

Study Guide
MO Performance Standards 3A.1-4

I can identify and give examples of energy transformations.
I can describe potential energy & kinetic energy, including gravitational potential energy.
I can explain and demonstrate how energy is transferred to or from an object as it moves.
I understand the principles of physics.

Resources:

- **Discovery Education Techbook** <http://www.discoveryeducation.com/?scrlybrkr>
- **Flocabulary Assignments** <https://www.flocabulary.com/>

Big Ideas:

- *Energy is the ability to do work or cause change*
- *Energy can never be created or destroyed; it only changes forms (Law of Conservation of Energy).*
- *There are many types of energy and these can transform to other types.*
- *Humans don't create energy. We get energy from natural resources.*
- *Humans get energy food, not from sleep.*
- *Remember the forms of energy by "KEEP CT" (Keep Connecticut)*

Define and provide examples of the following terms (Level 7 Basic):

energy-

kinetic energy-

electrical energy-

electromagnetic energy-

potential energy-

chemical energy-

thermal energy-

Law of Conservation of Energy-

Identify Energy Transformations (Proficient/Advanced Levels 9 & 10)

These are only examples. You should be able to identify more examples to be proficient.



Energy transformation
in a fan.



Energy transformation
in an oven.



Energy transformation
in a flashlight.

Describe Energy Transformations (Proficient/Advanced Levels 9 & 10)

Create your own example of energy transformations. Your example must not be one from above and must have three forms of energy (two transformations total). In addition to identifying the energy transformations you must identify what is happening in the example i.e. kicking a soccer ball.