Genetics Name:

Mendel's Second Experiments Period:

Use Chapter 6, Section 1 of your textbook to answer the questions below.

Mendel's Second Experiments (p.177)

_____ 1. What traits appeared in the second generation, when Mendel allowed the first-generation plants to self-pollinate?

a. only dominant traits c. new dominant traits
b. only recessive traits d. some recessive traits

2. Look at Figure 4. For every _____ second generation plants that had purple flowers, there was _____ second generation plant with white flowers.

Ratios in Mendel's Experiments (p.178)

3. To try and explain the results of his experiments, Mendel decided to _____ the number of plants that had each trait.

4. In Mendel's second-generation plants, _____ traits showed up most often.

5. In Mendel's second-generation plants, _____ traits did not show up as often.

6. To show how the numbers of dominant and recessive traits were related, Mendel calculated a fraction called a _____ .

_____ 7. What did Mendel figure out was the ratio of dominant traits to recessive traits?

a. about 4:1 b. about 1:4 c. about 3:1 d. about 1:3

Gregor Mendel—Gone but Not Forgotten (p.179)

_____ 8. How many sets of instructions do plants get for each characteristic?

a. two—one set from each parent
b. four—two sets from each parent
c. one—one set from one parent
d. two—two sets from one parent

9. The traits of offspring are determined by the _____ set of instructions.

_____ 10. About how long after he published his findings was Mendel's work recognized?

a. 3 years b. 10 years c. 30 years d. 100 years

Imagine that a couple gets married and has children. One of the parents has green skin, and the other one has white skin. If all of their children have green skin, does this mean that white skin is a dominant or a recessive trait?

Having white skin must be a

_____ trait,

because...