**Twin Rivers USD**
**Grade Eight Common Core Math Pacing**
**2017-2018**

# Trimester 3

| **Pretest Test** | **March 5** |
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| • **Trimester 3 Pretest Exam**<br>Use the information as an additional pacing tool to guide instruction. | |

## Unit 9: Transformations

**Instructional Window (14 days): March 6 – April 3**

**Standard(s)**

**8.G.1:** Verify experimentally the properties of rotations, reflections, and translations:
a. Lines are taken to lines, and line segments to line segments of the same length.
b. Angles are taken to angles of the same measure.
c. Parallel lines are taken to parallel lines.

**8.G.2:** 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.

**8.G.3:** Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.

**8.G.4:** Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.

| TE pg. # | SJ pg. # | Lesson Topic<br>* = optional lesson<br>(c) = combine lessons | Standard | Lesson Focus |
|---|---|---|---|---|
| | | **Lesson 1** Congruent Figures *(m)* | 8.G.2 | C |
| | | **Lesson 2** Congruent Figures *(m)* | 8.G.2 | P |
| | | **Lesson 3** Translations *(m)* | 8.G.1/ 8.G.3 | C |
| | | **Lesson 4** Reflections *(m)* | 8.G.1/ 8.G.3 | C |
| | | **Lesson 5** Translations & Reflections *(m)* | 8.G.1/ 8.G.3 | P |
| | | **Lesson 6** Rotations *(m)* | 8.G.1/ 8.G.3 | C |

*m*-major cluster, *s*-supporting cluster, *a*-additional cluster, *discovery*-possible discovery lesson

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| | | **Lesson 7** Rotations *(m)* | 8.G.1/ 8.G.3 | P |
| | | **Lesson 8** Compound Transformations *(m)* | 8.G.2 | C |
| | | **Lesson 9** Compound Transformations *(m)* | 8.G.2 | P |
| | | **Lesson 10** Similar Figures *(m)* | 8.G.4 | C |
| | | **Lesson 11** Dilations *(m)* | 8.G.4 | C |
| | | **Lesson 12** Dilations *(m)* | 8.G.4 | P |
| | | **Lesson 13** Transformations *(m)* | 8.G.1/ 8.G.3/ 8.G.4 | MT |
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| ***Suggested* Unit 9 Assessment Date – April 4 & 5** | | | | |

## Unit 10: Angle Relationships

| **Instructional Window (10 days): April 6 – April 19** | | | | |
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| **Standard(s)** | | | | |
| **8.G.5:** Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.* | | | | |
| **TE pg. #** | **SJ pg. #** | **Lesson Topic**<br>***** = optional lesson<br>**(c)** = combine lessons | **Standard** | **Lesson Focus** |
| | | **Lesson 1** Triangle Angle Sums *(m)* | 8.G.5 | P |
| | | **Lesson 2** Exterior Angles *(m)* | 8.G.5 | P |
| | | **Lesson 3** Parallel Lines & Transversals *(m)* | 8.G.5 | C |
| | | **Lesson 4** Parallel Lines & Transversals *(m)* | 8.G.5 | P |
| | | **Lesson 5** Similar Triangles *(m)* | 8.G.5 | C |
| | | **Lesson 6** Similar Triangles *(m)* | 8.G.5 | P |
| | | **Lesson 7** Angles of Polygons *(s)* | 8.G.5 | C |

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|---|---|---|---|---|
| | | **Lesson 8** Angles of Polygons *(s)* | 8.G.5 | P |
| | | **Lesson 9** Angle Relationships *(m)* | 8.G.5 | MT |
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| ***Suggested* Unit 10 Assessment Date – April 20 & 23** | | | | |

## Unit 11: Volume

**Instructional Window (8 days): April 24 – May 3**

**Standard(s)**

**8.G.9:** Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

| TE pg. # | SJ pg. # | Lesson Topic<br>* = optional lesson<br>**(c)** = combine lessons | Standard | Lesson Focus |
|---|---|---|---|---|
| | | **Lesson 1** Volume of Cylinders *(a)* | 8.G.9 | C |
| | | **Lesson 2** Volume of Cylinders *(a)* | 8.G.9 | P |
| | | **Lesson 3** Volume of Cones *(a)* | 8.G.9 | C |
| | | **Lesson 4** Volume of Cones *(a)* | 8.G.9 | P |
| | | **Lesson 5** Volume of Spheres & Composite Figures *(a)* | 8.G.9 | C |
| | | **Lesson 6** Volume of Spheres & Composite Figures *(a)* | 8.G.9 | P |
| | | **Lesson 7** Volume *(a)* | 8.G.9 | MT |
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| **Suggested Unit 11 Assessment Date – May 4 & 7** | | | | |

## Unit 12: Bivariate Data

**Instructional Window (10 days): May 8 – May 21**

**Standard(s)**

**8.SP.1:** Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and non-linear association.

**8.SP.2:** Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.

**8.SP.3:** Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*

**8.SP.4:** Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*

| TE pg. # | SJ pg. # | Lesson Topic<br>* = optional lesson<br>(c) = combine lessons | Standard | Lesson Focus |
|---|---|---|---|---|
| | | **Lesson 1** Scatter Plots | 8.SP.1 | C |
| | | **Lesson 2** Scatter Plots | 8.SP.1 | P |
| | | **Lesson 3** Lines | 8.SP.2 | C |
| | | **Lesson 4** Lines | 8.SP.2 | P |
| | | **Lesson 5** Interpret Slope & Intercept | 8.SP.3 | C |
| | | **Lesson 6** Interpret Slope & Intercept | 8.SP.3 | P |
| | | **Lesson 7** Two-Way Tables | 8.SP.4 | C |
| | | **Lesson 8** Two-Way Tables | 8.SP.4 | P |
| | | **Lesson 9** Bivariate Data | 8.SP.1/ 8.SP.4 | MT |

***Suggested* OPTIONAL Unit 12 Assessment Date – May 22 & 23**

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## End of Trimester 3 Assessments

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| ***Suggested Review Day*** **for Trimester 3 Benchmark Date – May 24**<br>***Suggested*** **Trimester 3 Cumulative Benchmark Date – May 25 & 29**<br>**Performance Task – May 30 & 31** |