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| **Energy Vocabulary**  **(Refer to Mastery Checklist)**  **Law of Conservation of Energy**        the rule that energy cannot be created or destroyed |

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|  | **chemical energy**        a form of potential energy that is stored in chemical bonds between atoms |

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|  | **elastic potential energy**        the energy of stretched or compressed objects |

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|  | **electrical energy**        the energy of moving electrical charges |

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|  | **electromagnetic energy**        the form of energy that travels through space as waves |

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|  | **energy**   (EHnurjee) *noun*    the ability to do work or cause change |

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|  | **energy transformation**        the process of changing one form of energy into another |

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|  | **gravitational potential energy**        potential energy that depends on the height of an object |

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|  | **heat**   (heet) *noun,verb*    the transfer of energy between two objects that are at different temperatures |

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|  | **kinetic energy**        energy that an object has due to its motion |

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|  | **mechanical energy**        the total energy of motion and position of an object |

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|  | **nuclear energy**        the energy stored in the nucleus of an atom |

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|  | **nuclear fission**        the process in which a large nucleus splits into two smaller nuclei |

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|  | **nuclear fusion**        the process in which two or more nuclei with small masses join together, or fuse, to form a larger nucleus |

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|  | **potential energy**        stored energy that results from the position or shape of an object |

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|  | **power**   (pouur) *noun,verb,adjective*    the rate at which one form of energy is transformed into another |

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|  | **sound energy**        the energy caused by an object's vibrations |

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|  | **thermal energy**        the total energy of the particles that make up an object |

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|  | **work**   (wurk) *noun,verb*    force exerted on an object that causes it to move |

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| **Celsius scale**        the temperature scale on which water freezes at 0 degrees and boils at 100 degrees |

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|  | **Fahrenheit scale**        the temperature scale on which water freezes at 32 degrees and boils at 212 degrees |

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|  | **Kelvin scale**        the temperature scale in which zero is the temperature at which no more energy can be removed from matter; has no negative numbers |

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|  | **absolute zero**    *noun*    the temperature at which no more energy can be removed from matter |

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|  | **boiling**   (boilihNG)     vaporization that takes place inside a liquid as well as on the surface |

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|  | **condensation**   (konduhnsayshuhn)     the change from a gas to a liquid |

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|  | **conduction**   (kuhnduhkshuhn) *noun*    the transfer of heat from one particle of matter to another |

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|  | **conductor**   (kuhnduhktur) *noun*    a material that conducts heat well |

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|  | **convection**   (kuhnvEHkshuhn) *noun*    the transfer of heat by the movement of currents within a fluid |

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|  | **evaporation**   (ihvapurayshuhn) *noun,verb*    the process that takes place when vaporization takes place only on the surface |

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|  | **external combustion engine**        an engine powered by fuel burned outside the engine |

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|  | **freezing**   (freezihNG) *noun,adjective*    the change from the liquid to the solid state |

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|  | **heat**   (heet) *noun,verb*    thermal energy that is transferred from matter at a higher temperature to matter at a lower temperature |

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|  | **heat engine**        device that converts thermal energy into mechanical energy |

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|  | **insulator**   (ihnsuhlaytur) *noun*    a material that does not conduct heat well |

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|  | **internal combustion engine**        an engine that burns fuel inside the cylinders within the engine |

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|  | **melting**   (mEHltihNG) *adjective,noun,verb*    the change from the solid to the liquid state of matter |

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|  | **radiation**   (raydeeayshuhn) *noun*    the transfer of energy by electromagnetic waves |

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|  | **refrigerant**   (rihfrihjuruhnt)     substance that absorbs and releases heat in a cooling system |

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|  | **specific heat**        the amount of heat required to raise the temperature of kilogram of a material by 1 kelvin |

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|  | **temperature**   (tEHmpruhchur) *noun*    a measure of the average energy of motion of the particles of a substance |

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|  | **thermal expansion**        the expansion of matter at a higher temperature to matter at a lower temperature |

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|  | **vaporization**   (vaypuruhzayshuhn)     the change of state from a liquid to a gas |