

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

ADAPT Lessons: Physics

ADAPT Program: Lesson Plans

1988

A Semester of Physics Laboratories by a Variety of Physicists

Robert G. Fuller

University of Nebraska-Lincoln, rfuller@neb.rr.com

Follow this and additional works at: <https://digitalcommons.unl.edu/adaptlessonsphysics>



Part of the [Curriculum and Instruction Commons](#), and the [Science and Mathematics Education Commons](#)

Fuller, Robert G., "A Semester of Physics Laboratories by a Variety of Physicists" (1988). *ADAPT Lessons: Physics*. 3.

<https://digitalcommons.unl.edu/adaptlessonsphysics/3>

This Learning Object is brought to you for free and open access by the ADAPT Program: Lesson Plans at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in ADAPT Lessons: Physics by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

ADAPT Laboratory Sequence

Seq. No.	Title	Physics and Reasoning Concepts
1	International Trade	Metric System, Units Conversions
2	The Planet Puzzle	Density, Ratio Reasoning
3	What Were They Doing? Finding Patterns in Numbers	Classification, Cartesian Graphs, Linear Functions
4	Finding Relationships	Linear Functions, Graphical Analysis
5	Working with Triangles	Ratio Reasoning, Trig. function definitions
6	Induction	Linear Functions, Graphical Analysis
7	Predictability, Measurements & Uncertainties	Error Analysis, Histograms, Linear functions
8	Finding More of Nature's Rules A Variety of Physical Systems	Power Law Functions, Periodic function
9	Four Different Systems	Log-Log Graphs, $y = Ax^m$ functions
10	Investigations in Optics	Log-Log Graphs, Inverse Square Law, Geometrical Optics
11	Radiation	Semi-Log Graphs, Exponential Functions
12	Reasoning Laboratory: The Puzzle Video	Karplus film, Development of Reasoning, Equal Arm Balance
13	The Intensity of a Light Bulb, The Effects of Blue Filters, The Hitching Post, Rebounding Cart	Exponential Functions, Semi-Log Graphs
14	Newton's Law of Cooling	Exponential Functions, Semi-Log Graphs