
- ➢ Revisions to previous assessment prompts
- ➢ Students use learning targets to decide what additional practice they need.

Ongoing Practice

- Assign one or more of the distributed practice problem sets from Lessons 1–9 to be completed over the time period that the section is being worked on.
- Specify which problems students should submit, or let them choose.
- Note: Several existing platforms already have IM's practice problems loaded so that students can complete and submit them online. Some can be autoscored.

Anytime Resources	
	• Delve into one of the culminating activities from lesson 9 which is not part of the section guide

Lessons 10–18: Rigid Transformations

Explore, Play, and Discuss		
	• 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.	
	Activity Suggestions: ➢ Lesson 10: Students respond to questions in an online or paper journal, or talk them over with someone at home. ➢ Activity 11.2: Info Gap: What's the point: Reflections. If possible have students do this with someone at home or an assigned classmate. If students skip this activity they will still be successful in subsequent lessons.	**Assessment Suggestions:** ➢ Lesson 10 ○ Lesson 10

Deep Dive		
	• I can draw reflections. • I can describe a translation by stating the directed line segment. • I can draw translations.	
	Activity Suggestions: ➢ Activity 11.3: Synchronous discussion ➢ Lesson 12: Synchronous discussion	**Assessment Suggestions:** ➢ Lesson 12 cool-down ○ Lesson 12

Explore, Play, and Discuss

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

Activity Suggestions:

- ➢ Activities 13.2, 13.3, and 13.4: Students respond to questions in an online or paper journal. Consider posting possible solutions for students to check their work if doing remotely.
- ➢ Activities 15.1 and 15.2: Students will explore reflections through the first two activities: Back to the Start and Self Reflection.

Assessment Suggestions:

- ➢ Lesson 13 cool-down
  - Lesson 13

Dive Deep

- I can describe a rotation by stating the center and angle of rotation.
- I can draw rotations.
- I can describe the rotations that take a figure onto itself.

Activity Suggestions:

- ➢ Activities 14.1, 14.3 and 14.4: Synchronous discussion
- ➢ Activities 16.3 and 16.4: Synchronous discussion

Assessment Suggestions:

- ➢ Lesson 14 cool-down
  - Lesson 14
- ➢ Lesson 16 cool-down
  - Lesson 16

Synthesize and Apply

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

Activity Suggestions:

- ➢ Activities 17.1 and 17.3: Students respond to questions in an online or paper journal, communicate with a classmate, or talk them over with someone at home.

Assessment Suggestions:

- ➢ Lesson 18 cool-down
  - Lesson 18
- ➢ Revisions to previous assessment prompts
- ➢ Students use learning targets to decide what additional practice they need.

	➢ Activities 18.2, 18.3, and 18.4: Students respond to questions in an online or paper journal, communicate with a classmate, or talk them over with someone at home. ➢ Teach and encourage students to study the lesson summaries (at the end of every lesson) and refer back to them.	

Ongoing Practice	• Assign one or more of the distributed practice problem sets from 10-18 to be completed over the time period that the section is being worked on. • Specify which problems students should submit, or let them choose. • Note: Several existing platforms already have IM's practice problems loaded so that students can complete and submit them online. Some can be autoscored.

Anytime Resources	• Take it further tasks • Card sorts

Lessons 19–22: Evidence and Proof

Explore, Play, and Discuss

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

Activity Suggestions:

- ➢ Lesson 19: Students respond to questions in an online or paper journal, confer with a classmate, or talk them over with someone at home.

Assessment Suggestions:

- ➢ Lesson 19 cool-down
  - ○ Lesson 19

Deep Dive

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

Activity Suggestions:

- ➢ Lesson 20: Synchronous discussion

Assessment Suggestions:

- ➢ Lesson 20 cool-down
  - ○ Lesson 20

Synthesize and Apply

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

Activity Suggestions:

- ➢ Lesson 21: Students respond to questions in an online or paper journal, confer with a classmate, or talk them over with someone at home.
- ➢ Teach and encourage students to study the lesson summaries (at the end of every lesson) and refer back to them.

Assessment Suggestions:

- ➢ Lesson 21 cool-down
  - ○ Lesson 21
- ➢ Revisions to previous assessment prompts
- ➢ Students use learning targets to decide what additional practice they need.

Ongoing Practice	
	• Assign one or more of the distributed practice problem sets from Lessons 1–21 to be completed over the time period that the section is being worked on. • These could also be lagging, so that students are working on practice problems from the previous section or unit during this section or unit. • Specify which problems students should submit, or let them choose. • Note: Several existing platforms already have IM's practice problems loaded so that students can complete and submit them online. Some can be autoscored.

Anytime Resources	
	• Delve into one of the culminating lessons from sections 1, 2, or 3. • Use activities from Lesson 22 which is the culminating lesson for the unit.