

Name _____ Class _____ Date _____

Skills Worksheet

Directed Reading A

Section: Mendel and His Peas (Pg. 56)

1. What is heredity?

2. Give one example of something about yourself that has to do with heredity. (Not in book)

WHO WAS GREGOR MENDEL?

3. Gregor Mendel was born in (Pg. 56)
- the United States.
 - Austria.
 - Germany.
 - Italy.

4. Gregor Mendel did his research (Pg. 56)
- in a laboratory.
 - at a university.
 - at a monastery.
 - on a farm.

UNRAVELING THE MYSTERY

5. In Mendel's work, first and second generation mean (Pg. 56)
- parents and offspring.
 - plants and animals.
 - peas and pea pods.
 - one kind of organism.

6. Both male and female reproductive structures are found in _____ plants. (Pg. 57)

7. The offspring of _____ plants all have the same traits as the parent. (Pg. 57)

8. Because pea plants can _____, one plant is able to fertilize another. (Pg. 57)

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9. List two ways that a plant can cross-pollinate. (Pg. 57)

10. Peas can both cross-pollinate and self-pollinate. Why was this a key factor in Mendel's work? (Pg. 57)

11. In a population, a(n) _____ is a feature that has different forms. (Pg. 58)

12. Different forms of characteristics are called _____ (Pg. 58)

13. Why was it important to Mendel's work that peas were true breeding?

14. How did Mendel make sure that some plants cross-pollinated? (Pg. 58 + Figure 4)

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MENDEL'S FIRST EXPERIMENTS

Match the correct definition with the correct term. Write the letter in the space provided. (Pg. 59)

- | | |
|--|----------------------------|
| _____ 15. seen in the second generation | a. dominant trait |
| _____ 16. offspring from the first cross | b. first-generation plants |
| _____ 17. seen in the first generation | c. recessive trait |

MENDEL'S SECOND EXPERIMENTS

_____ 18. What results did Mendel get when he allowed the first-generation plants to self-pollinate? (Pg. 59)

- a. half purple and half white offspring
- b. every fourth plant had white flowers
- c. every fourth plant had purple flowers
- d. offspring with all purple flowers

_____ 19. When a relationship between two different things is shown in a fraction, it is (Pg. 60)

- a. a ratio.
- b. a problem.
- c. a dominant trait
- d. a recessive trait.

_____ 20. Gregor Mendel realized the only explanation for his results was that (Pg. 61)

- a. the traits were appearing at random.
- b. the male traits were always the dominant ones.
- c. each trait had two sets of instructions, one from each parent.
- d. his important research would open the door to modern genetics.

_____ 21. Mendel was recognized for his discovery (Pg. 61)

- a. five years after he finished his work.
- b. in 1865 when he published his work.
- c. about ten years ago.
- d. more than 30 years later.

On Page 46B of your ISN,
write each question and
answer. Page 61 in the
text book.

Question 1, 2, 4, 7, and 9