Science Labs

Introductory Physics Version 3

Introduction:

- Lab 1: Introduction to Science
- Lab 2: General Lab Safety
- Lab 3: Measurements and Uncertainty

Newtonian Mechanics:

- Lab 4: 1-D Kinematics
- Lab 5: 2-D Kinematics and Projectile Motion
- Lab 6: Newton's Laws
- Lab 7: Friction
- Lab 8: Circular Motion
- Lab 9: Gravity
- Lab 10: Conservation of Energy
- Lab 11: Conservation of Momentum
- Lab 12: Center of Mass
- Lab 13: Buoyant Force and Archimedes Principle

Waves:

Lab 14: Properties of Waves

Introductory Physics Version 3

Heat and Thermodynamics:

Lab 15: Ideal Gas Law Lab 16: Latent Heat and **Specific Heat** Lab 17: First Law of Thermodynamics Lab 18: Second Law of Thermodynamics and Entropy

Electricity:

Lab 19: Electric Charge and Coulomb's Law Lab 20: Electric Field and Potential

Circuits:

Lab 21: Capacitance Lab 22: Resistivity and Ohm's Law

Magnetism:

Lab 23: Magnetic Forces and Fields

Light and Optics:

Lab 24: Snell's Law and Total Sciencel 005 Internal Reflection Lab 25: Interference Lab 26: Geometric Optics, Ray Tracing, and Image Formation

Appendix: Good Lab Techniques