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.