

Mendel Discussion Outline

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I. Childhood (Slide 3)

- A. Born - July 22, 1822
- B. In Heizendorf, Austria
- C. To a poor farming family
- D. To escape poverty entered a monastery
 - 1. Augustinian Order of St. Thomas in Brunn, Moravis
 - 2. Present day - Brno, Czechoslovakia
- F. Given the name Gregor in the monastery

II. Education

- A. Abbot arranged for Mendel to get a teaching diploma from the University of Vienna
- B. Studied math and science
- C. returned to the monastery after this didn't work out

III. Experiments

- A. In 1856, Mendel began experimenting with peas
- B. Experimented for around 8 years
- C. Tested over 28,000 peas
- D. Not widely accepted until 1900

IV. Observations (Slide 4)

- A. Worked through many generations of peas to insure purebred plants - plant that always produces the same trait generation after generation
- B. Started cross pollinating plants (Slide 6)
- C. Avoiding self pollination
- D. The first generation - F1 were all purple (Slide 7)
- E. Named these plants "hybrid"
- F.

V. Other Traits (Slide 8)

- A. Dominant - produced
- B. Recessive - missing

VI. Dominant vs. Recessive (Slide 10)

VII. F2 generation (Slide 11)

- A. Two hybrid parents
- B. Produced 3 purple and 1 white
- C. Recessive – no dominant trait present
- D. Dominant – at least one dominant trait present

VIII. Outcome (Slide 12)

- A. Died in 1884
- B. Not widely accepted
- C. 3 Scientist found the same thing as Mendel
- D. Became known as the father of genetics