

## Cognitive Wrapper Template

Here are questions for multiple situations. This needs to be short, so only select one or two of each type of question and tailor to your unique situation. For more on the rationale and research see [www.TeachingNaked.com](http://www.TeachingNaked.com).

This template is based upon research by Marsha C. Lovett, (2013), "Make exams worth more than grades: Using exam wrappers to promote metacognition" in *Using reflection and metacognition to improve student learning*, Kaplan, M; Silver, N; Lavaque-Manty, D; Meizlish, D., ed. San Francisco: Sterling, VA: Stylus (with more math and science templates at [www.learningwrappers.org](http://www.learningwrappers.org)) and Mary-Ann Winkelmes (2013), "Transparency in teaching: Faculty share data and improve students' learning" *Liberal Education* 99/2 (Spring 2013), 48-55. See also Illinois Initiative on Transparency in Learning and Teaching, for <http://go.illinois.edu/transparentmethods> and Brown, P. C., Roediger, H. L. & McDaniel, M. A (2014) *Make it Stick: The Science of Successful Learning*. Belknap Press

### Rationale:

This assignment/activity/exam and this feedback was designed to help you/give you practice/improve your... XYZ (achieve what learning outcome?) (So do the activities and feedback really support the goal?)

This form will help you evaluate your own preparation and performance for this assignment/exam/lesson/activity/class session and allow you to adjust your study/practice habits in the future. Your responses will have no effect on your grade and are solely to help you improve. Being brutally honest with yourself here is a useful and important part of self-examination

Ask in advance (i.e. give the wrapper with the homework):

The goal of this assignment/homework/reading/exam is to give you practice with X or to help you analyze your Z. Before you begin, rate your awareness of Y or think about Z.

This form is designed to help you prepare more fully for class. Did you participate fully in class today?

### Reflection:

1. How much total time did you spend preparing (or writing/reading/reviewing)?
2. When? How did you spread out your preparation?
2. How did you prepare for this exam/lesson/activity/class session?
2. How much time did you spend reviewing X, Y, or Z?
2. What % of your preparation was done alone/groups?

2. What % of your preparation time was spent on each of these activities?

- Reading textbook section(s) for the first time \_\_\_\_\_
- \*Re-reading or highlighting textbook section(s) \_\_\_\_\_
- \*Re-reading your class notes \_\_\_\_\_
- Reading/studying other materials \_\_\_\_\_
- (From where? \_\_\_\_\_)
- Rewriting key concepts into your own words \_\_\_\_\_
- Rephrasing ideas \_\_\_\_\_
- Creating personal examples or analogies \_\_\_\_\_
- Self-Testing (or working on extra problems) \_\_\_\_\_
- Relating new material to things you already know \_\_\_\_\_
- Finding online content \_\_\_\_\_
- Thinking \_\_\_\_\_
- Preparing \_\_\_\_\_
- Researching \_\_\_\_\_
- Drafting \_\_\_\_\_
- Editing \_\_\_\_\_
- Listening \_\_\_\_\_
- Finding inspiration \_\_\_\_\_
- Analyzing posture \_\_\_\_\_
- Working on problems \_\_\_\_\_
- \*Focusing on one thing at a time \_\_\_\_\_
- Interleaving (varying your studying) \_\_\_\_\_
- Playing through pieces \_\_\_\_\_
- Resting \_\_\_\_\_
- Memorizing \_\_\_\_\_
- \*Repeating concepts by rote \_\_\_\_\_
- Flashcards \_\_\_\_\_
- Playing for fun \_\_\_\_\_
- Brainstorming or Conceptualizing \_\_\_\_\_
- Experimenting \_\_\_\_\_
- Sharing Ideas with others \_\_\_\_\_
- Practicing technique \_\_\_\_\_
- Working on new material \_\_\_\_\_
- Focusing ideas \_\_\_\_\_
- \*Reviewing homework solutions \_\_\_\_\_
- \*Reviewing your own notes \_\_\_\_\_
- \*Reviewing concepts and ideas \_\_\_\_\_
- Contextualizing concepts in new ways \_\_\_\_\_
- Solving new harder problems for practice \_\_\_\_\_
- Reviewing other materials (which?) \_\_\_\_\_
- Other (Please specify: \_\_\_\_\_ ) \_\_\_\_\_

NOTE: Items with a \* tend to be time consuming and not very effective. Re-reading or

highlighting, for example, create fluency (the material FEELS more familiar), but does not stick in long-term memory. It is much better to switch to items with a “–” as elaborating on the material is faster and more effective. For example, try thinking of new examples, making analogies (how would explain this concept in baseball or fashion terms?) or looking for larger context and restating ideas in your own words. Trying to remember the exact phrase or syntax of an idea is actually counter productive: come up with your own rule or phrase.

**Comparison:**

Now that you have listened to my feedback, the feedback of your classmates, looked over your graded exam, read my response to your paper etc.

3. What kinds of mistakes did you make?

3. Estimate the points you lost due to

- Trouble understanding a concept (or list specific concepts) \_\_\_\_\_
- Trouble remembering lines/formulas/structures \_\_\_\_\_
- Trouble with definitions \_\_\_\_\_
- Trouble with technique \_\_\_\_\_
- Not concentrating/focused enough \_\_\_\_\_
- Careless mistakes \_\_\_\_\_
- Lack of preparation \_\_\_\_\_
- Not being able to formulate an approach to the problem \_\_\_\_\_
- Arithmetic/grammatical errors \_\_\_\_\_
- Unclear expectations \_\_\_\_\_
- Reviewed the wrong material \_\_\_\_\_
- Not practicing enough \_\_\_\_\_
- Anxiety (and specifically over what?) \_\_\_\_\_
- Other \_\_\_\_\_

3. After having completed this assignment, rate each of the following statements in terms of how true it is for you on a scale from 1-5 (similar list)

**Adjustment:**

4. Name at least three things you will do differently next time in preparing. Be specific. For example, will you spend more time, start your preparation earlier, change a specific study habit, try a new one (if so, try to name it), sharpen some other skill (if so, name it), participate in more review opportunities or something else?

4. What study /practice strategy worked best/worst?

4. Students sometimes have difficulty drawing appropriate force-body diagrams and applying Newton’s second law appropriately. Was either of these a difficulty for you (check question 2 on the exam)? If so, try to self-assess your understanding: Identify what aspect of these skills are causing you difficulty and what you can do to improve your ability to solve problems using these skills.

4. What aspect(s) of your preparation for this exam/session seemed different from your exam/session 1 preparation? Did these changes have any effect?