Also re-read the study skill assessment survey and the new document on Study Skills that are appended at the end of the homework. As you read these documents think about what hints and suggestions are useful and which ones do not apply to you.

1. Alvin, Simon, and Theodore went to work helping Dave paint his house. Alvin worked 6 hs, Simon worked 1¼ hours fewer than Alvin and Theodore worked 4½ hours. They were paid $61 for their work. How much did each of them get?

2. Sommer wants to buy a new car. She currently drives a car that gets 30 miles per gallon. She is contemplating buying a car that gets 40 miles per gallon. Sommer drives 15000 miles a year. Assume that gas cost $1.65 per gallon the entire year. How much will Sommer save in gas in one year if she buys the new car?

3. Convert each of the following:
   a. 92 mi/h to cm/s.
   b. 10987 mi/s² to km/h².
   c. 0.0005 µg/mL to mg/L

4. From “Quantitative Reasoning: Understanding the Mathematical Patterns in Nature” by F. Greenleaf. Section 1.3 Dealing with units, Exercise Set 1.3 (page 58-63)
   a. Exercise 31
   b. Exercise 40
   c. Exercise 41
   d. Exercise 48
   e. Exercise 49

5. From Debby Walser-Kuntz: Remember that BPA is found in many plastic food containers and humans may be exposed orally to low doses of BPA. We feed bisphenol-A (BPA) to mice to measure the in vivo effects of BPA on immune function. We feed the mice 2.5 µg BPA/kg body weight/day for 7-10 days.
   a. Our stock of BPA is at 5 mg BPA/ml of methanol. In order to be able to pipette the correct dose, we dilute the stock BPA 1000 fold in phosphate buffered saline. What is the concentration of BPA we actually use to feed the mice (in µg/ml)?
   b. We next weigh the mouse and find it weighs 20 g. Calculate how many microliters of our diluted BPA we need to add to a treat to feed the mouse so it gets the 2.5 µg BPA/kg body weight/day dose.
Some Study Skill Suggestions

The following are suggestions that have been helpful for many Carleton students. It may be a useful check list as you assess your recent academic difficulties. Staff in the Academic Support Center can provide additional information and assistance.

Study Habits
- Find a quiet place to study.
- Exercise, get enough sleep, eat well, and take breaks when studying.
- Plan at least 2 hours of study time for each hour of class.
- Schedule regular study hours. Study at same time each day.
- Plan no more than 1 hour blocks of study time.
- Schedule study periods before and after classes.
- Study for difficult and boring classes first.
- Reward yourself for using study time effectively.

Scheduling
- Put all due dates on a large calendar so you can't lose it!
- Post your schedule on a wall to remind you when you are to be in class, be tutored, etc.
- Don't overload until you know that you can carry a normal load.

Study for Exams
- Find out what will be covered, and how you will be tested from your professor, not another student.
- Attend classes faithfully.
- Set up temporary study schedule to prepare for a big test.
- Catch up on missing assignments, fill in blank spaces in notes; read over old tests.
- Make up study aids to review (main idea lists, definition sheets, time lines, or flash cards).
- Read recently covered material.
- Participate in study group. Brainstorm test questions with classmates and test each other.
- Get a good night's sleep before exam.
- Stay away from anxious students who may upset you before exam.
- Relax and be early for test. Visualize success.

Reading Textbooks
- First, read the introduction, Table of Contents, and familiarize yourself with overall purpose of book.
- Learn to read selectively (those who read slowly must learn WHAT to read).
- Read main headings in chapter first and highlight them.
- Next read supporting ideas. Highlight the key ideas.
- Read questions at end of chapter; summarize what the author thinks is important.

Writing a Paper
- List and outline main ideas first, to see overall picture. Then add supporting ideas.
- Read directions for style of writing paper.
- On weekly schedule, plan definite times for library research.
- Use index cards. Write author, title, etc., at top. Paraphrase material on card.
- Schedule rewrites and plan at least one day between revisions.
- Use computer with spelling correction feature. Follow outline you made.
- Proofread paper. May get tutor to assist with proofreading.
- Begin work when assignment is made. Do NOT put off until last few days!
- Go for help to the professor to discuss ideas or go over a draft.
- Take ideas or drafts to The Write Place tutors for help.
Carleton Science Scholars
Study Skills assessment

Some of the questions from the survey you completed on Monday can be interpreted as suggested behavior. Today, as you read the questions again, think if the behaviors described are conducive to YOUR effective learning or not.

- Talk with a faculty member during office hours
- Talk with a faculty member outside of class
- Form a study group
- Attend help or review sessions run by faculty, prefectors or lab assistants
- Visit the Math Skills Center
- Study with another student
- Skip classes
- Ask for extensions on assignments or papers
- Skim assigned reading before coming to class
- Ask questions in class
- Take notes in class
- Keep track of assignments and due dates in a calendar
- Take notes while reading/skimming textbooks
- Try to read all the words in sequence for every reading assignment
- Get anxious in exam situations

- I often do more poorly on exams than I expect to.
- When I read a textbook assignment, I usually start by looking at the section headings, the illustrations and the chapter summaries
- I seldom take notes during class
- I find it easy to start working on problem sets
- I allow enough time every day for studying so that I feel caught up in my classes
- I find it difficult to concentrate when I sit down to study
- I think I learn more when I study with other students in my class
- I (successfully) keep a calendar of appointments, assignments and due dates
- I frequently procrastinate on assignments.
- Even though I think I understand the course material, I find exam questions difficult.
- I never skip classes.
- I have trouble managing my time.
- I seldom visit my professors during their office hours or at other times outside of class.
- If I’m having trouble understanding the course material, I usually seek help from a faculty or staff member, or from a student assistant.
- I know the names of the reference librarians who work with faculty in my classes.
- When I take an exam or start an assignment, I feel confident about the type of thinking I’m being asked to do.
- When my professor assumes content knowledge that I do not have, I find out ways to get the background by talking with the professor, with other students, or with lab/class assistants.