

Models and Designs

Black Box- Any system that cannot be directly observed or understood.

Circuit- A path on which electricity travels.

Conceptual Model- A way to explain how something works in words, drawings, or numbers.

Design- A plan or process for building something.

Engineering- Using Math and Science to design and build things that solve a problem.

Force- A push or pull of an object.

Friction- The force that keeps this from moving easily.

Input- What goes into a machine such as power or energy.

Lever- A simple machine that can be used to lift a weight. It has a fulcrum, which can be located in the center, near the end, or at the end.

Model- A way to explain how something is built or how it works.

Motion- A change in position; movement.

Output- The act or process of making something move or work.

Physical Model- A 3-D object built to show how something works.

Simple Machine- A machine with few or no moving parts that use energy to make it work easier.

Variable- A factor that can be changed in an experiment and may change the results.

Wheel and Axle- A simple machine with a wheel and a rod inserted through the middle that work together to make work easier.