



# THE ENGINEERING DESIGN PROCESS

Throughout this book you will come across some open-ended STEM CHALLENGES which allow you to problem-solve and find solutions to real world problems using your science, math, engineering, and technology skills. The engineering design process shown below has 5 steps which will help guide your thinking and ability to experiment.

 <b>ASK</b>	<b>IN THIS STEP, YOU WILL BE PRESENTED WITH A REAL-WORLD CHALLENGE</b>
 <b>IMAGINE</b>	<b>IN THIS STEP, YOU WILL BRAINSTORM AND THINK OF MANY DIFFERENT POSSIBLE SOLUTIONS.</b>
 <b>PLAN</b>	<b>IN THIS STEP, YOU WILL DRAW A SKETCH OR DRAFT OF THE IDEA YOU PLAN TO CREATE.</b>
 <b>CREATE</b>	<b>IN THIS STEP, YOU WILL GATHER MATERIALS FROM YOUR TEACHER AND TRY TO BUILD YOUR OWN SOLUTION.</b>
 <b>IMPROVE</b>	<b>IN THIS STEP, YOU WILL IMPROVE YOUR PRODUCT, AND POSSIBLY EVEN START OVER WITH A NEW PLAN IF YOUR FIRST ATTEMPT DID NOT WORK. ENGINEERS DO NOT GIVE UP!</b>