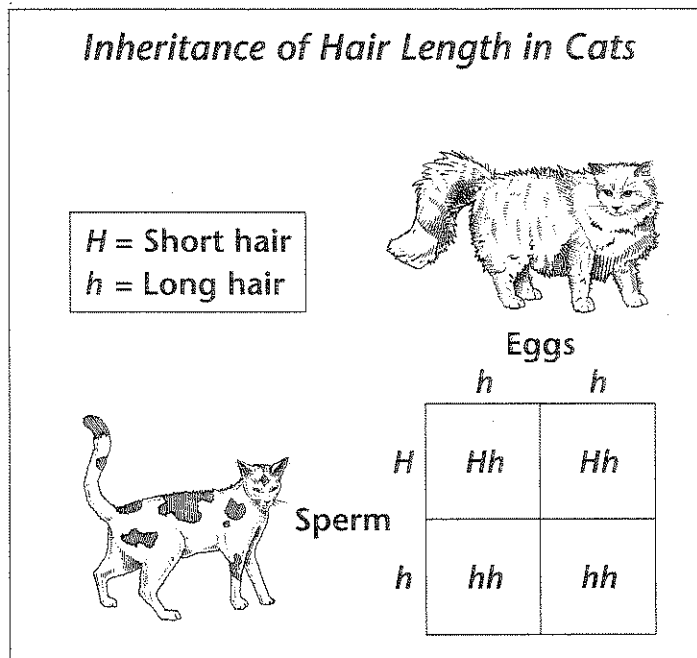


Genetics: The Science of Heredity • Chapter Test

Using Science Skills

Use the diagram below to answer questions 21–23. Write your answers in the spaces provided.



21. **Classifying** What are the genotypes of the offspring? What are their phenotypes?

22. **Calculating** What percentage of the offspring will have short hair? What percentage will have long hair?

23. **Applying Concepts** Suppose the heterozygous short-haired cat parent was replaced with a homozygous short-haired cat. What would be the genotypes of the offspring? What would be their phenotypes?

Essay

Write an answer for each of the following on a separate sheet of paper.

- 24. Describe what occurs during the process of protein synthesis.
- 25. Green (G) is the dominant color for pods in pea plants. Yellow (g) is recessive. Is it possible to have a heterozygous yellow pod? Explain.

Genetics: The Science of Heredity