1046-05-997 **Nora Youngs*** (nyoungs@email.smith.edu), Smith College, Department of Mathematics and Statistics, Northampton, MA 01063, and **Carolyn Gardner**, **Marissa Neal**, **Yoshi Merrybird** and **Agnieszka Rec**. *Coloring Graphs.* Preliminary report.

Two colorings of a graph, G, are isomorphic if by permuting the colors in one of them, we can obtain the other. The set of nonisomorphic colorings of G is the set of isomorphism classes of proper colorings. Define the graph of nonisomorphic colorings of G, I(G), to have vertex set equal the set of nonisomorphic colorings of G, with an edge between two colorings if they are isomorphic on V(G-x) for some x in V(G). Similarly, define the graph of canonical colorings of G, Can(G) on the same set of vertices, but with an edge between two colorings if they are identical on V(G-x). In this talk we explore properties of I(G) and Can(G). (Received September 13, 2008)