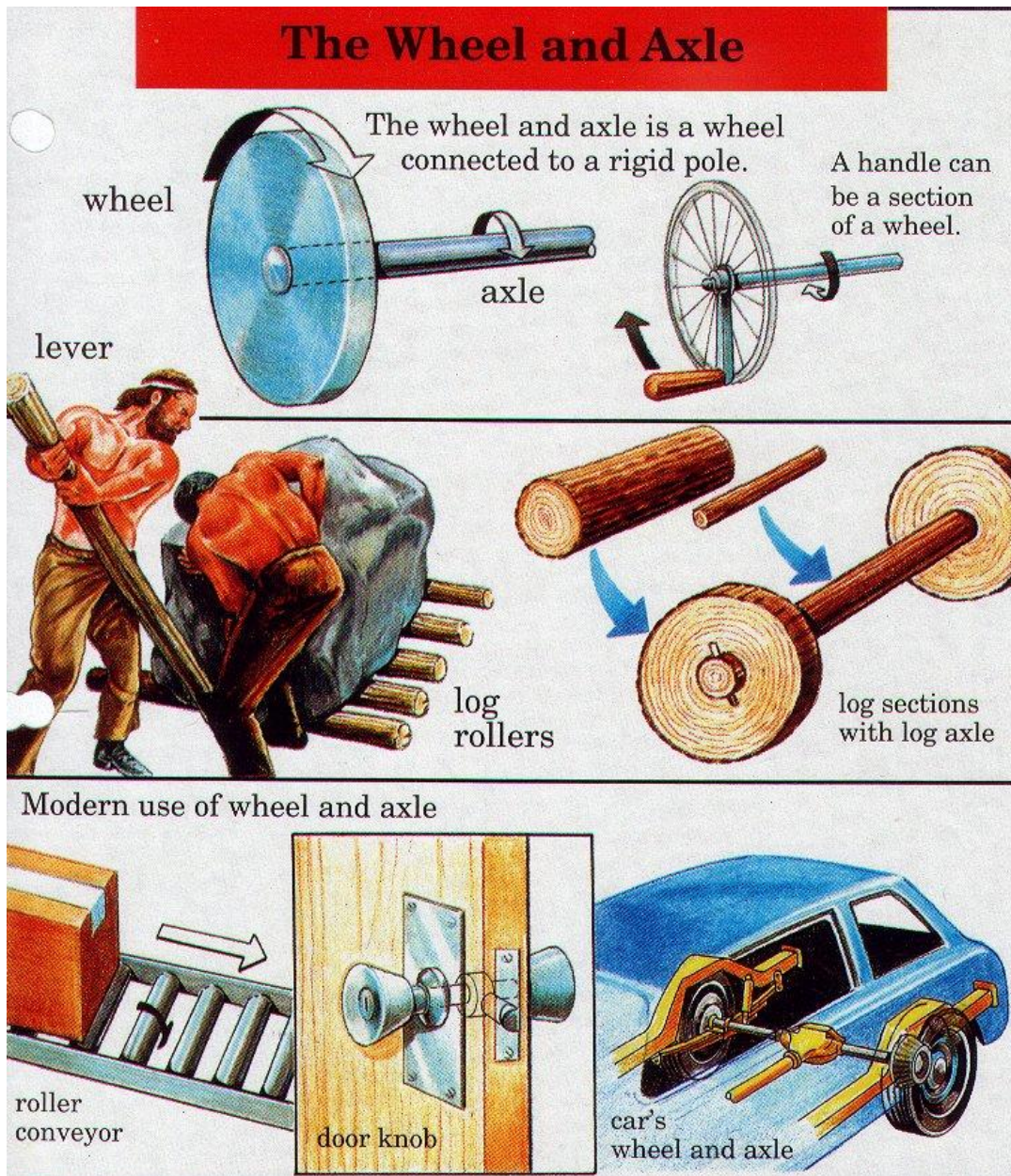


## Wheel and Axle, Gears



1. The Wheel and Axle was first used around 3000 B.C. and is one of the most important inventions in history.
2. The Wheel and Axle is a Wheel connected to a rigid pole.
3. Rollers were the forerunner of the Wheel, several logs placed under heavy objects.
4. The Wheel and Axle is basically a modified Lever, the Center of the Axle serves as a Fulcrum – making the Wheel a Lever that rotates around in a circle.
5. Effort Force is applied to a large Wheel to Turn the Smaller Axle.
6. Samples of Wheel and Axle - Door Knobs, Screwdrivers (the whole screwdriver), Water Faucets, Handle Bars on a Bike, Airplane Propellers, Helicopter Blades, Fan Blades, Wheels on a Car, Wagon, Bike (or anything).
7. Gears are a modified or special Wheel and Axle.
8. A Gear is a Wheel with Teeth along its circumference.
9. Effort is exerted on one of the gears, causing the other gear to turn.
10. In most gears, the larger gear is the Effort Gear turning a much smaller Gear the Resistance.
11. Samples of Gears – Bike Sprockets, Can Opener, Gears in any machine.

