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Changing scientific theories and developing technology influenced ideas and understanding of genetics. This chapter describes scientists' early explorations of cell life and the contributions of pioneering researchers Gregor Mendel, Robert Hooke, Matthias Jakob Schleiden, Theodor Schwann, August Weissmann, James D. Watson, and Francis Crick.

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Chromosomes and genes are the carriers of heredity. Basic genetic processes such as mitosis, meiosis, mitochondrial inheritance, spermatogenesis, oogenesis, hybridization, and selective breeding are described in this chapter. It also examines how gender is determined, genetic traits, and sex-linked characteristics.

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