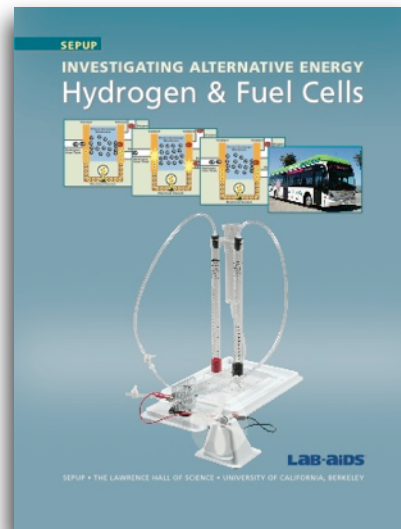


South Carolina

Correlations to SEPUP's *Investigating Alternative Energy: Hydrogen & Fuel Cells*

Investigating Alternative Energy: Hydrogen & Fuel Cells was developed by SEPUP at The Lawrence Hall of Science, and is published by, and available exclusively from, LAB-AIDS, Inc. This document is intended to show selected locations in the *Hydrogen & Fuel Cells* module that support the South Carolina State Department of Education standards for high school science. It is not an exhaustive list; other locations may exist that are not listed here.



For more information about this correlation or for questions about the module, please contact:

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Chemistry

Standard C-4: The student will demonstrate an understanding of the types, the causes, and the effects of chemical reactions.

Performance Indicator Descriptor	Location in Module	Where Assessed
C-4.1 Analyze and balance equations for simple synthesis, decomposition, single replacement, double replacement, and combustion reactions.	Activities 2, 3, and 4	Activity 2, Analysis #1b; Activity 3, Pre-Lab #1a; Activity 4, Procedure Part A
C-4.7 Summarize the oxidation and reduction processes (including oxidizing and reducing agents).	Activity 4	Activity 4, Procedure Parts A and B

Physics

Standard P-3: The student will demonstrate an understanding of the conservation, transfer, and transformation of mechanical energy.

Performance Indicator Descriptor	Location in Module	Where Assessed
P-3.3 Explain, both conceptually and quantitatively, how energy can transfer from one system to another (including work, power, and efficiency).	Activities 3 and 5	Throughout Activity 5

Standard P-4: The student will demonstrate an understanding of the properties of electricity and magnetism and the relationships between them.

Performance Indicator Descriptor	Location in Module	Where Assessed
P-4.7 Carry out calculations for electric power and electric energy for circuits.	Activity 5	Procedure and Student Sheet 5.1