Send as an attachment via email to [adlerml@scsk12.org](mailto:adlerml@scsk12.org). Save file as: LessonPlans\_Last NameFirstInitial\_MonthDay

Example: LessonPlans\_AdlerA\_Aug10

Boxes will expand as necessary when you type. Due by 11:59 Friday of week before scheduled plans.

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| Teacher | Teri Lindsey |
| Class | 8th Math |

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|  | **Date: 1-2** | **Date: 1-3** | **Date: 1-4** | **Date: 1-5** | **Date: 1-6** |
| **Standard**  (Reference State, Common Core, ACT College Readiness Standards and/or State Competencies.) | 8.G.A.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. | | | | |
| **Objective**  (Clear, Specific, and Measurable, student-friendly) |  | * Students learn the definition of dilation and why “same shape” is not good enough to say when two figures are similar. ƒ * Students know that dilations magnify and shrink figures. | | * Students know that dilations map circles to circles and ellipses to ellipses. * Students know that to shrink or magnify a dilated figure back to its original size from center *O* with scale factor *r* the figure must be dilated by a scale factor of 1/*r.*   . | * Students know that dilations map circles to circles and ellipses to ellipses. * Students know that to shrink or magnify a dilated figure back to its original size from center *O* with scale factor *r* the figure must be dilated by a scale factor of 1/*r.*   . |
| **Connections to Prior Knowledge** | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. |
| **Guiding Questions**  (Motivator / Hook  An Essential Question encourages students to put forth more effort when faced with complex, open-ended, challenging, meaningful and authentic questions.) |  | Why isn’t “same shape” good enough to say when two figures are similar? | | What happens to rays, segments, lines, and angles under a dilation? | How many points are needed to dilate a curved shape?  What scale factor is needed to dilate a figure back to its original size? |

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| **Instructional Strategies**  (Step-By-Step Procedures – Sequence  Discover / Explain – Direct Instruction  Modeling Expectations – “I Do”  Questioning / Encourages Higher Order Thinking  Grouping Strategies  Differentiated Instructional Strategies to Provide Intervention & Extension, **Literacy Task**) |  | Eureka Math  Module 3, Lesson 1 (TWO DAYS)  TTW use guided notes to introduce key concepts about dilations. TSW fill in blanks and participate in discussion of concepts  TTW model and guide as students as they create examples for their notes. | Eureka Math  Module 3, Lesson 2  TTW use guided notes to emphasize key points about dilations.  TTW present the last example from the classwork section to demonstrate how to use a compass to dilate a figure when r > 1.  TTW present a second example to demonstrate how to use a ruler to dilate a figure when 0<r<1. | Eureka Math Module 3, Lesson 3  TTW guide students through the examples in the classwork section to discover how to dilate a circle and an elipse.  TSW work with a partner to complete the dilations and then discuss their strategies.  TTW guide students through exercise 2 to discover how to “shrink” a figure back to its original size.  TSW work with a partner to complete the exercises. |
| **Differentiated Tasks**  (Activities based on students’ needs and learning styles, IEP modifications) |  | TSW complete the exercises in the Problem Set.  TTW guide students through several examples and gradually release them to work independently to find missing lengths given the scale factor or find the scale factor given both segment lengths.  Below Expectation:  TTW provide support as students work.  At Expectation:  Students will work independently.  Above Expectation:  Students will work independently to complete problem set.  Enrichment:  Use the template displayed to create additional examples to solve. | TTW guide students through several examples and gradually release them to work independently on the Problem Set.  Below Expectation:  TTW provide support as students work.  At Expectation:  Students will work independently.  Above Expectation:  Students will work independently.  Enrichment:  Draw a star. Label each of its points. Dilate it with a scale factor r = 3.  Measure each segment of the original star and calculate the measures of the dilated segments. | TSW complete the exercises in the Problem Set.  TTW guide students through several examples and gradually release them to work independently.  Below Expectation:  TTW provide support as students work.  At Expectation:  Students will work independently.  Above Expectation:  Students will work independently.  Enrichment:  Using the star drawn in the previous lesson (or draw a new one), measure each of the interior angles of the pentagon and each of the angles at the tips of the star and calculate the measures of the remaining angles. |
| **Assessment**  (Aligned with the Lesson Objective  Formative / Summative  Performance-Based/Rubric  Formal / Informal) |  | Formative:  Problem Set  Exit Ticket | Formative:  Problem Set  Exit Ticket | Formative:  Problem Set  Exit Ticket |
| **Closure**  (Reflection / Wrap-Up  Summarizing, Reminding, Reflecting, Restating, Connecting) |  | Lesson Summary:  TTW guide students to recall and articulate the definition of dilation.  TSW explain in his/her own words the meaning of dilation. | Lesson Summary:  Dilations map lines to lines, rays to rays, and segments to segments. Dilations map angles to angles of the same degree. | Lesson Summary:  Dilations map circles to circles and ellipses to ellipses.  If a figure is dilated by scale factor *r* ,we must dilate it by a scale factor of 1/*r* to bring the dilated figure back to the  original size. For example, if a scale factor is *r = 4,* then to bring a dilated figure back to the original size, we must  dilate it by a scale factor *r = ¼.* |
| **Resources/Materials**  (Aligned with the Lesson Objective  Rigorous & Relevant) |  | Eureka Math, Module 3, Lessons 1-3  Parent Tip Sheets  **Additional Resource(s)**  [**CCSS Flip Book with Examples of each Standard**](http://www.azed.gov/azccrs/files/2013/11/high-school-ccss-flip-book-usd-259-2012.pdf) | Eureka Math, Module 3, Lessons 1-3  Parent Tip Sheets  **Additional Resource(s)**  [**CCSS Flip Book with Examples of each Standard**](http://www.azed.gov/azccrs/files/2013/11/high-school-ccss-flip-book-usd-259-2012.pdf) | Eureka Math, Module 3, Lessons 1-3  Parent Tip Sheets  **Additional Resource(s)**  [**CCSS Flip Book with Examples of each Standard**](http://www.azed.gov/azccrs/files/2013/11/high-school-ccss-flip-book-usd-259-2012.pdf) |