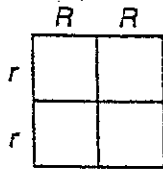
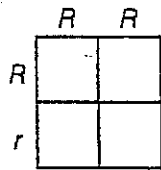


TAKE HOME QUIZ

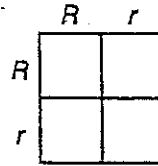
Mendel made the following crosses with pea plants. Complete the Punnett squares and answer the questions about each cross.



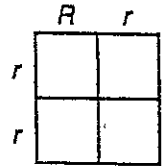
1



2



3



4



- 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? _____

1. Complete the Punnett Square and answer the following questions. Use the given information.

T = Tall t = Short

Cross: Hybrid Tall X Pure Short

- A. What fraction of offspring will be tall? _____
- B. What fraction of offspring will be short? _____
- C. What fraction of offspring will be pure tall? _____
- D. What fraction of offspring will be hybrid? _____
- E. What fraction of offspring will be pure short? _____

2. Complete the Punnett Square and answer the following questions. Use the given information.

B = Black Fur b = White Fur

Cross: Hybrid X Hybrid

- A. What is the phenotype of the parent dogs?

- B. What **fraction** of offspring have the same phenotype as the parent dogs? _____
- C. What is the genotype of the parent dogs?

- D. What **fraction** of the offspring have the same genotype as the parent dogs? _____
- E. Is it possible for any of the offspring produced to show the recessive trait? _____