TIP SHEET:
The Do’s and Don’ts of Building Tests

Consider the purpose of your test:
• What are you measuring?
• Is testing the most appropriate measure of student learning?
• If so, what level of learning are you testing?

What Types Of Tests Are There?
• Multiple Choice, True/False, Matching objective testing – students choose from alternatives provided.
• Fill-in-the-Blank, Short-Answer, Essay subjective testing - students provide the answers themselves.

How Do I Build An Effective Test?
• Write original test questions rather than using text-provided test banks – this way you can incorporate your standards and vocabulary. Over time, create a test bank of your questions to draw from (see below).
• Make up test questions throughout the term.
• Ask students to submit test questions.
• Prepare clear instructions.
• Include a few words of advice and encouragement on the test.
• Put some easy questions first.
• Challenge your best students with one or two tough questions for extra marks.
• Give thought to the layout and timing of the test (see below).

What Type Of Questions Should I Use?
• Objective questions are typically good choices for assessing higher cognitive levels such as analysis, synthesis or evaluation.
• Multiple-choice questions...
  ○ Are difficult and time consuming to construct.
  ○ Lead an instructor to favour simple recall of facts.
  ○ Place a high degree of dependence on the student’s reading ability and instructor’s writing ability.
  ○ Subjective questions allow assessment of a range of cognitive levels.

How Do I Write An Effective Multiple-Choice Question?
• Stem:
  ○ When possible, state the stem as a direct question rather than as an incomplete statement.
  ○ Present a definite, explicit and singular question or problem.
  ○ Eliminate excessive verbiage or irrelevant information.
  ○ Include any word(s) that might otherwise be repeated in each alternative.
  ○ Use negatively stated stems sparingly. When used, underline and/or capitalize the negative word.
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Infinite Possibilities...

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- **Response Alternatives:**
  - Make all alternatives plausible and attractive to the less knowledgeable student.
  - Make the alternatives grammatically parallel with each other, and consistent with the stem.
  - Make the alternatives mutually exclusive.
  - Make alternatives approximately equal in length.
  - Use at least four alternatives for each question to lower the probability of getting the question correct by guessing.
  - Have the same proportion of alternatives a, b, c, d and e as the right answer.
  - Use “none of the above” and “all of the above” sparingly. When used, they should occasionally be the correct response.

How Should I Lay Out My Test?

- Use margins and line spacing that make the test easy to read.
- On the first page, note the total number of marks for the test.
- If items are worth different numbers of points, indicate the point value next to each item.
- Group similar types of items, such as all true-false questions, together.
- Keep in mind that the amount of space you leave for short-answer questions often signifies to the students the length of the answer expected of them.
- If students are to write on the exam, leave space at the top of each page for the student’s name (and section, if appropriate). If each page is identified, the exams can be separated so you can mark each question separately.
- Number the pages using the “Page 1 of 5” style so students can easily see if a page is missing from their test.
- Include suggested timings for each section of the test.

How Do I Calculate How Long My Test Will Take To Write?

- Factor in time to distribute and collect the tests.
- Allow:
  - One-half minute per item for true-false.
  - One minute per item for multiple-choice. Allow up to 2 minutes if there is a lot of reading or the question is complex.
  - Two minutes per short-answer requiring a few sentences.
  - Ten or fifteen minutes for a limited essay question.
  - Thirty minutes for a broader essay question.
  - Another five or ten minutes for students to review their work.

Resources:
- Blackboard’s Assessment Tool
- TestGen Tool from Pearson (needs a Pearson Login):
  http://wpslive.pearsoncmg.com/wps/media/access/Pearson_Default/8722/8931911/testgen_login.html

Sources:
- Improving Your Test Questions, Center for Teaching Excellence, University of Illinois, http://cte.illinois.edu/testing/exam/test_ques.html
- Differentiation and the Brain, David A. Sousa and Carol Ann Tomlinson, 2011, Solution Tree Press
- Balanced Assessment, Kay Burke, 2010, Solution Tree Press

Test only what’s been taught ➔ no surprises!

Don’t include “trick” questions

40 – 50 multiple-choice questions for a 50 minute period