Name _____ Period _____

Lab 1 – Length Measurement Simulations **40 Points**

Introduction

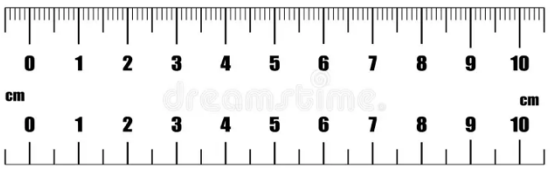
In this lab we will be practicing the measurements of various objects, from lines to boxes to practice both measurements and calculations with measurements.

Prelab Questions

Define *accuracy*	Define *precision*

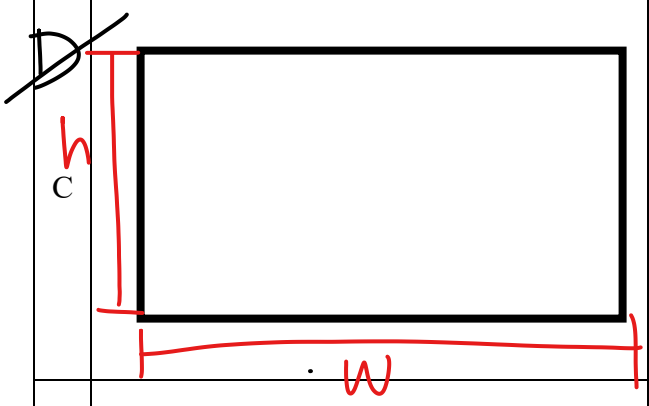
Lab Procedures

1. Measure each objects length using the ruler provided using the cm markings on the ruler.
2. Round each measurement to 0.1cm, round up or down based on the estimated digit on the ruler (±0.01cm)
3. Complete the calculations below the measured values on the ruler.



Lab Measurements

For each box measurement, measure on the outside of the dark black lines.

A		B	
C		D	
E		F	
G		H	

Measurement Data

Write your measurement data here on the data table from your measurements above.

	Measurement Quantity + Unit				Measurement Quantity + Unit			
A Width			cm		B Width			cm
C Height	cm	C Width		cm	D Height	cm	D Width		cm
E Height	cm	E Width		cm	F Height	cm	F Width		cm
G Width			cm		H Width			cm

Measurement Calculations

Write your measurement data here on the data table from your measurements above.

Measurement		Measurement		Answer	Measurement		Measurement		Answer
A		B		A+B	E_{Height}		E_{width}		E_{area}
12.9cm	+	15.2cm	=	28.1cm	same units	x		=	
C_{Height}		C_{width}		C_{area}	F_{Height}		F_{width}		F_{area}
$4.3cm^1$	x	$9.2cm^1$	=	$39.56cm^2$		x	$cm^1 \times cm^1 = cm^{1+1} = cm^2$	=	
D_{Height}		D_{width}		D_{area}	E_{area}		G		Volume E
	x		=		cm^2	x	cm	=	cm^3
C_{area}		D_{area}		Total Area	F_{area}		H		Volume F
cm^2	+	cm^2	=	cm^2		x		=	2+1 = 3
G		H		G+H	Volume E		Volume F		Total Volume
	+		=		cm^3	+	cm^3	=	cm^3

units stay the same