What it is: a self-monitoring activity that surrounds another assignment or activity.

3 steps to teach metacognition: (Lovett, 2008)
1. Teach students their ability to learn can change.
2. Teach planning and goal-setting.
3. Provide opportunities for students to monitor and adapt their learning.

Wrapper benefits:
- Students monitor their learning.
- Students get immediate self-feedback.
- Responses to wrapper may provide start to in-class discussion.
- Big impact for a short activity.

Exam Wrapper
(modified from Ambrose et al., 2010)
1. Approximately how much time did you spend preparing for this exam?

2. What percentage of your time was doing the following:
   a. Reading textbook sections for the first time
   b. Rereading textbook sections
   c. Practicing problems
   d. Reviewing notes
   e. Reviewing class materials
   f. Other (specify)

3. After reviewing your graded exam, estimate the percentage of points lost due to the following:
   a. Lack of understanding the concept
   b. Not knowing how to approach the question/problem
   c. Carelessness
   d. Other

4. Based on your responses above, how do you plan to prepare differently for the next exam?

References
National Association of Geoscience Teachers. The Role of Metacognition in Teaching Geoscience. Teach the Earth.
   http://serc.carleton.edu/NAGTWorkshops/metacognition/index.html
   http://www.montana.edu/rmaher/barrier_courses/Learning%20to%20Learn%20Wirth.pdf

Lecture Wrapper
(Lovett, 2008)
- Start of lecture: provide tips on active listening
- End of lecture: students list 3 key points of lecture. Instructor collects lists, and reveals 3 most important points for immediate feedback.
- Study: After 3 successive lecture wrappers, student responses increasingly matched the instructor’s: 45%, 68%, 75%.

Research Project Wrapper
- What did you learn about research and the topic through this project?
- What did you learn about your own research habits and preferences?
- When were you excited or frustrated during the project?
- If you did a similar project in the future, would you approach the project the same or differently?

Reading Reflection
(Wirth & Perkins, 2008)
- What is the main point of this reading?
- What did you find surprising? Why?
- What did you find confusing? Why?