

ABOUT THE COVER

The chromosome is arguably the most iconic image in the field of genetics. Chromosomes are the physical units of heredity and were one of the first genetic structures to be observed in living cells. A closer look with scanning electron microscopy reveals the highly recognizable human chromosomes shown on the cover. However, these discrete structures appear only once in the lifetime of a cell, as it prepares to divide. Despite over a century of research, there are still mysteries about how the cell elegantly controls the packaging of DNA within chromosomes. We discuss this topic in depth in Chapter 11—Chromosome Structure and DNA Sequence Organization.

ABOUT THE BOOK

Known for its focus on conceptual understanding, problem solving, and practical applications, the bestselling *Essentials of Genetics* strengthens students' problem-solving skills and explores the essential topics students need to learn genetics. The **10th Edition** has been extensively updated to provide comprehensive coverage of important, emerging topics such as CRISPR-Cas, epigenetics, and genetic testing. Additionally, a new Special Topics chapter, *Advances in Neurogenetics*, focuses on Huntington Disease, and new essays on Genetics, Ethics, and Society emphasize ethical considerations that genetics is bringing into everyday life.

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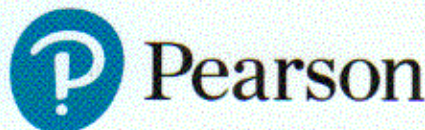
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ADDITIONAL HELP

Student Handbook and Solutions Manual

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This valuable handbook provides a detailed step-by-step solution or lengthy discussion for every problem in the text. The handbook also features additional study aids, including extra study problems, chapter outlines, vocabulary exercises, and an overview of how to study genetics.



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