

Guidelines for Writing Test Items¹

TRUE/FALSE

Definition: a statement that the test-taker determines is true or false.

Advantages:

- Easy to write
- Easy to score

Disadvantages:

- 50/50 chance of guessing correctly

Guidelines:

- Use this when the content produces only two likely alternatives
- Include only one major idea in the statement. Do not link multiple tasks or content points
- Make sure the statement is reasonably true or false
- Avoid ambiguous terms like “most customers.” Give specifics such as “90% of the customers”
- Phrase each item in the positive; negative statements can be easily misread
- Avoid double negatives (this principle applies to all question types)
- Make true and false statements equal in length; true statements tend to be longer because they spell everything out
- Statements should be short and simply stated
- Make sure true and false statements are randomly distributed

MULTIPLE CHOICE

Definition: Presents test-takers with a question (“stem”) and then asks them to choose a single correct answer from among a series of alternatives.

Advantages:

- Flexibility
- Low probability of guessing correctly
- Diagnostic capability
- Easy to score

Disadvantages:

- Difficult to write
- Cannot assess unassisted recall

¹ The primary resource for this material is a book by Sharon A. Shrock and William C. Coscarelli, *Criterion-Referenced Test Development*.

Guidelines:

For Writing the Stem:

- Use multiple choice when one answer can be defended as the best answer. If more than one possible answer exists or is referred to in the question, the question should be in a Check Box format.
- Use the clearest and simplest language to avoid making the question a measure of reading ability
- Place as much information as possible in the stem and limit the words in the response choices
- If possible, state the stem in a positive format
- Avoid double negatives

For Writing the Distractors:

- Make the correct and incorrect responses approximately equal in length to avoid giving clues
- Make all answer choices grammatically consistent with stem to avoid cueing the correct answer
- Avoid specific determiners such as all, never, always, etc.
- Check to make sure the responses will not give away an answer to another test question
- Write incorrect answers which are:
 - * Believable and logical
 - * Familiar-looking statements
 - * True statements which do not answer the question
 - * Common errors or misconceptions
- Avoid using the following statements:
 - * All of the Above
 - * None of the Above
 - * Both c and d(See Check Box for a question format allowing more than one correct answer).

MATCHING

Definition: Match a series of words or phrases with something else, such as another series of words or phrases or features on a chart, diagram, or map.

Advantages:

- Easy to compose
- Easy to score
- Good for questions involving a graph, chart, or piece of equipment

Disadvantages:

- If items in a column are unrelated, it is easy to match items to other list
- One error can create other errors which one would not otherwise make
- Long lists are difficult to keep track of

Guidelines:

- Use matching to assess knowledge of terminology or related tasks
- Keep each item in the list short
- Arrange the response list in some type of logical order (chronological, alphabetical, etc.)
- Directions should clearly indicate the basis on which the entries are to be matched
- Make sure the lists do not interchange items
- Make sure the items in the list are similar in type (e.g., various pieces of hardware). Otherwise, students may be able to narrow down their choice without really knowing the content.

CHECK BOX

Definition: a variation of the multiple choice item in which a respondent can select more than one response.

Advantages:

- Provide fewer clues to correct answers because learner does not know how many responses are correct
- Easier to construct than multiple choice
- Cover more aspects of a learning topic

Disadvantages:

- Proper interpretation of scores. Can partial credit be given for some correct answers?

Guidelines:

- Use the Check Box when more than one reasonable answer exists for the question or statement
- Include wording such as “Select all that apply” in the question to indicate that multiple answers are possible
- Use the clearest and simplest language to avoid making the question a measure of reading ability
- Place as much information as possible in the question and limit the words in the response choices
- If possible, state the question in a positive format
- Avoid double negatives
- Make the correct and incorrect responses approximately equal in length to avoid giving clues
- Make all answer choices grammatically consistent with the question to avoid cueing the correct answers
- Avoid specific determiners such as all, never, always, etc.
- Write incorrect answers which are:
 - * Believable and logical
 - * Familiar-looking statements
 - * True statements which do not answer the question
 - * Common errors or misconceptions
- Avoid using All of the Above and None of the Above responses as answer choices

SEQUENCING

Definition: placing a series of items in a logical or sequential order.

Advantage: Can recreate a job task or flow

Disadvantage: One mistake causes all steps from that point to be wrong

Guidelines:

- Use a sequencing question so the participant can recreate a task or job flow
- Make sure the question assesses a sequence that they must remember instead of recognize (Ex: Do not assess screen flow if it is not necessary for the participant to remember the screen names to complete the task)
- Use the clearest and simplest language to avoid making the question a measure of reading ability
- Avoid double negatives
- In the question wording, indicate how the student should order the steps (chronologically, alphabetically, etc.)
- Make all answer choices grammatically consistent; it is usually best to begin each answer choice with an action verb

FILL IN THE BLANK

Definition: the test-taker writes an answer which may consist of a single word or two or a phrase or clause.

Advantage: Assesses recall rather than recognition

Disadvantages:

- Answers may be ambiguous and difficult to score
- Scoring can be time consuming because of judgment calls
- Suitable only for one word or short phrase answers. This limits the sophistication of the content.

Guidelines:

- If answer is a quantity, indicate unit in which it should be expressed.
- Keep blanks the same length. Varying-length blanks cue the answers.