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## Statistical Consultants

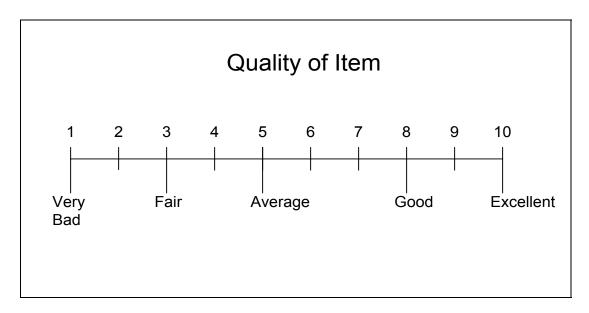
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## Procedure for Assigning Values to Properties Based on Panel Ratings

1) A rating scale such as the one below can be used:



- 2) Choose 3 to 6 individuals to be raters. These individuals should be familiar with the material that they are rating but should not have any pre-conceived biases about the study or the materials they are going to rate. Assure the raters that they are not being 'tested' in any way and that their ratings will be kept confidential if they wish. The raters need not be identified.
- 3) Randomize the items to be rated and number them in such a way that the rater cannot identify them.
- 4) Allow each rater to rate each item in turn, using the scale above and that individual's knowledge and judgment. Do not coach them or give any information during the rating process. Each rater should do his/her rating individually and in the <u>absence</u> of the other raters. Raters should not discuss the rating or 'compare notes' until after all have rated.
- 5) Allow the raters full reign to examine the materials in any way and in any order they wish. Fractional weightings are permitted (If someone wants to give an item a rating of 5.6, for example, that is ok). Also, identical ratings are permitted; two or more items can have the same rating. (This is not a ranking exercise. That is, the items do not have to be ranked in order of quality; just rated individually). Each rating must be an individual number and not a range.
- 6) Record all the ratings from all the individual raters and save all of the raw data for analysis. One way to use the data is to simply average across the raters and let that be the measure of the property being studied. If the rating values have a very wide range and/or are very skewed, then the median is a better overall measure of the property being studied.

7) Occasionally, one should look at the correlation of results among the raters. Raters that are highly correlated are 'seeing' the attributes of the samples in the same way; which is good. If an individual rater does not correlate well with the others, he/she may not be an appropriate individual for this task.

However, a rater should not be removed from the pool on the basis of a single rating session. Lack of correlation with others should be consistent and pervasive over time.