Focus on understanding key concepts that define the reactions and formulas you ought to memorize. If you know the principles behind the reactions, then remembering the specific reaction will not be as critical.

Memory depends on understanding first, then converting the ideas in your short-term memory into stored, long-term memory. In order to do this effectively:

- Read the chapter material for lecture the night before: it’s not too long, and it’ll benefit your understanding during the lecture.
- Take comprehensive notes in class (it also helps if you go to class!). Pay particular attention to what the professor has lectured on; if s/he has presented a concept that was not in the text, learn it! When in doubt, do things the professor’s way, and not according to the book.
- Review those notes within 24 hours of the lecture. This reaffirms what you’ve learned.

Reasoning skills develop by doing problems frequently. Solve as many end-of-chapter problems as possible (resort to the answer book only after you’ve attempted the problem). Keep trying to answer a difficult problem and don’t look at the answer until you’ve completed it: this will store the problem in your memory longer and be more helpful in test taking.

extra tips

Don’t pull all-nighters for exams!
Consistently keep up with the work, review your notes, do problems, read the book, attend lecture. Don’t fall behind, because rushing and cramming is useless.
Constantly probe your understanding by asking (and answering) questions about “why” reactions occur (bonds forming and breaking) and recognize patterns of reaction types.
Study with a friend if that works for you; if you can explain a concept to your study mate, you understand it.
Join a PILOT group to help with general problem solving skills, or head over to the Learning Den for any specific questions you might have.