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: 12-12** | **Date: 12-13** | **Date: 12-14** | **Date: 12-15** | **Date: 12-16** |
| **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. | 8th Grade Field Trip | * Students learn how to use a compass and a ruler to perform dilations. ƒ * Students learn that dilations map lines to lines, segments to segments, and rays to rays. Students know that dilations are angle-preserving. | * 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.*   . | I can locate points on a coordinate graph and follow instructions to create a specific design. |
| **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.  Module 3,  Lesson 1 Exit Ticket | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills.  Module 3,  Lesson 2 Exit Ticket | 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  TTW demonstrate how to enlarge a digital photograph by dragging the side, the top/bottom, or the corner. Guide a discussion about the difference in the look of the photograph with each enlargement. Guide students to understand the concept of proportion.  TTW use the examples provided in the Exploratory Challenge to guide a discussion about how to determine whether two figures are similar.  TTW model and guide as students work through the exercises in the classwork section of the lesson. |  | Eureka Math  Module 3, Lesson 2  TSW fold a piece of paper into fourths.  TSW write the words segments, lines, rays, and angles in each section of the paper and make predictions for each of the figures mentioned above.  TTW go through each of the examples in the classwork, asking students to verify their predictions.  TSW work with a partner to complete the last exercise in the classwork section. | 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. | Students will plot points and connect them to create a design. |
| **Differentiated Tasks**  (Activities based on students’ needs and learning styles, IEP modifications) | 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. |  | 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. | 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. | TTW guide students through several examples and gradually release them to work independently. |
| **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 | 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: | 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.* | Lesson Summary: |
| **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, Lesson 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, Lesson 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, Lesson 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) |