Measurement Scales:
1. **Nominal Scales** have no numerical value and produce *categorical* data
2. **Ordinal Scales** also produce *categorical* data and are used when an inherent order exists among categories
3. **Numerical Scales** are used when differences between numbers have a meaning
   - Interval Scale – arbitrary zero point (e.g. Fahrenheit scale)
   - Ratio Scales – true zero point (e.g. Kelvin scale)

Examples:
1. **Nominal Scales**: Numbers are arbitrary and have no inherent values
   - Gender (circle one):
     1. male
     2. female
   - Ethnicity
     1. African-American
     2. Asian
     3. Native American
     4. Native Hawaiin/Pacific Islander
     5. American Indian or Alaskan Native
     6. White/Caucasian
     7. Hispanic/Latino
   - Type of lung cancer:
     1. small cell
     2. large cell
     3. squamous cell
     4. adenocarcinoma

   *Must be exhaustive and mutually exclusive*
   - What is your intended career choice?
     1. Primary Care
     2. Internal Medicine
     3. Family Medicine
     4. Pediatrics
     5. Specialty
     6. Not Sure

2. **Ordinal Scales**: Inherent order to categories:
   - Level of education
     1. less than high school
     2. high school graduate
     3. some college
     4. college graduate
   - Ann Arbor Lymphoma stage
     1. Stage I
     2. Stage II
     3. Stage III
     4. Stage IV
   - Rating of health status
     1. Excellent
     2. Very Good
     3. Good
     4. Fair
     5. Poor

   (Likert-type)

3. **Numerical Scales**: Differences between numbers have meaning:
   A. Continuous - Height/Weight, Age, USMLE Step 1 score, Length of survival
   B. Discrete - Number of visits to physician in past year, Number of pregnancies