

The Wheel and Axle

The wheel was one of the most important inventions of all time. No one knows when the wheel was invented. But there is evidence that people were using the wheel over 6,000 years ago.

Everyone knows that it is easier to move a round object than a flat object. The wheel cuts down the amount of friction. The wheel and axle work together. They move together. The wheel and axle is like a lever that has been wound up. The large wheel represents the effort arm, while the axle represents the resistance arm.

A steering wheel makes it easy to steer the car. A truck or bus has a larger wheel to help steer the larger vehicle.

A pencil sharpener is a wheel and axle. Turning the crank or handle turns the axle, which has cutting edges in it to shave away the pencil wood.

A doorknob is another common example of a wheel and axle. It is easy to open a door because the door knob is like a wheel with an axle.

A bicycle uses the wheel and axle idea to make pedaling easier. A 10-speed or mountain bike have wheels that are the same size. However, the pedaling advantage comes from pedals that move through a larger circle than the rear tire sprockets.
