

## Lesson Plan

**Text:CORD Classic**

**Unit number and title: 10- Working with Scale Drawings**

**Developed by: David Richards**

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**Short Description:** Students will apply concepts of scale to make the scale of the solar system understandable. Distances between objects and the size of the objects will be represented on a large field, with earth represented by a sphere the size of a basketball.

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### LESSON PLAN

**TEACHER:** Teacher Prep/ Lesson Plan

- Lesson Objectives  
Students will be able to compute the scales needed to represent real objects
- Statement of pre-requisite skills needed  
**Ability to calculate scales of objects and manipulate units**
- New Vocabulary:  
Planetary systems, light year
- GLE's addressed:  
Math: (1.3.3 Represent the relevant features of a physical situation using 2 D figures with and without a coordinate system.)  
Reading: (3.1.1 Analyze web-based and other resource materials (including primary sources and secondary sources) for relevance in answering research questions.)  
Writing: (3.1.1 Analyzes ideas, selects a narrow topic, and elaborates using specific details and/or examples.)
- Set-up information (Remind students to follow these basic rules.)  
All galactic objects must be reduced to the same scale for this to work. Pick a scale that makes earth somewhere between basketball and beachball size.
- Teacher Assessment of student learning (scoring guide, rubric)  
Worksheet for planet sizes scored. distances between objects checked for rough accuracy.
- Summary of learning  
Students will get to apply scale to their world, and appreciate their next episode of star trek.
- Optional activities
- Career Applications  
Any career which scale varies from job to job. Draftsman, planners, mappers, engineers, astronomers.