

TABLE OF CONTENTS

Licensing

Spiral Mechanics (Calculus-Based)

- 00: Front Matter
 - Table of Contents
- 1: Ideal Gases
 - 1.0: Concepts and Principles
 - 1.1: Analysis Tools
 - 1.2: Activities
- 2: Model 1 - The One-Dimensional, Constant-Force, Particle Model
 - 2.0: Introduction
 - 2.1: Model Specifics
 - 2.2: Kinematics
 - 2.3: Dynamics
 - 2.4: Conservation Laws
 - 2.5: Selected Answers
- 3: Model 2 - The Constant Force Particle Model
 - 3.0: Model Specifics
 - 3.1: Kinematics
 - 3.2: Dynamics
 - 3.3: Conservation Laws
 - 3.4: Summary Problems and Projects
 - 3.5: Selected Answers
- 4: Model 3 - The Particle Model
 - 4.0: Model Specifics
 - 4.1: Kinematics
 - 4.2: Dynamics
 - 4.3: Conservation Laws
 - 4.4: Selected Answers
- 5: Model 4 - The Rigid-body Model
 - 5.0: Model Specifics
 - 5.1: Kinematics
 - 5.2: Dynamics
 - 5.3: Conservation Laws
 - 5.4: Selected Answers
- 6: Linear Oscillations
 - 6.0: Model Specifics
 - 6.1: Concepts and Principles
 - 6.2: Analysis Tools
 - 6.3: Activities

Spiral Electricity and Magnetism (Calculus-Based)

- 1: Electric Fields
 - 1.1: Concepts and Principles
 - 1.2: Charge and Charge Density

- 1.3: Perfect Conductors and Perfect Insulators
- 1.4: Analysis Tools - Continuous Charge Distribution
- 1.4: Analysis Tools - Point Charges
- 1.6: Analysis Tools - Gauss's Law
- 1.7: Activities (The Electric Field)
- 1.E: Electric Fields (Exercises)
- 2: Electric Forces
 - 2.1: Concepts and Principles - The Gravitational Analogy
 - 2.2: Analysis Tools - Point Charges
 - 2.3: Analysis Tools - Force and Motion
 - 2.4: Electric Fields and Cancer (Project)
- 3: Magnetic Fields
 - 01. Concepts and Principles
 - 02. Analysis Tools
 - 03. Analysis Tools 2
 - 04. Activities
- 4: Magnetic Forces
 - 01. Concepts and Principles
 - 02. Analysis Tools
 - 03. Analysis Tools 2
 - 04. Activities
- 5: Electromagnetic Induction
 - 01. Concepts and Principles
 - 02. Analysis Tools
 - 03. Activities
- 6: Electric Potential
 - 01. Concepts and Principles
 - 02. Analysis Tools
 - 03. Analysis Tools 2
 - 04. Activities
- 7: Electric Circuits
 - 01. Concepts and Principles
 - 02. Analysis Tools
 - 03. Analysis Tools 2
 - 04. Activities
 - XI - 19
 - XI - 20
 - XI - 21
 - XI - 22
 - XI - 23
 - XI - 24
 - XI - 25
 - XI - 26
 - XI - 27
 - XI - 28
 - XI - 29
 - XI - 30
 - XI - 31
 - XI - 32
 - XI - 33

- [XI - 34](#)
- [XI - 35](#)
- [XI - 36](#)
- [XI - 37](#)
- [XI - 38](#)
- [XI - 39](#)
- [XI - 40](#)
- [XI - 41](#)
- [XI - 42](#)
- [XI - 43](#)
- [XI - 44](#)
- [XI - 45](#)
- [XI - 46](#)
- [XI - 47](#)
- [XI - 48](#)
- [XI - 49](#)
- [XI - 50](#)
- [XI - 51](#)
- [XI - 52](#)
- [XI - 53](#)
- [XI - 54](#)
- [XI - 55](#)
- [XI - 56](#)
- [XI - 57](#)
- [XI - 58](#)
- [8: Electromagnetic Waves](#)
 - [01. Concepts and Principles](#)
 - [02. Concepts and Principles 2](#)
 - [03. Analysis Tools](#)
 - [04. Analysis Tools 2](#)
 - [05. Activities](#)
 - [XII - 17](#)
 - [XII - 18](#)
 - [XII - 19](#)
 - [XII - 20](#)
 - [XII - 21](#)
 - [XII - 22](#)
 - [XII - 23](#)
 - [XII - 24](#)
 - [XII - 25](#)
 - [XII - 26](#)
 - [XII - 27](#)
 - [XII - 28](#)
 - [XII - 29](#)
 - [XII - 30](#)
 - [XII - 31](#)
 - [XII - 32](#)
 - [XII - 33](#)
 - [XII - 34](#)
 - [XII - 35](#)
 - [XII - 36](#)
 - [XII - 37](#)

- [XII - 38](#)
- [XII - 39](#)
- [XII - 40](#)
- [XII - 41](#)
- [XII - 42](#)
- [XII - 43](#)
- [XII - 44](#)
- [XII - 45](#)
- [XII - 46](#)
- [XII - 47](#)
- [XII - 48](#)
- [XII - 49](#)

[Index](#)

[Glossary](#)

[Detailed Licensing](#)