Engineering is all about seeing the world as a complex place where humans use math, technology, and science to develop systems and processes to create solutions to address problems. Students will work to solve problems using the following steps based upon the scope and sequence of the Clever Crazes for Kids facts, questions, activities, and lesson plans.

Number

Steps

- 1 Identify a need or a problem.
- 2 Research your need or problem by finding out all you can. Use as many sources as is feasible (Internet, library, interviews, books, magazines).
- ³ Predict possible solutions to your need or problem using technology, math and science by brainstorming and creating models or rough drafts.
- 4 Refine your possible solutions.
- 5 Select the best possible solution by asking, "Does it meet the need?" or "Does it solve the problem?"
- 6 Build a model or prototype for your need or problem using technology, math and science.
- 7 Test and evaluate your solution by asking, "Does it work?"
- 8 Communicate your solution and get feedback. Create a dialogue about possible impacts of your solution.
- 9 Redesign or tweak your solution based on feedback.
- 10 Throughout this process, you will likely encounter new needs and problems, go back to step 1.