Density Investigation – Red vs. Blue Block

Name: _____ Date: _____

Purpose:

To determine the density of two types of wood and to identify the type of wood by comparing the densities of wood listed in the table.

Materials:

Ruler Calculator Wooden Blocks Electronic Balance

$$D = \frac{m}{V}$$

Procedure:

1. Measure and record the mass of each block on the scale (balance)
2. Determine the volume, in cm^3, by measuring the length, width, and height
3. Calculate the density of each block and identify them

Observations & Results:

	RED Block #_____	**BLUE** Block #_____
Mass		
Length (cm)		
Width (cm)		
Height (cm)		
Volume (= lwh)		

- Be sure to include your units in the volume calculation

Calculations:

Complete the density calculations in the space provided. Show your work and include units. Keep answers to three decimal places. Box your final answer.

RED Block – Density Calculation	**BLUE** Block – Density Calculation

Compare your density values to the ones listed in the table to determine the identity of the wood.

Wood Type	**Density (g/cm^3)**
Balsa	0.12
Cherry	0.433
Walnut	0.593
Southern Pine	0.65
Red Oak	0.673
Sugar Maple	0.689
Birch	0.705
Mahogany	0.705
Ironwood	1.24

Identity of **RED** Block:

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Identity of **BLUE** Block:

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