

Activity 1.3.3 Precision Measuring

Procedure

1. Obtain ten objects from your teacher to measure. For some objects you will measure the thickness, some a diameter, some a depth, so make sure you know what part of the object you are supposed to be measuring.
2. For each object, fill in the name of the object in the column called "Item to be Measured" and describe the measurement (for instance, "Paperclip, thickness". Use the dial calipers to make the measurement and record your reading in the "My Measurement" column of the chart.
3. Compare your measurements with your classmate's measurements. If your answers are not the same, re-measure the object to determine an acceptable measurement and record this measurement

Item to be Measured	My Measurement	Partner's Measurement
Length of the metal bolt		
Diameter of the threaded area of the metal bolt		
Thickness of the metal nut		
Outside width of the metal nut		
Inside diameter of the metal nut		
Thickness of the metal washer		
Inside diameter of the metal washer		
Outside diameter of the metal washer		
Inside diameter of the sprinkler pipe		
Outside diameter of the sprinkler pipe		

Item to be Measured	My Measurement	Partner's Measurement
Height of the 2 x 4 Lego brick		
Width of the 2 x 4 Lego brick		
Length of the 2 x 4 Lego brick		
Outside diameter of a glass marble		
Outside diameter of a table tennis ball		
Outside diameter of a tennis ball		
Outside diameter of a 12-tooth VEX gear		
Outside diameter of a 36-tooth VEX gear		
Width of your thumb		
Width of the fingernail on your little finger		

Conclusion

1. Do you think your dial caliper measures accurately? Explain.