

Gregor Mendel Research Homework

- theories of heredity- his work became the foundation for modern genetics.
- short monograph, *Experiments with Plant Hybrids*, in which Mendel described how traits were inherited, has become one of the most enduring and influential publications in the history of science
- first person to trace the characteristics of successive generations of a living thing
- was not a world-renowned scientist of his day
- Augustinian monk who taught natural science to high school students
- ideas had been published in 1866 but largely went unrecognized until 1900
- idea of dominance and segregation of genes
- basic laws of heredity:
 - hereditary factors do not combine, but are passed intact
 - each member of the parental generation transmits only half of its hereditary factors to each offspring (with certain factors "dominant" over others)
 - different offspring of the same parents receive different sets of hereditary factors
- Through the selective cross-breeding of common pea plants (*Pisum sativum*) over many generations, Mendel discovered that certain traits show up in offspring without any blending of parent characteristics. His theories can be applied to people and other animals because the mechanisms of heredity are essentially the same for all complex life forms

Sources:

http://www.accessexcellence.org/RC/AB/BC/Gregor_Mendel.php

http://anthro.palomar.edu/mendel/mendel_1.htm