

Physical Science Honors: Science Performance Rating Scale

Mechanical Energy

Big Idea: Energy Transfer & Transformations		D.o.K.: MODERATE
Benchmark: SC.6.P.11.1 – Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa.		
Benchmark: SC.9.12.P.10.6 – Create and interpret potential energy diagrams, for example: chemical reactions, orbits around a central body, motion of a pendulum.		
Rating	Indicators	
4	In addition to what the standard says, I can: <input type="checkbox"/> Calculate the gravitational potential energy and/or the kinetic energy of an object <input type="checkbox"/> Teach someone else to perform these tasks	
3	Without any major errors or omissions, I can: <input type="checkbox"/> Differentiate between potential and kinetic energy <input type="checkbox"/> Identify situations where one is transformed into the other <input type="checkbox"/> Create and interpret potential energy diagrams <input type="checkbox"/> Perform these tasks independently	
2	I make some major errors and omissions with the more complex ideas and processes included in the standard, but I can perform the simpler ideas and processes in the standard without major errors or omissions such as: <input type="checkbox"/> Identify the definitions of terms such as MECHANICAL ENERGY, KINETIC ENERGY, POTENTIAL ENERGY, VELOCITY, ACCELERATION DUE TO GRAVITY ON EARTH, ENERGY CONVERSIONS, CONSERVATION OF ENERGY <input type="checkbox"/> Classify potential and kinetic energy as types of mechanical energy	
1	With help, I can demonstrate partial mastery of the simpler content and skills included in the standard.	
0	Even with help, I demonstrate no understanding or skill related to this standard.	

Monitoring Progress toward the Learning Goal

Components of Learning Goal for SC.9.12.P.10.6 & SC.6.P.11.1	Before Instruction Self-Rating	During Instruction Self-Rating	After Instruction Self-Rating
I can differentiate between potential and kinetic energy.			
I can identify situations where potential energy is transformed into kinetic energy and vice versa.			
I can create and interpret potential energy diagrams.			

Name: _____
Pd: _____
Ast: _____