

# GREGOR MENDEL



**Gregor Mendel** was born in 1822 in Heinzdorf be Odrau, Austria, today part of the Czech Republic. As a young man he studied philosophy and physics. In 1843 he decided to become a monk, and entered the Abbey of St. Thomas. Born Johann Mendel, he took the name Gregor when he began his religious life.

In 1851, Mendel went to study at the University of Vienna and returned to his abbey as a teacher in 1853. Inspired by his professors and colleagues and by his love of plants and nature, Mendel began the plant experiments for which he is known. He grew and tested over 28,000 pea plants. He wanted to discover how *traits* are passed on from parents to their children. Traits are things such as hair color and eye color or, in the case of pea plants, height.

At the time, it was thought that the traits of offspring were simply blends of their parents' traits. For example, when Mendel bred a tall pea plant with a short pea plant, he might have expected to get medium-sized plants as their offspring. Instead, the offspring were all tall plants. From this, he figured out that each parent must have a unit passed directly to the offspring that determined height. Today we call those units *genes*.

Next, Mendel bred these *hybrid*, or combination, plants with each other. He discovered that the hybrid parent plants produced about three tall plants for every one dwarf plant. He figured out that this meant that one gene, the one for tallness, was stronger than the one for shortness. These stronger traits are called *dominant* traits, and the weaker called *recessive*.

Mendel's experiments with his pea plants laid the foundation for the study of heredity. For this reason, he is called "The Father of Modern Genetics".

# VOCABULARY

Look at the text and define these key concepts:

Traits \_\_\_\_\_

Genes \_\_\_\_\_

Hybrid \_\_\_\_\_

Think about your family. What physical traits do you have in common with your mother? What do you have in common with your father? How about your siblings or cousins? List them in the columns below.

*Mother*

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*Father*

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*Sisters/Brothers*

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*Cousins*

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