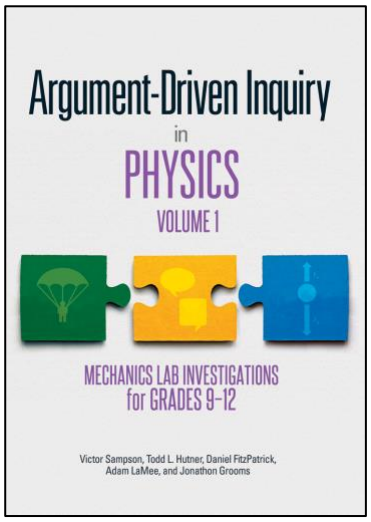
Argument-Driven Inquiry in Physics, Volume 1: Mechanics Lab Investigations for Grades 9–12

Author(s): Victor Sampson, Todd L. Hutner, Daniel FitzPatrick, Adam LaMee & Jonathon Grooms

Date Available:	January 2019
ISBN:	978 1 76056 704 0
Code/SKU:	NST6704
RRP:	$69.95
Format/Page No.:	A4, 590 pages
Year Level:	9–12, Teachers and Administrators
Focus Area:	Activities and Exercises, Classroom Practice and Direct Instruction, Inquiry Learning
Key Learning Area:	Science



Summary

Are you interested in using argument-driven inquiry for high school lab instruction but just aren't sure how to do it? *Argument-Driven Inquiry in Physics, Volume 1* focuses on mechanics and will provide you with the information and instructional materials you need to start using this method right away. The book is a one-stop source of expertise, advice and investigations to help physics students work like scientists.

The book is divided into two basic parts:

1. An introduction to the stages of argument-driven inquiry – from question identification, data analysis, and argument development and evaluation to double-blind peer review and report revision.
2. A well-organised series of 23 field-tested labs designed to be much more authentic for instruction than traditional laboratory activities. The labs in this volume cover a variety of topics related to mechanics, including forces and interactions, energy, work and power. You can use the introduction labs to acquaint students with new content or the application labs to explore the use of a theory, law or unifying concept.

The authors also wrote the NSTA Press books for argument-driven inquiry in biology, chemistry, life science and physical science. These veteran teachers understand your time constraints, so they designed this book with easy-to-use, reproducible student pages, teacher notes and checkout questions. The labs also support today's standards and will help your students learn science practices, crosscutting concepts and disciplinary core ideas.

Many of today's high school teachers – like you – are seeking new ways to engage students in scientific practices and help students learn more from lab activities. *Argument-Driven Inquiry in Physics, Volume 1* does all of this while also giving students the chance to practise reading, writing, speaking and using maths in the context of science.

Other Resources

- *Student Lab Manual for Argument-Driven Inquiry in Physics, Volume 1: Mechanics Lab Investigations for Grades 9–12* (NST7606)