

Chapter 11-1 ?'s

NAME _____

MULTIPLE CHOICE:

Circle the answer that best completes the sentence.

The Austrian monk whose experiments with pea plants were the beginning of our understanding of genetics was _____.

- A. Albert Einstein
- B. Albus Dumbledore
- C. Alfred Nobel
- D. Gregor Mendel

The different alternatives or choices for a gene (like blue, green, or brown eyes) are called _____.

- A. generations
- B. traits
- C. tetrads
- D. alleles

Crossing organisms from the F_1 generation produces the _____ generation.

- A. P_2
- B. F_2
- C. P_1
- D. None of these-you can't cross F_1 organisms with each other!

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Mendel's "factors" are now called _____.

- A. gametes
- B. genes
- C. cells
- D. zygotes

Self-pollination produces seeds with genetic information from _____ parent plant(s).

- A. ONE
- B. TWO
- C. THREE

What pattern did Mendel see when crossing pure TALL with pure SHORT pea plants?

- A. ALL the F_1 offspring were short, but the F_2 generation were all tall.
- B. ALL the F_1 offspring were tall, but the F_2 generation were all short.
- C. ALL the F_1 offspring were short, but 50% the F_2 generation were all tall and 50% were short.
- D. ALL the F_1 offspring were tall, but 25% the F_2 generation were short and 75% were tall.

WHICH OF THE FOLLOWING IS TRUE of MENDELIAN INHERITANCE?

- A. If a dominant allele is present, the recessive allele won't be seen.
- B. If a recessive allele is present, the dominant allele won't be seen.
- C. Both recessive and dominant alleles show if present

Pollen is produced by the _____ part of the flower.

- A. female
- B. male

* * * * *

TRUE OR FALSE

Circle T if the statement is TRUE. Circle F if the statement is FALSE.

If false, make corrections to the underlined words to make the statement true.

T F Dominant alleles are represented by a lower case letter.

T F Mendel's Law of Fertilization explains why alleles end up in different gametes following meiosis.

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MATCH THE WORD FROM THE WORD BANK WITH ITS DEFINITION:

GENETICS

HEREDITY

TRAIT

PURE-BREEDING

DOMINANT

RECESSIVE

ALLELE

FERTILIZATION

_____ A characteristic that can be observed such as hair color, seed shape, flower color, etc

_____ The joining of a sperm and egg to make a zygote

_____ A gene choice that MASKS ANOTHER choice for a trait

_____ A gene choice that IS MASKED BY ANOTHER choice for a trait

_____ the branch of biology that studies how characteristics are transmitted from parent to offspring

_____ the passing of characteristics from parent to offspring

_____ An alternative choice for a gene (such as brown, green, or blue eyes)

**An organism that always produces offspring identical to itself if self
pollinated**