

Topic/Title: Scientific Notation and Scale Representations

Grade Level: 8th Grade Algebra Intensive Class

Source: Distances were found at: Arnett, Bill. "The Sun's Satellites". The Sun. 14 November 2000. <http://www.seds.org/billa/tnp/sol.html>

Preplanning Information

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| Math Concepts <ul style="list-style-type: none">• Conversions• Measurement• Scientific Notation• Scale Representation | Goal <p>Students will have a better understanding of scientific notation through the use of models to compare distances written in scientific notation.</p> | Prerequisite Skills <p>Students need to understand what scale representations are used for and have a basic understanding of how to write numbers in scientific notation.</p> |
| Estimated Time <p>To complete the scale model, discuss as a class, and at least start the worksheet, it will take the entire class time: 50 minutes. If there is extra time, we will use it to discuss their answers to the questions.</p> | Materials Needed <ul style="list-style-type: none">• 8 meter sticks• Adding machine tape (6 meters per group)• Copies of the worksheet and questions | Reproducibles/Transparencies <ul style="list-style-type: none">• Two worksheets with the directions, charts and follow-up questions• Overhead of the same worksheets |
| Organizational Tips <ul style="list-style-type: none">• Start the class by reviewing the directions• Students get in groups to make the models• Come together to compare models• Students complete the questions individually• Discuss answers as a class | National Standards (PSSM) <ul style="list-style-type: none">• Measurement• Algebra• Data Analysis• Number and Operations• Geometry• Connections• Communication• Representation | State Standards (Show-me) <p>(Let me know if you want me to do this part :)</p> |