

College & Career Awareness
Engineering, Skilled & Technical Trade Pathway
Cycle: Interdependence



Overview: Engineers use the design process to save time, money, and keep all safe. Using this process of **asking, imagining, planning, creating, & improving** we are going to build a car that runs on solar energy.

Essential question: How do troubleshooting, invention, innovation, and experimentation play a role in solving problems?

Terms to use: axle bushings, chassis, parallel, gear, flashing, burrs, pinion gear, motor shaft, motor mount, motor connection terminal, adhesive tab

Checklist

_____ *Record* input

_____ *Build* a solar car in teams of 4

_____ *Calculate* acceleration of you solar car by completing the *Speed & Acceleration Data Sheet*

_____ *Engineer* your solar car to either have:

Four wheel drive **-or-** two solar panels

_____ In your output record a report that summarizes the design and testing process you went through. Give reasons why you think that design was successful, including any factors that you feel may have contributed to the success or failure of the designs.

Turn in study guide.