

Diff Biology Genetics Exam

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- Gregor Mendel used pea plants to study
 - flowering.
 - gamete formation.
 - the inheritance of traits.
 - cross-pollination.
- Offspring that result from crosses between parents with different traits
 - are true-breeding.
 - make up the F₂ generation.
 - make up the parental generation.
 - are called hybrids.
- The chemical factors that determine traits are called
 - alleles.
 - traits.
 - genes.
 - characters.
- Gregor Mendel concluded that traits are
 - not inherited by offspring.
 - inherited through the passing of factors from parents to offspring.
 - determined by dominant factors only.
 - determined by recessive factors only.
- When Gregor Mendel crossed a tall plant with a short plant, the F₁ plants inherited
 - an allele for tallness from each parent.
 - an allele for tallness from the tall parent and an allele for shortness from the short parent.
 - an allele for shortness from each parent.
 - an allele from only the tall parent.
- The principle of dominance states that
 - all alleles are dominant.
 - all alleles are recessive.
 - some alleles are dominant and others are recessive.
 - alleles are neither dominant nor recessive.
- A tall plant is crossed with a short plant. If the tall F₁ pea plants are allowed to self-pollinate,
 - the offspring will be of medium height.
 - all of the offspring will be tall.
 - all of the offspring will be short.
 - some of the offspring will be tall, and some will be short.