How to read journal articles

When reading a research paper, ask yourself five questions and find answers to them:

1. ***What question(s) was (were) the author(s) trying to answer?***
   Many times authors of papers unnecessarily limit the scope of their paper or base their experiment on a false premise. An example is the question "does recognition memory have one or two processes?" This question assumes that one of these two possibilities is correct and ignores the possibility that more than two processes are involved. A much broader question would be "How does recognition memory work?" When you discuss a paper, do not take the author's question at face value; rephrase it in your own terms.

2. ***What did the author(s) do to answer the question?***
   This topic involves method and procedure. Focus on the parts of the procedure that are important and ignore details that are irrelevant. The central idea of *operationism* is that concepts have no scientific meaning beyond the operations used to measure them. For example, the authors may have measured the reaction time of observers making judgments about whether or not a test face had been previously seen. Distinguish what is actually measured (reaction time) from the interpretation the authors put on it (e.g., confidence or speed of processing). In other words, distinguish what the authors actually did from what they think they did.

3. ***What did the author(s) find?***
   In an APA style paper, this question is answered in the results section. The results are the actual data either in raw form or summarized by means that allow comparing relevant experimental conditions. For example, the results might be the mean reaction time for testing in the morning and mean reaction time for testing in the afternoon. Usually there will be statistical analyses to judge if differences are meaningful or just due to chance.

4. ***What did the author(s) conclude?***
   This question is handled in the discussion section of the paper and is the part that deserves careful consideration. Do the results, combined with what the authors actually measured, justify the conclusions? One should feel free to contradict the authors if their conclusions are not justified.

5. ***What is your evaluation of the paper?***
   Form your opinion and evaluation of the paper.