

Castle Construction

Castles were built by wealthy nobles as a safe place to live. They were often constructed in locations that were easy to defend. Castles were built from wood, dirt, and stone. Many had a moat filled with water as an additional defense.

It is amazing that these giant structures were built by using just manpower and a combination of these basic simple machines.

Simple Machines

There are 6 simple machines: the wheel and axle, lever, inclined plane, pulley, wedge, and screw. This Toolbox includes materials and activities for 4 of these. Simple machines are used to transfer force, making work easier.

Simple Machines In Real Life

Wheel & Axle - Door Knob, Car, Bike, Fan

Lever - Catapult, Hammer, Nut cracker, Crowbar, Seesaw, Scissors, Stapler

Inclined Plane - Ramp, Slide

Pulley - Crane, Flagpole, Window Blinds, Drawbridge

Wedge - Ax, Nail, Door Stopper, Scissors, Teeth

Screw - Bottle Cap, Drill, Light Bulb

Wheel & Axle

Moving a Heavy Object - Place a heavy object (like a book) on the floor and try pushing it. Then lay the same object on top of multiple dowels. See how easy it is to push with the dowels rolling underneath.

Make an Axle - Use one of the pickup sticks and two styrofoam balls to make a wheel and axle.