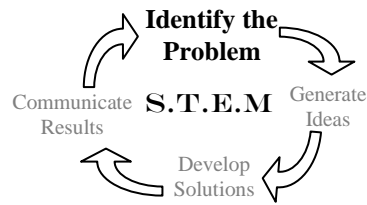


# *Science Technology Engineering and Mathematics*

## THE DESIGN PROCESS



### **Design-folio for the Sudden Impact Challenge RFP IS6-300**

#### **Step 1: Identify the Problem**

1. According to the *Request for Proposal* (RFP), what is the problem?
2. What are the design constraints and other variables that may affect your project?
3. What do you need to learn before you begin generating ideas to solve the problem?
4. What questions do you have about the RFP requirements of the challenge?

# THINKING LIKE A SCIENTIST!



1. Why do scientists use models and prototypes to test ideas?  
(Note: Prototypes are smaller, yet working versions of a larger idea)
2. What are the benefits and limitations of using models?
3. How do the math skills of measurement and computation support science research and engineering design?
4. Which physics concepts are demonstrated by a bumper in a collision?