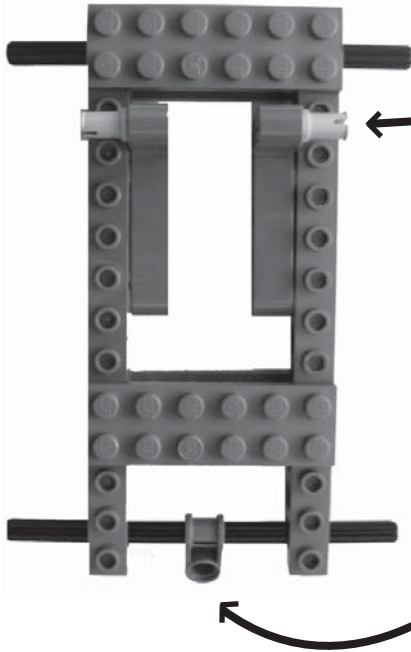


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Race Cars 101: Rubber Band Powered Cars

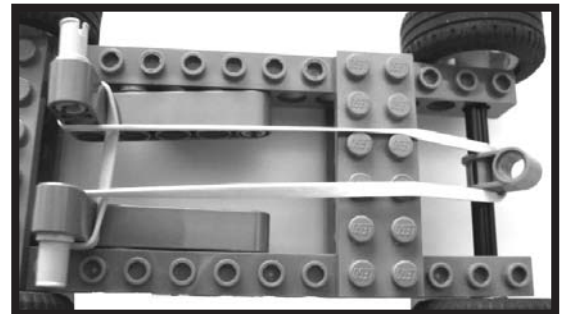
Building the chassis

Rubber band cars can be designed many different ways. Here is one of the simplest ones that you can build. Make sure you know how to build this basic car before building a more complex one.



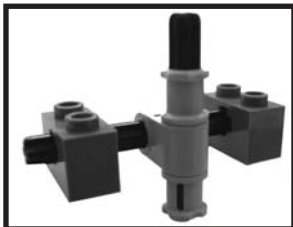
Rubber Band Holders
 These hold the rubber bands in place to the chassis

Rubber Band Axle Holder
 This holds the rubber bands to the axle and is responsible for spinning the axle.

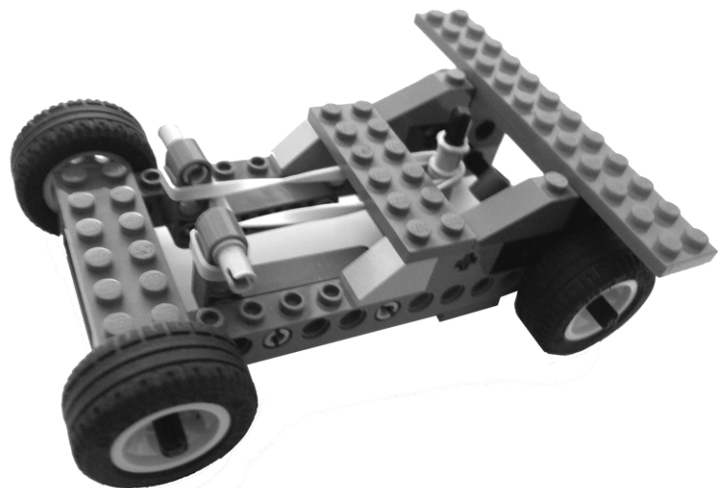
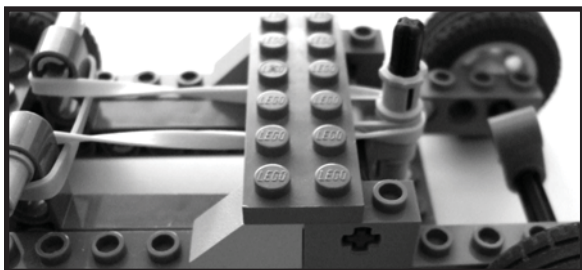


To make the car go, start turning the wheels and wind the rubber band around the axle. Once you let go, the wheels will spin, so make sure you hold onto them until you are ready!

Rubber bands have **"Elastic Potential Energy"** when it is wound around the axle and held in place. This is also known as **stored energy**. Once you let go of the rubber band, elastic potential energy gets turned into **kinetic energy**, and this makes the car move! Kinetic energy is **energy in motion**. Hint: the more elastic potential energy you have, the faster the wheels will spin. But make sure you are able to transfer all that energy into making the car go forward. Too much energy and the wheels might just spin in place!



Optional rubber band stopper
 This prevents the rubber band from coming off the vehicle and makes it easier to put it back around the axle.



Don't forget to add your own engineering style! What kind of different designs can you come up with?