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Stephen P Humphries (steve@mathematics@byu.edu), 284 TMCB, Department of Mathematics, Brigham Young University, Provo, UT 84601, and Rebeca A Paulsen* (lakabecky@gmail.com), 330 TMCB, Department of Mathematics, Brigham Young University, Provo, UT 84601. Weak Cayley Table Groups of Wallpaper Groups.

Let G be a group. A Weak Cayley Table mapping $\varphi: G \to G$ is a bijection such that $\varphi(g_1g_2)$ is conjugate to $\varphi(g_1)\varphi(g_2)$ for all g_1, g_2 in G. The set of all such mappings forms a group $\mathcal{W}(G)$ under composition. We study $\mathcal{W}(G)$ for the seventeen wallpaper groups G. (Received August 17, 2015)