

Mechanical Advantages of Levers		Grade 8: Systems in Action	
Curriculum Connections		Topic	Structures and Mechanisms
		Fundamental	Systems and
		Concepts	Interactions
Description Learn about the three classes of lever and investigate how they help us do work by experimenting with your own levers at home.			
Big Ideas	Overall Expectations		
Systems are designed to accomplish tasks	3. demonstrate an understanding of different types of systems and the factors that contribute to their safe and efficient operation		

Specific Expectations

- **3.4** compare, using examples, the scientific definition with the everyday use of the terms work, force, energy, and efficiency
- **3.6** calculate the mechanical advantage needed without a simple machine divided by force needed with a simple machine of various mechanical systems