1035-05-1415 **Joshua D Laison*** (`jlaison@willamette.edu`), Mathematics Department, Willamette University, 900 State St., Salem, OR 97301, **Courtney R. Gibbons**, University of Nebraska Lincoln, and **Erick J. Paul**, University of California Santa Barbara. *Critical Pebbling Numbers of Graphs.* Preliminary report.

We define three new pebbling parameters of a connected graph G, the r-, g-, and u-critical pebbling numbers of G. Together with the standard pebbling number, the optimal pebbling number, the number of vertices and the diameter of G, this yields 7 graph parameters. Through bounds and separating examples, we determine the order relations between these parameters, and find that the critical pebbling numbers fit neatly between the previously studied pebbling parameters. (Received September 19, 2007)