

Name: _____ Date: _____ Class: _____

Choosing a Scale Worksheet

1. Measure and record important dimensions of your object. Pick appropriate units and record them. The *dimension column* might include height, length, width, radius, etc. In the *measurement column*, record the measured number. In the *units column* indicate the units of your measurements.

Note: You do not necessarily need to fill in all rows; just make sure you get all the information you need to build an accurate model.

Dimension	Measurement	Units

2. Choose a scale factor and then calculate the scaled dimensions of the object. Do this for two different scale factors that you could potentially use for your project.

Scale factor: _____

Dimension	Original Measurement (indicate units)	Scaled Measurement (indicate units)

Scale factor: _____

Dimension	Original Measurement (indicate units)	Scaled Measurement (indicate units)

3. Consider the scaled measurements you calculated for the two different scale factors and decide which is more reasonable to use for your final project. Explain your logic.

4. **Engineering Drawings:** Now that you have chosen an object and a scale factor for the final project, produce engineering drawings of your object.
- Make at least two different drawings, such as views of different sides, base or top of the object.
 - Do all the drawings on graph paper.
 - Pick a scale for your drawing. Choose a scale so that the object fits on one piece of paper and takes up most of the paper. Example drawing scale: one graph paper square = 1 inch.
 - Include on your drawing your name, drawing title and scale.
 - See the teacher-provided example engineering drawing, which is also reproduced below in smaller scale.

