**Science Fair Project Thoughts for Parker Gatlin (8th Grade)  
Mathematics/Statistics**Tom Browder <tom.browder@gmail.com>, June 2015

**Possible Problem Study Areas**

**Cryptography**Survey the current status of public key cryptography. Select one method and predict date of brute force break for various assumptions of computer resources (e.g., processor capabilities, cost for large number of processors if parallel methods are suitable for the cryptographic method used, etc.).

**Replication and enhanced analysis of published studies**One of the requirements of good, objective science is peer review of published studies and replication thereof. Select a suitable published study and critique the author's results including methodology, quality of data, assumptions, and conclusions. If appropriate and feasible, extend or improve the author's work using his or her data.