

GEARS

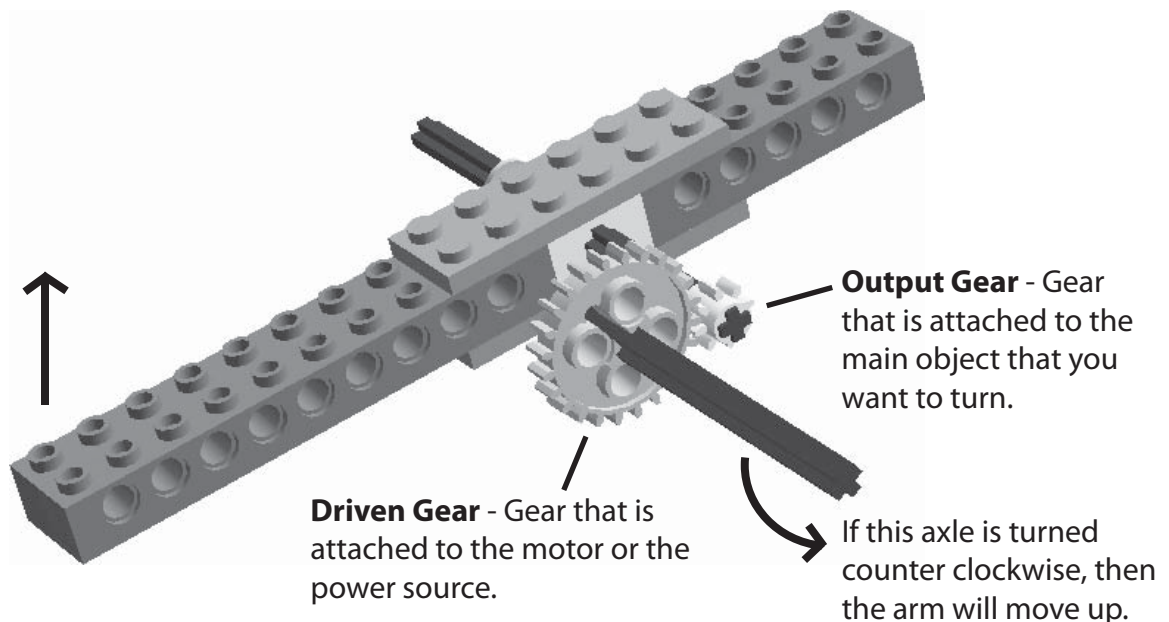
Gears help machines do work. They can make something go faster or slower.

Spur Gear - This is the most common type. It is also known as a straight cut gear as its teeth are "cut straight" across. Different sizes of spur gears can be used together in many different combinations.



Gear Functions

Each gear has a job to do. Here is how gears are used and how they work together. In order for gears to work, their teeth need to be interlocking.



When 2 or more gears are used together, they form something called a gear **transmission**. Depending on the size of the gears and where they are placed, they can make your contraption move slower or faster.

Build a brick launcher

Build a hand powered catapult with gears and a lever that activates the arm. If built correctly, when the lever is pulled down the arm will move faster and will be able to launch your object further!

Challenge 1 - Launch a LEGO brick 10 feet

Challenge 2 - Launch a LEGO brick 15 feet

Challenge 3 - Launch a LEGO brick further than your friends!