Writing Test Items

You should write an assessment item for each objective whose accomplishment you want to measure. Mager provides these steps to follow when writing a criterion assessment item:

1. Read the objective and determine what it wants someone to be able to do (i.e., identify the performance).
2. Draft a test item that asks students to exhibit that performance.
3. Read the objective again and note the conditions under which the performing should occur (i.e., tools and equipment provided, people present, key environmental conditions).
4. Write those conditions into your item.
5. For conditions you cannot provide, describe approximations that are as close to the objective as you can imagine.
6. If you feel you must have more than one item to test an objective, it should be because (a) the range of possible conditions is so great that one performance won't tell you that the student can perform under the entire range of conditions, or (b) the performance could be correct by chance. Be sure that each item calls for the performance stated in the objective, under the conditions called for.

If you follow these steps and still find yourself having trouble drafting an assessment item, it is almost always be because the objective isn't clear enough to provide the necessary guidance.

Guidelines for Constructing Test Items

Across All Item Types

1. Make all language as simple as possible. The difficulty within the item should not arise from having to decipher complex or convoluted text.
2. Be careful not to "give away" the answer with language forms, such as use of singular or plural verbs or adjectives that give clues to the correct answer.

Multiple-Choice Items

1. State the stem in the form of a question or an incomplete sentence.
2. Include in the stem any words that might be repeated in the options.
3. Avoid the use of a negative in the item stem. If you must use a negative, emphasize it with underlining or boldface.
4. Make all options grammatically correct with the stem and in a similar form of speech (e.g., all verb phrases or all complete sentences).
5. Avoid, when possible, options that are subsets of each other or overlap in other ways.
6. Avoid words such as all, always, none, and never within options. Also avoid terms such as most, generally, and some. The former cue an incorrect answer; the latter cue a correct answer.
7. Make all options approximately the same length or otherwise screen out the tendency to make the correct response the longest one.
8. List options in a logical order (e.g., chronologically or in increasing or decreasing value).
9. Use the options all of the above and none of the above sparingly and only when they

conceptually make sense as options.
10. To reduce the effects of guessing, include at least four options.

Fill-in-the-Blank Items
1. Use fill-in-the-blank items for only those objectives that have a unique and critical single-word answer.
2. Avoid including more than one blank per sentence.
3. Avoid the temptation to copy information verbatim from text. Paraphrase textual materials. Blanks should be key terms or important concepts.
4. Blanks should be positioned toward the end of a sentence.
5. Try not to give cues, such as a or an, in the body of the sentence.
6. Blanks should be long enough to accommodate answers and should be a standard length.

Matching Items
1. Statements or terms within a column should be as homogeneous as possible in terms of grammatical structure and conceptual concept.
2. Lists of responses should be relatively short, such as less than ten responses.
3. Directions must precisely state how matches should be indicated.
4. To reduce guessing, the question should include items that will not be used. This should be noted in the directions.
5. Statements and terms within each column should be listed in a logical order (e.g., increasing or decreasing size).

Checklists
1. Directions for expected performance should be made explicit to learners.
2. Behaviors or characteristics that are to be observed should be of similar level of detail. Include only the most critical behavior(s).
3. Behaviors or characteristics that should not be observed should be listed in a separate section of the checklist and clearly identified with an emphasized negative (e.g., Cook did NOT attempt to put out grease fire with water).
4 Behaviors and characteristics should be stated in such a way that they can be evaluated in a dichotomous manner (e.g., yes/no, present/not present, and performed/not performed).
5. Make it clear in your directions to the checklist whether and how the sequence of behaviors should be taken into account.
6. If the list of behaviors or characteristics becomes greater than ten statements, divide these into sub-divisions or categories.

Rating Scales
1. Use an odd number of anchors, from three to seven, on your scale line.
2. Statements of behaviors or characteristics should be stated in the positive.
3. If possible, label the lowest and highest anchor with descriptors (e.g., very poor and excellent).
4. For the highest anchor, describe the best you actually expect to see (not the best possibility in an ideal world), and for the lowest anchor, describe the worst you actually expect to see (not the

worst scenario imaginable).
5. Behaviors or characteristics that are to be observed should be of a similar level of detail. Include only the most critical behavior(s).
6. Make it clear in your directions to the checklist whether and how the sequence of behaviors should be taken into account.
7. If the list of behaviors or characteristics becomes greater than ten statements, divide these into sub-divisions or categories.

Source:
Smith, P. L. & Ragan, T. J. (1993). *Instructional Design*. New York: Merrill.