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Work, Energy, and Machines

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|  |  |  |  |  |  |  |  |  |  | 4S |  |  |  |  |  |  E |  |  |  |  |  |  H |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 5I |  |  | 6M |  E |  C |  H |  A |  N |  I |  C |  A |  L |  A |  D |  V |  A |  N |  T |  A |  G |  E |  |  |
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| **Across****3.** The fixed point at which a lever pivots.**6.** A number that tells how many times a machine multiplies the input force.**7.** The energy that an object has because of the position, condition, or chemical composition of the object.**11.** An inclined plane that is wrapped in a spiral around a cylinder.**12.** The transfer of energy to an object by using a force that causes the object to move in the direction of the force.**14.** The type of pulley that is used on a flag pole is called \_?**15.** The tyoe of pulley that is attached to the object being moved is called what?**16.** A see-saw is an example of what class of lever?**18.** The energy of an object that is due to the object's motion.**19.** A simple machine that is made of a wheel connected to a smaller cylindrical object.**21.** A simple machine that has a grooved wheel that holds a rope or cable.**22.** The ability to do work. | **Down****1.** A quantity, usually expressed as a percentage, that measures the ratio of work output to work input in a machine.**2.** The sum of an object's kinetic energy and potential energy due to gravity.**4.** A stapler is an example of what class of lever?**5.** A simple machine that is a straight, slanted surface. (2 words)**8.** A set of pulleys that multiplies the input force by 4 is called what?**9.** The rate at which work is done.**10.** A simple machine that has a bar that pivots at a fixed point.**13.** A device that helps do work by changing the magnitude and or direction of an applied force.**17.** A softball bat is an example of what class of lever?**20.** A pair of inclined planes that move. |