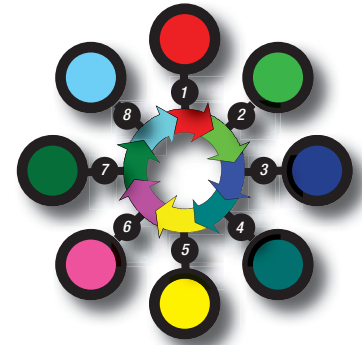


# Design Project

## Aerospace Engineering

AEROSPACE ENGINEERING:  
MARS ROVER



### Using the Design and Engineering Process

Use the steps in the design and engineering process to develop a high quality design.



**Step 1:**

#### **What is the Problem/Opportunity?**

*A rover needs to be developed to conduct research on Mars.*



**Step 2:**

#### **Research and Discovery**

*Check out availability of materials and how to build a highly functional rover.*



**Step 3:**

#### **Brainstorm Ideas**

*List all the ideas that you have found, then look at the pros and cons for each idea, considering each one carefully before making a final decision.*



**Step 4:**

#### **Select a Solution**

*Identify the best solution and move forward with your design.*



**Step 5:**

#### **Develop a Plan**

*Once you have made a decision on which solution you think is best, then put together a good plan for designing and building a custom rover.*



**Step 6:**

#### **Build a Prototype/Model**

*Build a model of your design.*



**Step 7:**

#### **Test the Design**

*Once you build your prototype or model, test your design to make sure it meets all constraints and specifications.*



**Step 8:**

#### **Fix and Redesign**

*If you have identified any problems or design issues, then go back through the design process to make any needed changes or redesigns.*