Introduction

This activity has been designed to challenge your group's ability to solve real world type problems. Over the past few weeks you have been working with electrical circuit designs and wiring layouts. Recently you have explored how different gear systems are used to increase the power or speed of an electric motor. This activity will demonstrate your group's skill at applying this new information and technology in developing a solution to a problem.



Problem Statement:

A construction company has come to you with a problem they would like you to solve. The workers are fixing a bridge on the Long Island Expressway. The work is very dangerous because of the traffic. The company needs your team, specialists in technology, to construct a model of a warning light they might place on the roadway to warn traffic, and protect their workers. This device must meet several design requirements:

- **It must have a flashing light to warn motorists that there is construction work ahead.**
- **The device must be able to stand on its own.**
- **The device must be easily movable from one job site to another.**
- **The light must be able to turn on and off with a switch.**
- **The light and motor must be on different power sources.**