1056-C1-749 Melanie Anne Pivarski* (mpivarski@roosevelt.edu), Roosevelt University, Mailstop AUD520, 430 S. Michigan Ave, Chicago, IL 60605. Dancing and Groups: An Active Activity. Preliminary report.

Dancing is a fun way to connect group theory and movement. We'll create a dictionary between mathematical terms (like finite group, generating set, permutations, even, odd) and dance moves (like circle left, swing). We'll discuss some questions that can be asked and answered such as: What configurations are possible? Given a set of possible dance moves, what groups can we get? Are dances even or odd? This activity can be used for students of all levels. A "cheat sheet" will be provided for instructors. (Received September 16, 2009)