

MathStar Research Lesson Plan

Grade Level: 6th

Instructor: Judy Morrow

Class Time: 1:45 – 2:30

Location:

House Municipal Schools
309 Apple Street
House, NM 88121
5th-6th grade classroom

Date: 2/24/03

of Students: 11

Class Type (check one):

Regular SPED Bilingual/ESL Other

Comments: *(Describe social/ cultural context of school)*

House is a small, rural community with low cultural diversity. There are approximately 80 students k-12th grade.

I. Description of Unit: *(1 to 2 sentences)*

Students are studying space in science. In this lesson math will be incorporated by comparing sizes of planets.

A. How does this lesson fit into the unit?

- **Previously learned concepts** *(What concepts are needed to do this lesson?)*
 - Compare large numbers
 - Expanded notation
 - Place value
 - Names of Planets
 - Rounding numbers
- **Concepts to be learned in this lesson**
 - Scale
 - Comparison
 - Modeling of size
 - Problem solving
- **Concepts to be used in future lessons**
 - Comparison
 - Scale model
 - Modeling of distance

B. Instructional sequence for unit *(Where does this unit fit in the curriculum for the year?)*

Students will have a greater understanding of large numbers in relation to the planets.

New Mexico State Standards and Benchmarks

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems.
- Compute fluently and make reasonable estimates.
- Use mathematical models to represent and understand quantitative relationships.
- Develop and evaluate inferences and predictions that are based on data.

II. Plan of the research lesson

A. Goals of the research lesson: *(What do you want your students to learn in this research lesson?)*

The students will be able to compare large numbers in order to better understand size relationship of planets.

B. How does the lesson fit into the overarching lesson study goal?

(Example of overarching lesson study goal: Students will be confident in their ability to learn.)

Students will be confident in their ability to apply math to other areas of the curriculum.

C. Steps of the research lesson: *(See attached table)*

D. Things to prepare/materials:

Colored worksheet for 1st guesses

Worksheet with planet sizes

Each group needs: volleyball

Basketball

Marbles x 2 (two sizes)

Tennis ball

Ping pong ball

Baseball x 2