

Article Summary/Critique Guidelines

WHAT IS AN ARTICLE SUMMARY/CRITIQUE?

An article summary/critique both summarizes and comments on the author's work. As undergraduates beginning your study of chemistry you may not have the knowledge or skills necessary to critique the author's conclusion but you can provide your peers with important insight. The guidelines provided below should help you to prepare an article summary/critique now and in the future. At this point you may not be able to address all of these points, but as you gain knowledge and skills your ability to critique scientific work should improve.

CRITICAL READING

The most important part of writing the article summary/critique is to critically read the article! When reading a literature article for a critique it is important that you read the article critically. Consider the following points while reading your article. It is a good idea to make notes as you read.

- (a) First determine the author's thesis. What is the author's claim or purpose in writing this article?
- (b) Observe the context for the article. Who is the author's audience? Is the author supporting or contesting work already published?
- (c) Examine the methodology. What methods does the author use to make his or her conclusions? In particular how can you relate this methodology to theories and/or facts you have learned in class?
- (d) Examine the evidence. What evidence does the author present to support the conclusions? Again make any connections you can between this evidence and things you have learned in class.
- (e) Provide an evaluation of the author's methods, evidence and conclusions. Can you observe any obvious bias on the author's part by analyzing the citations in the paper, funding sources or other references made by the author.

WRITING THE SUMMARY

It is important to first summarize the work for your reader. Be sure that you clearly state the topic of the work, the methods that the author uses and the conclusions the author makes. The summary should be factual and unbiased – a simple representation of the work. The summary should be a narrative. Address the points listed below but do NOT present your summary in the form of questions and answers!

- (f) What is the specific topic of the article?
- (g) What is the author's thesis?
- (h) What is the context of this specific work? How does it fit into the larger body of research?
- (i) For what audience is the author writing?

(The abstract, acknowledgements and citation can be helpful in answering these questions.)

WRITING THE CRITIQUE

When critiquing a scientific work you should analyze the author's intent, bias and use of scientific reasoning to draw the conclusions. Use these questions as a guide. Again the critique should be in narrative form and NOT take the form of questions and answers.

- (1) Does the author explicitly state his thesis
 - (a) Does the author have an obvious or subtle bias? Consider funding sources, author's affiliation and literature cited.
 - (b) Does the author use logical application of scientific theories to draw conclusion? Does the evidence support the author's conclusions? Does the author adequately explain any inconsistencies? Are alternate conclusions possible?
 - (c) How does the article relate to content of your science courses?
 - (d) What are your own reactions to the work in terms of your current knowledge in the area?