

SUBMITTED BY: David Weishaar

STRATEGY NAME: Reverse Engineering Project

PURPOSE/ OBJECTIVES: Students will Reverse Engineer a Mechanical Object using AutoCAD to draw the prints.

MATERIALS NEEDED: Computer with AutoCAD, Micrometers, Vernier Callipers, Mechanical Object

PROCESS: The students will reverse engineer a mechanical object to understand how a object functions. Students will gain experience using measuring tools and the AutoCAD software. By deconstructing the product, student will understand how an object functions.

1. Using measuring tools, students will disassemble the object and precisely measure each part.
2. Students will take the measurements and draw the parts in AutoCAD.
3. Students will create an exploded view, and working drawings of the object.
4. When the drawings are complete, students will identify one change they could make to the object, to make is better.

Pre-Engineering students will have a authentic experience reverse engineering a product. Students will increase their knowledge on what it takes to draw, manufacture, and assemble a product.