Subject: Mathematics   Grade: Seventh

Standard: # 7 Statistics and Probability

Key Concept: Students work with data and make predictions from data.

Generalization: Students collect, organize, and present numerical data and make inferences and predictions from the data.

Background:

   This lesson could be a culminating activity for your unit on statistics. It could also be used about midway through a unit depending on how much time you spend teaching probability and statistics. Students should be familiar with the following terms and their meanings: random, average, and sample.

   This lesson is adapted from the book <u>Math for Humans</u>, ISBN#0-9656414-7-3.

   Each tier solves a data mystery from a series of questions. The reference provides a description of the data collected, how to organize the data, how to present the data, and asks the student to make predictions and inferences from which you can make an appropriate worksheet. Since the level presented in the reference is challenging, some parts of the worksheet should be adjusted to the level of the student(s) who will be completing them.

This lesson is tiered in ***content*** according to Howard Gardner's ***Multiple Intelligences***.

Tier I: ***Linguistic Learners***

   Students select an article from a newspaper or magazine. Details to create a worksheet are given in the reference, "Case I: Words."

Tier II: ***Bodily-Kinesthetic Learners***

   Pairs of students complete a worksheet based on "Case II: Colored Counters" or "Case III: Dice."

Tier III: *Spatial Learners*

Pairs of students complete a worksheet based on "Case IV: Vehicles."

Tier IV: *Musical Learners*

Students use a book or piece of sheet music that shows the notes of a song. Ideas to generate a worksheet are given in the extension section of the reference.

Assessment:

Each worksheet should be graded for correctness.

You might also have students share their data mystery with their classmates and assess their presentation skills.