Polyhedra have been a rich source of problems and inspiration for scientists and artists since ancient times. However, they can be hard to visualize and the best way to appreciate them is to use models. In this talk I will compare different ways of making models that I have tested in the classroom, using either paper or plastic building kits like Zome, Polydron or Jovo. You can see examples of this on my web page on polyhedra <www.math.nus.edu.sg/aslaksen/polyhedra/>. I hope that the talk will inspire you to make models, alone or with your students. (Received September 29, 2003)