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| --- | --- |
| Energy | Potential Energy |
| Kinetic Energy | Forms of Energy |
| Chemical | Mechanical |
| Electrical | Sound |
| Light | Thermal |

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| stored energy  http://www.cmmap.org/images/learn/modeling/pe.jpg | ability to do work (move or change matter)  http://www.energy4me.org/blog/wp-content/uploads/icon_squared.jpg |
| chemical, mechanical, electrical, sound, light, thermal, & solar  http://www.energy4me.org/blog/wp-content/uploads/icon_squared.jpg | energy of motion  http://www.sciencelearn.org.nz/var/sciencelearn/storage/images/science-stories/harnessing-the-sun/sci-media/images/potential-and-kinetic-energy/255523-1-eng-NZ/Potential-and-kinetic-energy.jpg |
| moves objects  https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcQ8y28hZ58w376Fn52eZ-PMNTzULRGQmaP4GA01tbzPbeONmW7Vgx_kHS2o | stores energy in molecules/bonds  http://www.phschool.com/science/biology_place/biocoach/images/photosynth/photo1.gif |
| vibrations  http://ykonline.yksd.com/distanceedcourses/Courses09/PhysicalScience/Lessons/FourthQuarter/Chapter10/Lesson2/01SoundEnergy.gif | moves electrons through circuit waves  http://sullivan.sbcisd.net/wp-content/uploads/2012/10/plug.jpg |
| produces heat  https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcQWWmeVYyt6Zl7tOv2ynwVZ3n7opx3zIHwaKkPpMhD2RGGwkcAsVuf7Jedx | travels as a wave  https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcTrJ96Yb4OsUHDz6_qZ5L_5MwatNvFsxPfE3kguNVCzjbv1E0yFnnI5LY2e |

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| Solar | Balanced Forces |
| Unbalanced Forces | Friction |
| Gravity | Waves |
| Medium | Amplitude |
| Wavelength | Frequency |

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| opposing forces are equal in size; the speed and/or direction of an object does not change | produced by the Sun; provides most of  the Earth’s energy  http://c1cleantechnicacom.wpengine.netdna-cdn.com/files/2012/04/solar-energy-potential.jpg |
| a force that opposes motion  https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcQ77TCkBs4GrZs_9EVlBduFnUR9QvCMFO2nF877Mj-Ofy7TDqsb-VuIfhVi | opposing forces are not equal in size; the speed and/or direction of an object changes |
| disturbance that transmits energy | a force that pulls objects in the universe towards one another.  http://whitechocolatecat.files.wordpress.com/2010/03/gravity.png |
| maximum distance from the resting =point  http://www.mediacollege.com/audio/images/amplitude.gif | substance (solid, liquid, or gas) through which a wave travels  https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcT768JIrbGI2a81QgaQQkiS200AxsRB_Sk9AajKSwAYt867l8pn51uYvnLy |
| number of wavelengths in a given time period  http://www.qrg.northwestern.edu/projects/vss/docs/media/Communications/frequency.gif | distance between two crests of two troughs.  http://science.hq.nasa.gov/kids/imagers/ems/wave_crest.gif |
| Types of Waves | Mechanical |
| Electromagnetic | Speed |
| Work | Force |
| Law of Conservation of Energy | Electric Energy |
| Chemical Energy (in batteries) | Mechanical Energy (wind) |

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| require a medium, such as  o ocean waves through water  o sound waves through air  o seismic waves through the ground  https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcT9v2bocSKLuh7fv6XU6cvnCrm_us_J6feSZQYJCmUsJK_K5RGWX3JUy94W | mechanical & electromagnetic  http://dev.physicslab.org/img/d38b4fb4-312b-4e12-8f1b-9d1ed46d791e.gif http://www.bigbangcentral.com/images/em_wave.jpg |
| distance ÷ time (*s = d/t*) | waves that do not require a medium, such as:  o Visible light  o Radio waves  o X-rays  http://www.bigbangcentral.com/images/em_wave.jpg |
| mass x acceleration (*F=ma*) | force x distance (W=Fd) |
| light energy (lamp turned on)  http://www.functionart.com/AM/Artists/ZuccaE/MysteryScience9_M.jpg | Energy cannot be created or destroyed, but can be changed from one form to another form  https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcRp2tsnQX75qa8oxO7S3ajkdq4p8kizqEYooNVPz-1wUl_oFSm6kpcn0IV8 |
| electrical energy (by a windmill)  https://encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcT9v2bocSKLuh7fv6XU6cvnCrm_us_J6feSZQYJCmUsJK_K5RGWX3JUy94W | sound (when you turn on a radio)  http://ykonline.yksd.com/distanceedcourses/Courses09/PhysicalScience/Lessons/FourthQuarter/Chapter10/Lesson2/01SoundEnergy.gif |
| Lever | Inclined Plane |
| Pulley | Wheel and Axle |
| Screw | Wedge |
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| Slanting surface that connects a lower level to a higher level so objects can be moved up of down easily. Examples ramp, stairway, slide  http://downloads.clipart.com/21986172.jpg?t=1270604348&h=64033f9acf947764ece36e45d2538830&u=dcarfield | Bar that rests on a fulcrum to lift or move loads. Examples seesaw, shovel, elbow  http://downloads.clipart.com/15311148.jpg?t=1270604107&h=7683a8b6cea7c9f78d2efc5014ce83b5&u=dcarfield |
| Wheel with a rod through its center so both parts move together to roll objects. Examples bicycle, skateboard, car  http://downloads.clipart.com/21348945.jpg?t=1270605724&h=74ae33bdb470e0077551dc26a0750148&u=dcarfield | Grooved when with a rope around it than can move objects up, down, or across. Example flag pole, crane lift  http://downloads.clipart.com/4393475.jpg?t=1270605084&h=e8b832798d12da6c51f06d0ee96251ec&u=dcarfield |
| Object with one or two slanting sides that end in a sharp point that can move objects apart. Example ax, nail  C:\Documents and Settings\almasanchez\Local Settings\Temporary Internet Files\Content.IE5\9NBFGY7I\MC900349371[1].wmf | Inclined plan wrapped around a pole that holds objects together. Example Drill, Jar lid |
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