Steps	Your response
 Ask What is the problem you are trying to solve? What simple task will your machine do? 	
Research and imagine What are some possible solutions? Brainstorm your ideas and consider what simple machines it will include.	

Steps	Your response
 Plan Plan a design and create a drawing that includes all materials you may need. Label materials and identify simple machines being used 	
Create	If possible, build your first prototype of your device.

Steps	Your response
Test	If possible, test your device. Record your observations.
	What changes do you need to make? Why?
Improve	Does this solve the problem? How can the design be improved?

Steps	Your response
Communicate Share your device with others in a method of your choice. Create an advertisement for the machine that you created in one of the following methods: • Turn your design into a newspaper advertisement (just like Rube Goldberg used to do!) and explain what purpose it serves with step-by-step instructions of the machine. • Create a poster (in print or digitally) that explains the purpose your machine serves with step-by-step instructions of the machine. • Create an audio recording of yourself that explains the purpose your machine serves with step-by-step instructions of the machine.	Be sure to include: • the purpose or function of your machine (Hint: What does it do?) • the simple machines included in your design • how your machine works (step-by-step)

Steps	Your response
Calculate Calculate the mechanical advantage and work of two of the simple machines that you included.	