

**Mansfield Independent School District
Grade: 7**

Instructional Unit: Physics and Energy				
TEKS	TAKS Objective	Concept/Skill Taught		
7.6 a-c 7.8 a-b	The student will demonstrate an understanding of motion, forces, and energy.	<p><u>Force and Motion:</u> Simple machines (pulleys and levers) Newton's first law Relate forces to living organisms including blood flow, emergence of seedlings(developed with living systems) Relate forces to rotation and revolution of earth around the sun causing changes in season and length of day (developed in depth in Earth Science)</p> <p><u>Energy:</u> Potential and kinetic energy in everyday life Transfer of radiant energy into chemical energy through photosynthesis.</p>		
Language of Instruction				
acceleration	force	gravity	inertia	kinetic energy
potential energy	lever	pulley	simple machine	

Suggested Labs		
Newtonian Adventure-TA Howard	Gumball Machine-TA Howard	Roller Coasters for ACCEL-TA Howard
Soaring Straws Lab	Pulley Lab	Rocket Lab
Catapult Lab	Edheads.com	Seesaw Science