# Activity

**Subject Area(s):**             **Biology/Genetics/Cells**

**Associated Unit:**             ***Cells and Heredity***

**Associated Lesson:**           ***Cells Alive and Growing***
**Activity Title:**      ***Human Genetics: Is the dominant trait always dominant?***

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**Grade Level:**                 **(6-8)**

**Time Required:**               **2-3 class periods (may vary)**

**Group Size:**                  **Entire Classroom**

**Summary:**    *The Human Genetics Project is an Internet-based project which will enrich a student's learning experience through "Unique and Compelling" applications of instructional technology. In particular, this project taps into some of the exciting applications of the Internet in education by having students collaborate in large numbers across great distances to "pool" large amounts of data. By participating in this project, students also have the opportunity to interact with experts online, use an online asynchronous discussion board to to discuss project-related topics, and publish their own work to this project web site.*

**Engineering Connection:**        Genetics is commonly used by biologists, doctors and scientist to predict certain physiological and mental traits observed in living organisms. Collecting statistics from larger amount of test subjects ensures a higher accuracy of these predictions.

**Keywords:** Heredity, Statistics, Probability, Ratios, Percentages

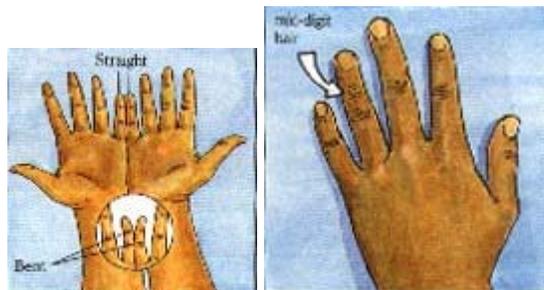**Educational Standards:** [PA] *2.1.8AD, 2.2.8AB, 2.4.8BCDF, 2.7.8ABCDE, 2.11.8A, 3.7.7CD*

**Learning Objectives:** *Student should be able to identify dominant and recessive traits and calculate the percentage of each for their respective sample size.*

**Materials List:** *Worksheets from the CIESE website. Internet access for the class.*

**Introduction/Motivation:** *They do re-run these programs at least 2 times a year, if you miss the fall one make sure to register before the spring. They are very on top of these things, follow all dates and deadlines!!*

**Procedures:**
**1.** I would be doing CIESE injustice if I explained these procedures. It's an excellent program. Please visit
**http://www.ciese.org/curriculum/genproj/project_instructions.html** and follow their detailed plan. It follows with all the sheets and learning aides you will need. They also possess different projects.



**Attachments:** http://www.ciese.org/curriculum/genproj/project_instructions.html for pdf attachments.

**Activity Extensions:** They can take their sheets home and ask family/friends etc. for their data as well.

**References:** http://www.ciese.org/curriculum/genproj/project_instructions.html

**Redirect URL:** http://www.ciese.org/curriculum/genproj/project_instructions.html

**Owner**
Drexel University GK-12 Program

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