

A SCREW SIMPLE MACHINE:

An inclined plane wrapped around a central rod



Spiral parking garage ramp



Spiral staircase



Try it out:

Cut a triangle of paper and mark the "ramp" side of the triangle. Roll the paper up around a pencil, and it becomes a screw. If the ramp was not wrapped around in a circular pattern, it would take up a lot more room.

A screw or bolt also represents a screw simple machine

A screw takes rotational motion and turns it into vertical motion. When you turn a screw, it moves down or up, depending on which way you turn.

Try it out: play with a nut moving up and down a bolt.



Screws hold things together more tightly than plain nails with smooth sides.

A screw can move things:

An Archimedes screw can lift water up hill – one of the earliest water pump mechanisms.

A grain auger is used to lift grain from trucks into grain silos.

When you drill a hole, the drill lifts the cut wood up and out of the hole.