

Name: _____

Science: _____

VOCABULARY REVIEW SHEET

Simple Machine	Types of machines that do work with one movement. There are six classes (types) of simple machines which belong to one of two families – the inclined plane family and lever family.
Inclined Plane	A sloping surface that helps us move a load by applying an effort force.
Wedge	A simple machine that helps us split things apart.
Screw	An inclined plane wrapped around a rod.
Effort force	A push or pull capable of causing an object to move, slow down, or change direction.
Distance	The greater the distance the less effort force is needed. The space the object moves.

Lever	A straight rod that pivots on a fulcrum and helps us move a load by applying an effort force.
Work	The amount of effort applied to move something over a distance. Force X Distance = Work
Mechanical Advantage	The amount of effort saved when using a simple or compound machine. The number of times your effort force is multiplied by a machine.
Power	The rate at which work is done, which means how fast work is done. Power = Work Divided by Time
Resistance Force/Load	The weight of the object you are moving with a simple machine.
Friction	A force that opposes or resists motion and makes work harder.
Energy	The ability to do work Potential Energy is energy that is stored. Kinetic Energy is energy that is in motion.

Wheel and axle	Two circular objects, or a wheel and rod that are connected and rotate together.
Pulley	A wheel that has a groove around the outside edge that helps us lift a heavy object.
Efficiency	<p><u>The amount of work you put into a machine compared to the amount of work you get out of a machine.</u></p> <p>Comparison of work input to work output.</p> <p>Formula= $\frac{\text{output work}}{\text{Input work}} \times 100\%$</p>
MA formula for Inclined Plane	MA= $\frac{\text{length}}{\text{height}}$
MA formula for Wedge	MA= $\frac{\text{length}}{\text{thickness}}$
MA formula for Screw	MA= $\frac{\text{circumference}}{\text{pitch}}$
MA formula for Lever	MA= $\frac{\text{distance from effort to fulcrum}}{\text{distance from load to fulcrum}}$
MA formula for Wheel and Axle	MA= $\frac{\text{radius of wheel}}{\text{Radius of axle}}$
MA formula for Pulley	MA= number of strands

