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 Indicates a research-demonstrated benefit

### Overview

Guided-inquiry worksheet activities to help students develop a better understanding of upper-division thermodynamics and statistical mechanics.

 <b>Type of Method</b>	Curriculum supplement, Tutorials
 <b>Level</b>	<b>Designed for:</b> Intermediate  , Upper-level Undergraduate  <b>Can be adapted for:</b> Intro College Calculus-based, Intro College Algebra-based
 <b>Setting</b>	<b>Designed for:</b> Lecture - Small (<30 students)  , Recitation/Discussion Session 
 <b>Coverage</b>	Many topics with less depth
 <b>Topics</b>	Thermal / Statistical
 <b>Instructor Effort</b>	Medium
 <b>Skills</b>	<b>Designed for:</b> Conceptual understanding  <b>Can be adapted for:</b> Problem-solving skills
 <b>Research Validation</b>	<b>Based on research into:</b> student ideas about specific topics  <b>Demonstrated to improve:</b> conceptual understanding  <b>Studied using:</b> student interviews  , research at multiple institutions 
 <b>Compatible Methods</b>	<a href="#">Peer Instruction</a> , <a href="#">PhET</a> , <a href="#">JiTT</a> , <a href="#">CGPS</a> , <a href="#">Physlets</a> , <a href="#">SCALE-UP</a> , <a href="#">OSP</a> , <a href="#">LA Program</a> , <a href="#">CAE TPS</a> , <a href="#">Paradigms</a> , <a href="#">Tutorials</a> , <a href="#">Clickers</a>
 <b>Similar Methods</b>	<a href="#">UW Tutorials</a> , <a href="#">ABP Tutorials</a> , <a href="#">OST Tutorials</a> , <a href="#">Lecture-Tutorials</a> , <a href="#">QuILTs</a> , <a href="#">Mechanics Tutorials</a> , <a href="#">Tutorials</a>
 <b>Developer(s)</b>	John Thompson, Michael Loverude, David Meltzer, Warren Christensen, Don Mountcastle
 <b>Resources</b>	For more information and to access the tutorials, email Mike Loverude at <a href="mailto:mloverude@fullerton.edu">mloverude@fullerton.edu</a> .

