Simple Machines

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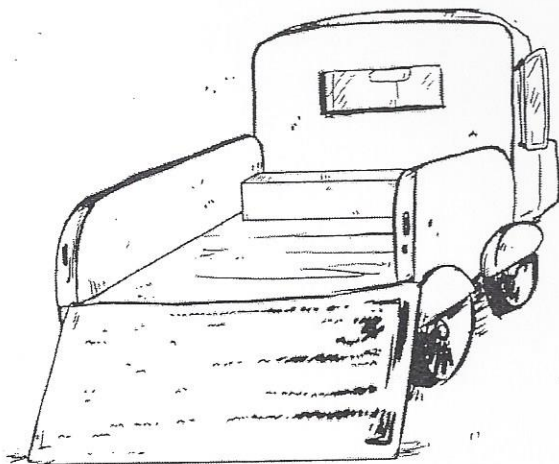
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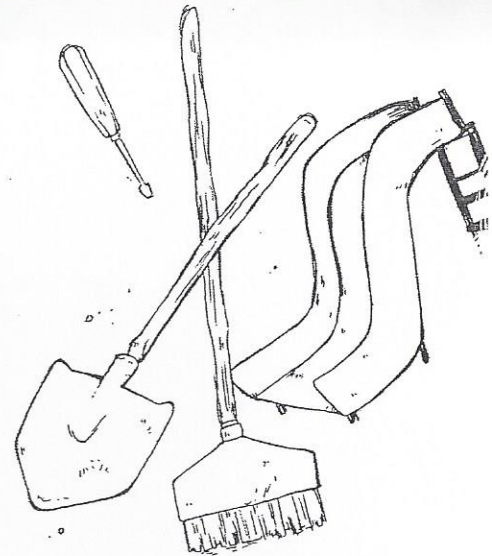
①

Machines are objects that make it easier for people to do work. Not all machines have lots of parts or motors.

Simple machines have only one or two main parts. A shovel, a screwdriver, a knife, a broom, and even a slide on the playground are all simple machines.

Let's learn about the six types of simple machines.

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②

An inclined plane makes moving and lifting things easier. It is a flat, slanted surface that works like a ramp.
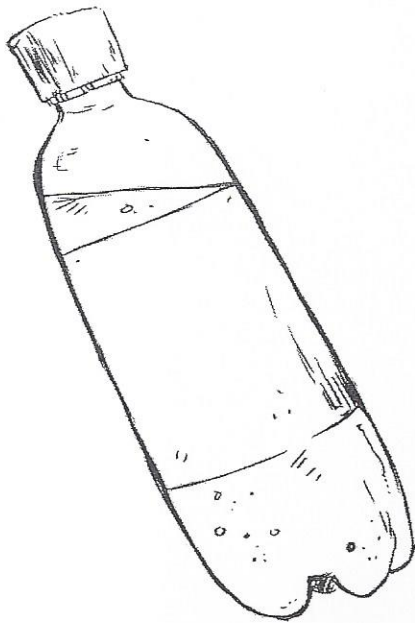
Have you ever seen someone load heavy items into the back of a large truck? They may have used a ramp, or inclined plane, to load the truck more easily.

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③

A wedge is a pair of inclined planes attached back-to-back. A wedge is used to force things apart.
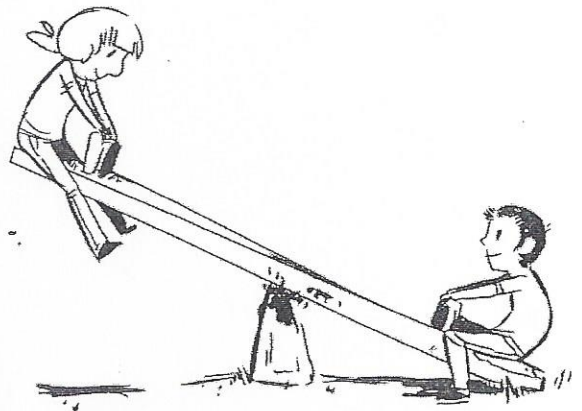
Have you ever seen someone chop wood with an ax? The head of an ax is a wedge.

④

A screw is a spiral wrapped around a center post. When you turn it, it can lift objects or hold two objects together.
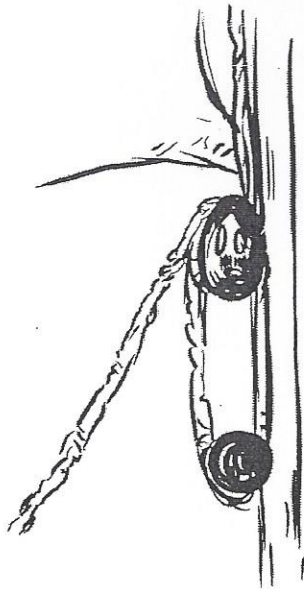
Have you ever opened a bottle of water? When you turn the cap one way, it opens. If you turn it the other way, it seals the bottle shut. The cap is a screw.

⑤

A lever is a bar that pivots or turns on a fixed point. The fixed point is called the fulcrum.

Have you ever played on a seesaw? The seesaw is a lever. The support in the middle is the fulcrum.

⑥

A pulley is a wheel that is used with a cord or rope. When you pull it downward, the other end lifts upward.

Have you ever seen someone hoist a flag up a flagpole? The flag is attached to a rope. At the top of the flagpole is a pulley. When you pull the rope downward, the flag rises up the pole.

⑦
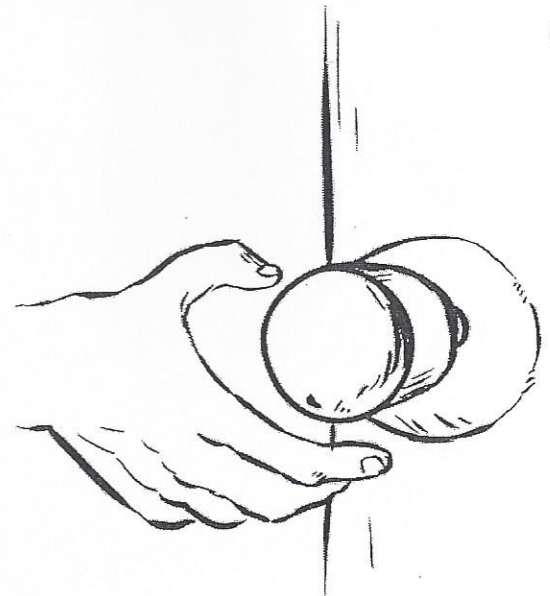
A wheel and axel is made up of a wheel with a rod attached to it. When the wheel is turned, it turns the axle with it.

Have you ever turned a round doorknob to open a door? When you turn a doorknob, you are using a wheel and axle. The knob is a wheel. The rod that it is attached to is an axle.