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.htr

Teaching materials

Ranking Task Exercises in Physics come in a book published by Pearson. You can order them from Pearson or from Amazon.