

ENGINEERING DESIGN PROCESS

IMAGINE

Brainstorm solutions to the problem. List all ideas – don't hold back! Discuss and select the best possible solution.

CREATE

Follow the design plan and build the solution.

SHARE

Communicate what was learned. Share the design, data, and conclusions. Present results.

IDENTIFY

Define the problem and how it is affecting life globally, nationally, and locally. Research and consider how others have approached solving the problem. Describe why this problem needs a solution. Determine constraints (e.g., time, space, resources, etc.).

DESIGN

Diagram the solution. Identify the materials needed to build the prototype. Write out the steps to take. Describe the expected outcomes.

TEST & IMPROVE

Test the design and collect quantitative and qualitative data. Discuss results and compare with the expected outcomes. Seek areas of improvement and make changes where needed.

