Engineering Design Toolkit Instructional Guide - Car Activity
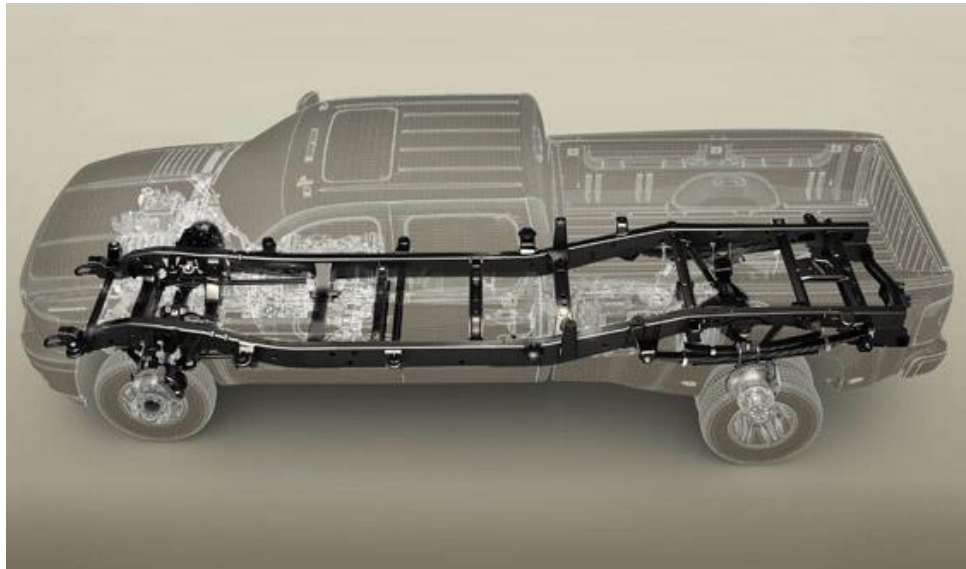

Figure 1: 2011 Chevrolet silverado frame.

Problem Description

Abraham lives in Corvallis. He wants to visit his grandmother in Portland. He cannot get to Portland on time without a car. It's key that Abraham stays on the highway the whole time to ensure that he gets there on time. Use the provided materials to build a car that can drive straight and roll far enough to get to Portland. The car can be pushed, but cannot be touched after release. The car must be able to roll at least 10 ft. The highway is only 3 ft. wide and the car must stay within this limits.

Figure 2: Materials needed for car activity

Engineering Design Process
Use the engineering design process below to help your team design and build a car that will allow Abraham to drive on the highway.
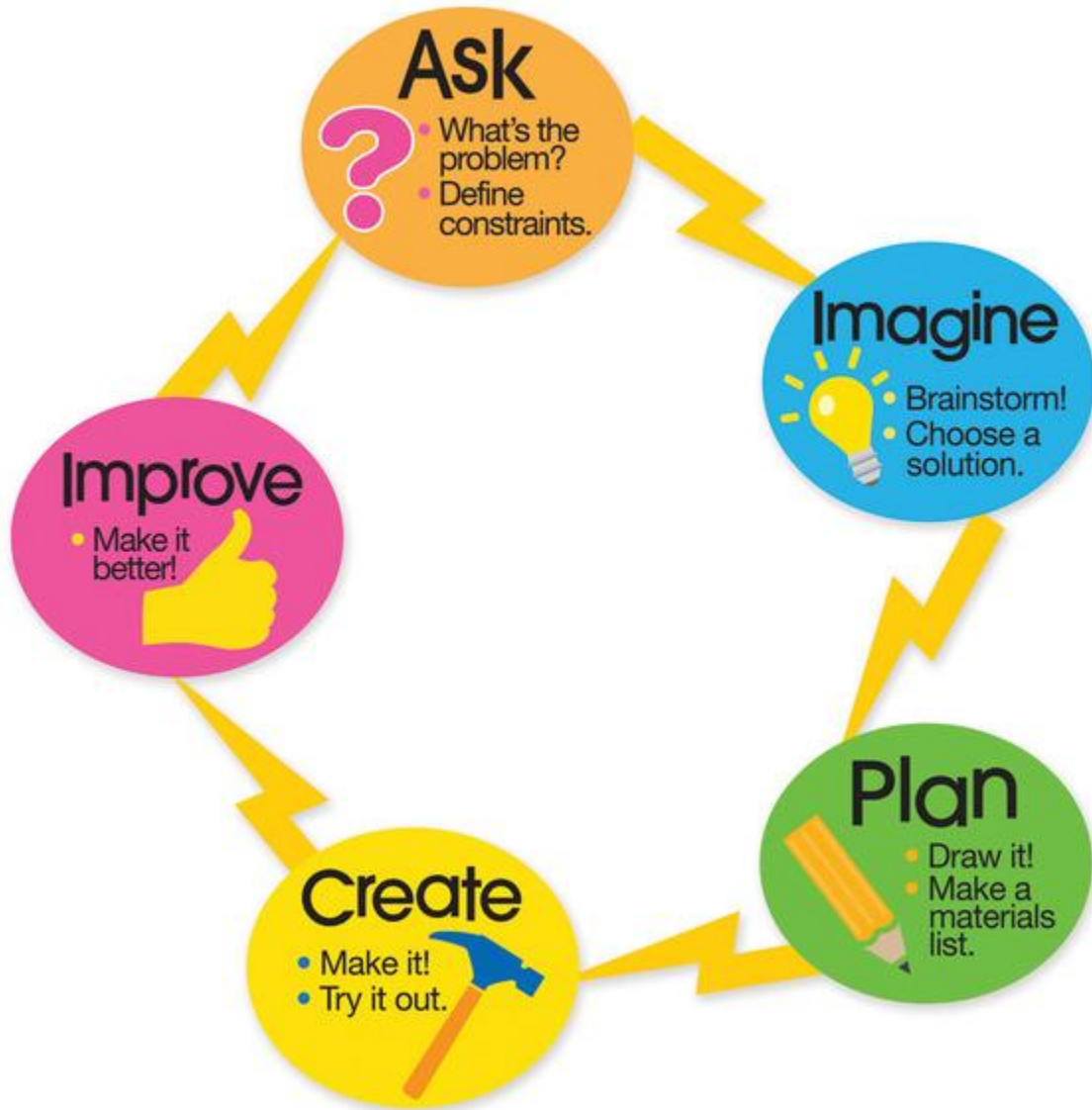

Figure 3: STEM Engineering Design Process
Source: http://shop.dowlingmagnets.com/p/engineering-design-process-magnets