

Challenge 9: Single Motor Racing Vehicle

In a group with two or three members, design a vehicle with a single motor, powered by a *PicoCricket*, that can carry a 1.0 kg weight as fast as possible on a 3 meter course.. You should use one of the gray rectangular motors that does *not* have internal gearing. This will encourage you to experiment with building your own gear trains. It will be helpful to study the handout on *LEGO Gears and Motors* and also the section on gears in *The Art of LEGO Design*.

This is a non-trivial challenge that will require many design iterations on your part. You will have three class sessions to work on this challenge. During the second class there will be a trail run in which you will pit your vehicle against others on the 3 meter course. During the third class the final competitive event will be held. You should document each iteration of your design in your design blog.