



Ranking Task Exercises in Physics

Indicates a research-demonstrated benefit

Overview

Exercises in which students rank variations of a physical situation on the basis of a specified physical quantity and explain their reasoning.



Type of Method

Curriculum supplement



Level

Designed for: Intro College Calculus-based , Intro College Algebra-based

Can be adapted for: Teacher Prep Course, Teacher Professional Development, High School, Intro College Conceptual



Setting

Designed for: Lecture - Small (<30 students) , Lecture - Large (30+ students)

Can be adapted for: Recitation/Discussion Session, Homework, Studio



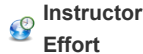
Coverage

Many topics with less depth



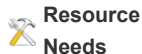
Topics

Mechanics, Electricity / Magnetism, Waves / Optics, Thermal / Statistical, Astronomy



Instructor Effort

Low



Resource Needs

Cost for students



Skills

Designed for: Conceptual understanding



Research Validation

Based on research into: theories of how students learn , student ideas about specific topics



Compatible Methods

[Peer Instruction](#), [PhET](#), [UW Tutorials](#), [JiTT](#), [ILDs](#), [CGPS](#), [Physlets](#), [Context-Rich Problems](#), [RealTime Physics](#), [TIPERs](#), [ABP Tutorials](#), [SCALE-UP](#), [OSP](#), [SDI Labs](#), [OST Tutorials](#), [Thinking Problems](#), [Workbook for Introductory Physics](#), [LA Program](#), [CAE TPS](#), [MBL](#), [CPU](#), [SCL](#), [TEFA](#), [Tools for Scientific Thinking](#), [M&I](#), [Tutorials](#), [Clickers](#), [Responsive Teaching](#)



Similar Methods

[TIPERs](#), [Thinking Problems](#), [Astro Ranking Tasks](#)



Developer(s)

Thomas O'Kuma, David P. Maloney, Curtis Hieggelke



Website

<https://www.pearsonhighered.com/product/O-Kuma-Ranking-Task-Exercises-in-Physics-Student-Edition/9780131448513.htm>

Teaching materials

Ranking Task Exercises in Physics come in a book published by Pearson. You can order them from [Pearson](#) or from [Amazon](#).