PROBLEM SET

1. For each of the following topics, give an analogy to suit a general audience.
   a. A 12-inch snowfall.
   b. Two numbers at opposite ends of a distribution.
   c. An erratic pattern of change.
   d. Something moving rapidly.
   e. A few things.
   f. Something very heavy.
   g. Prices that are rising rapidly.
   h. Something that has been level for a long time and then declines suddenly and substantially.
   i. A repetitive pattern.

2. Repeat the previous question but for a scientific audience in your field.

3. Devise short phrases to convey the concept of small size to the people listed below.
   a. A cooking aficionado
   b. A gardening nut
   c. An artist
   d. A sports fanatic

4. Each of the following analogies would work better for some audiences than others. Name a suitable audience, an unsuitable audience, and an improved analogy for the latter group.

5. For each of the following topics, state whether information from Illinois in 2010 would be useful as a numeric example. If so, give an example of a type of contrast in which that information could be used.
   a. Chicago in 2010.
   d. Iowa voters in 2004.

6. Your state is considering three alternative income tax scenarios: a stable tax rate (at 5%), an increase of 0.5 percentage points, and an increase of 1.0 percentage points. Your local representative wants to know how each scenario would affect low-, moderate-, and high-income residents.
   a. What criteria could you use to define “low,” “moderate,” and “high” income?
   b. What kinds of numeric contrasts would you use to compare the different scenarios?
c. Create a table to present the effects of those changes to the government budget agency.

d. Create a chart to illustrate the effects of those changes to citizens of the state.

7. State whether a $1.00 increase would be a useful contrast for each of the following topics. If not, suggest a more reasonable increment. Assume that all examples are for the year 2010 in the United States.

a. Weekly allowance for an eight-year-old child
b. Weekly wages for a supermarket checkout clerk
c. Hourly wages for a supermarket checkout clerk
d. Sales tax on a package of cigarettes
e. Sales tax on a new SUV