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**Jeffrey Paul Wheeler\*** (jpwheelr@memphis.edu), Department of Mathematical Sciences, The University of Memphis, 3725 Norriswood Street, Memphis, TN 38152-3240. *A Survey of the Cauchy-Davenport Theorem and the Erdos-Heilbronn Conjecture.*

The Cauchy-Davenport Theorem states that for nonempty subsets  $A$  and  $B$  of the integers mod  $p$  the sumset  $A + B$  has size at least  $\min\{|A| + |B| - 1, p\}$  where  $A + B := \{a + b \mid a \in A, b \in B\}$ . Similarly the Erdos-Heilbronn Conjecture states that  $A \dot{+} B$  has size at least  $\min\{|A| + |B| - 3, p\}$  where  $A \dot{+} B := \{a + b \pmod p \mid a \in A, b \in B \text{ and } a \neq b\}$ . I will discuss the history of the problems, their extension to Abelian groups, and my recent work (with Paul Balister) extending the theorems to all finite groups. (Received January 12, 2007)