

Instructions. Write all answers clearly on one piece of paper, and put all group members' names on the top of the paper. If you talk, you must do so **very quietly!**

1. Let a be an element of a group G . Put the following subgroups in order with respect to \leq : G , $\{e\}$, $C(a)$, and $\langle a \rangle$.
2. (True/False) Some dihedral groups D_n have center $Z(D_n)$ with more than one element.
3. (True/False) All cyclic groups are Abelian.
4. What is the center of an Abelian group?
5. What is meant by a “generator” of a cyclic group?