With a focus on chemistry and physics content that is directly relevant to the practice of anesthesia, this text—written in an engaging, conversational style—supplies all the scientific information required for the combined chemistry and physics course for nurse anesthesia students.

Now in its third edition, the text is updated and reorganized to facilitate a greater ease and depth of understanding. The addition of a third author—a practicing nurse anesthetist—enhances the clinical relevance of the scientific information. Clinical scenarios now begin every chapter, and a concluding chapter, new to this edition, provides detailed, step-by-step solutions to the book’s review questions. Also included is a comprehensive list of need-to-know equations.

The third edition retains the many outstanding learning features from earlier editions, including a special focus on gases, the use of illustrations to demonstrate how scientific concepts relate directly to their clinical application in anesthesia, and end-of-chapter summaries and review questions to facilitate self-assessment. This clear, easy-to-read text will help even the most chemistry- and physics-phobic students to master the foundations of these sciences and competently apply them in a variety of clinical situations.

**New to the Third Edition:**
- Increased focus on clinical relevance
- Revised and updated chapters foster ease of understanding
- Clinical application scenarios open each chapter
- A new chapter provides guidance about calculator use and a unique problem-solving method
- Detailed step-by-step solutions clarify answers to end-of-chapter problems
- Comprehensive list of all key equations with explanation of symbols

**Key Features:**
- Written in an engaging, informal style for ease of understanding
- Focuses solely on chemistry and physics principles relevant to nurse anesthetists
- Provides end-of-chapter summaries and review questions
- Includes abundant illustrations that apply theory to practice

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