962-J1-464 **William R. Harris*** (wharris@georgetowncollege.edu), Dept. of Mathematics, Physics and Comp. Sci., 400 E. College St. #234, Georgetown, KY 40324. *A Constructivist Approach to Abstract Algebra Using Mathematica.*

In 1994, Dubinsky and Leron wrote Learning Abstract Algebra with ISETL, a text incorporating constructivist methods and computer laboratories which use the programming language ISETL. In an attempt to remedy some of the shortcomings of working with ISETL, we have written functions to bring to *Mathematica* many of ISETL's capabilities and strengths, such as evaluating "for all" statements and forming sets using reasonably natural mathematical notation. In this talk, we will describe and demonstrate some of these functions, discuss how the students who took the adapted course during the Fall 2000 semester fared, and compare their experiences with those who used ISETL. (Received September 14, 2000)