Tips for Using the Textbook

1. Read it! Don't just use it to find formulas. Students who approach physics with a “find-the-right-formula” mindset often struggle, and sadly, all too often they fail or give up. This is because they refuse to put in the effort to understand the rhyme or reason for when an equation is applicable and when it is not. The result is that physics appears mystifying. Your experience in this course will greatly improve, and the fog will lift, if you focus on the underlying reasons for things, rather than just looking for equations that “work.” The textbook is an excellent resource for uncovering the reasoning used to analyze physical situations.

2. Re-read it!!! Things rarely sink in after just one reading. This is especially true when it comes to technical writing. You often have to read passages several times over. That doesn't mean you are stupid, or lacking in any way. It simply takes our minds time to process a lot of information, especially if it is new or unfamiliar. So don't be discouraged if you need to re-read the textbook. In fact, it is normal, and to be expected.

3. Try to answer the “Test Your Understanding” questions at the end of each section; correct answers appear at the very end of each chapter (after the end-of-chapter problems).

4. Read and work through the many examples throughout each chapter. Some examples are also available as video tutor solutions in the “Study Area” of Mastering Physics.

5. Read the “Problem Solving Strategies” for advice regarding how to attack various problems. Some of these activities are also available as tutorials in Mastering Physics.

6. The “Bridging Problem” at the end of each chapter helps move beyond the relatively simple examples in the text and toward the more challenging problems that appear as end-of-chapter problems; correct answers appear at the very end of each chapter (after the end-of-chapter problems).

7. Discuss the “Discussion Questions” at the end of each chapter with a friend or classmate.

8. Familiarize yourself with the contents in the many Appendices. Note that much of this content is also available in the “Study Area” of Mastering Physics.