As a NASA engineer, Lucien Junkin uses the engineering design process to develop complex space exploration vehicles with cutting-edge technology. Thinking like engineers, little Bulldogs can make their own rovers using materials found around the house.

Follow the steps of the engineering design process to build a moon rover for Bully.

**ASK:** What does a rover need?

**RESEARCH:** In its simplest form, a rover consists of a body, two axles and two sets of wheels.

**IMAGINE:** What household items can be used as a rover's body? Its axles? Its wheels? How can they be connected?

**PLAN:** Sketch your design. Gather the items and tools needed to build it. Don’t forget to decorate the rover, so Bully's new ride looks sharp.

**CREATE:** Using the tools and materials, assemble the rover. Copy or cut out the Bully below, so he's ready for the driver's seat. Don't forget to decorate his new ride.

**TEST:** Place Bully at the controls and take him for a spin in his new rover.

**EVALUATE AND IMPROVE:** Did it roll? Travel in a straight line? Could it be faster? Would different materials make it more durable?

The engineering process is never done. Things can always be changed, improved or adapted for different purposes. It’s up to your imagination.

Completing this project with your little Bulldogs? Send a picture of your completed or in-progress project to alumnus@msstate.edu. Be sure to include the names and ages (or graduation year) of the participants, and we might include it in the next issue.