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Nota di contenuto	CELL BIOLOGY SECOND EDITION; CONTENTS IN BRIEF; CONTENTS; PREFACE; ACKNOWLEDGMENTS; INSTRUCTOR NOTES; 1 CELLS AND TISSUES; Principles of Microscopy; The Light Microscope; The Electron Microscope; The Scanning Electron Microscope; Only Two Types of Cell; Special Properties of Plant Cells; Viruses; Origin of Eukaryotic Cells; Cell Specialization; Epithelia; Connective Tissue; Nervous Tissue; Muscle; Plants; Summary; Review Questions; Answers to Review Questions; 2 FROM WATER TO DNA: THE CHEMISTRY OF LIFE; The Chemical Bond: Sharing Electrons; Interactions with Water: Solutions Ionic Compounds Will Dissolve Only in Polar Solvents Acids Are Molecules That Give H(+) to Water; Bases Are Molecules That Take H(+) from Water; Isoelectric Point; A Hydrogen Bond Forms When a Hydrogen Atom Is Shared; Biological Macromolecules; Carbohydrates: Candy and Canes; An Assortment of Sweets; Disaccharides; Out of the Sweet Comes Forth Strength; Modified Sugars; Nucleosides, Phosphate, and Nucleotides; Amino Acids, Polypeptides, and Proteins; Lipids;

Hydrolysis; Summary; Further Reading; Review Questions; Answers to Review Questions; 3 MEMBRANES AND ORGANELLES
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Sommario/riassunto

This text tells the story of cells as the unit of life in a colorful and student-friendly manner, taking an "essentials only" approach. By using the successful model of previously published Short Courses, this text succeeds in conveying the key points without overburdening readers with secondary information. The authors (all active researchers and educators) skillfully present concepts by illustrating them with clear diagrams and examples from current research. Special boxed sections focus on the importance of cell biology in medicine and industry today. This text is a completely revised, re