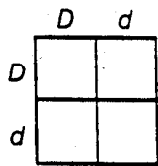


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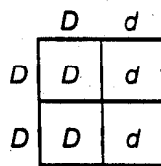
**EXPECTED AND OBSERVED RESULTS**

In Section 26:2 of your textbook, read about solving genetics problems using the Punnett square.

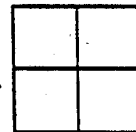
3. Examine the diagrams below. Each is a step in the Punnett square method. Put the steps in order by writing the numbers 1 to 4 below them on the correct blanks.



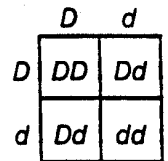
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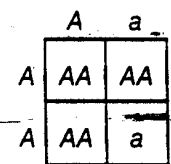
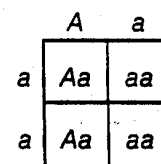
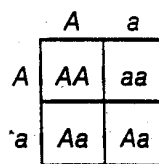
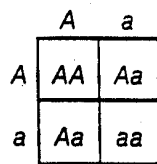
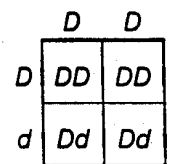
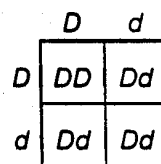
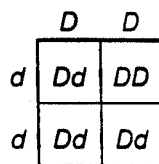
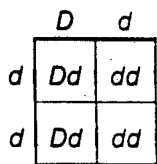


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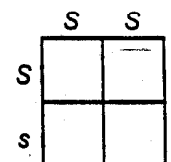
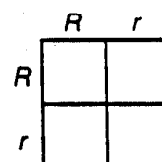
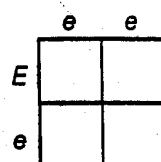
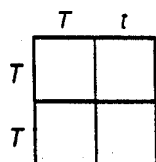
4. What do the letters outside the Punnett square stand for? \_\_\_\_\_

What do the letters inside each box stand for? \_\_\_\_\_

5. Examine the following Punnett squares and circle those that are correct.



6. Complete the following to determine the expected offspring.

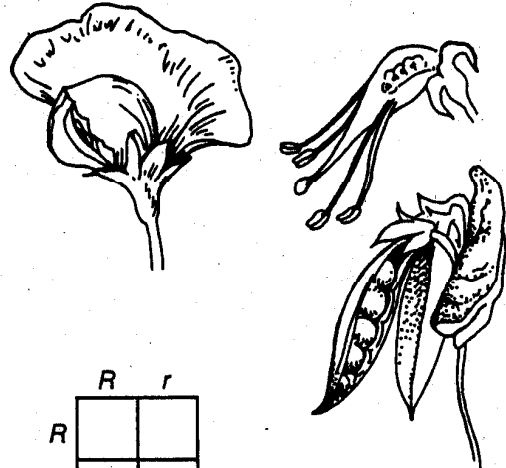
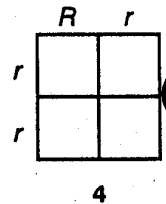
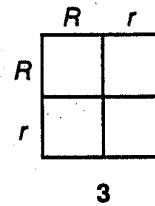
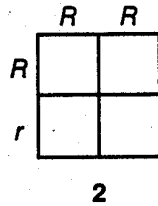
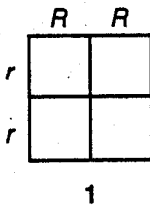


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## EXPECTED AND OBSERVED RESULTS

In Section 26:2 of your textbook, read about the work done by Gregor Mendel in genetics.

10. Mendel made the following crosses with pea plants. Complete the Punnett squares and answer the questions about each cross.



- a. He crossed a red flowered  $R$  plant with a white flowered  $r$  plant. His results were 126 red flowered plants and 122 white flowered plants. Which of the Punnett squares above best shows the parents and offspring that could give these results? \_\_\_\_\_
- b. He crossed a red flowered plant with a white flowered plant. His results were 307 red flowered plants and 0 white flowered plants. Which of the Punnett squares above best shows the parents and offspring that could give these results? \_\_\_\_\_
- c. He crossed a red flowered plant with a red flowered plant. His results were 306 red flowered plants and 110 white flowered plants. Which of the Punnett squares above best shows the parents and offspring that could give these results? \_\_\_\_\_
- d. He crossed a red flowered plant with a red flowered plant. His results were 300 red flowered plants and 0 white flowered plants. Which of the Punnett squares above best shows the parents and offspring that could give these results? \_\_\_\_\_