Lab write ups

Work in groups of 2, submit reports individually

Check-in: equipment list/safety rules

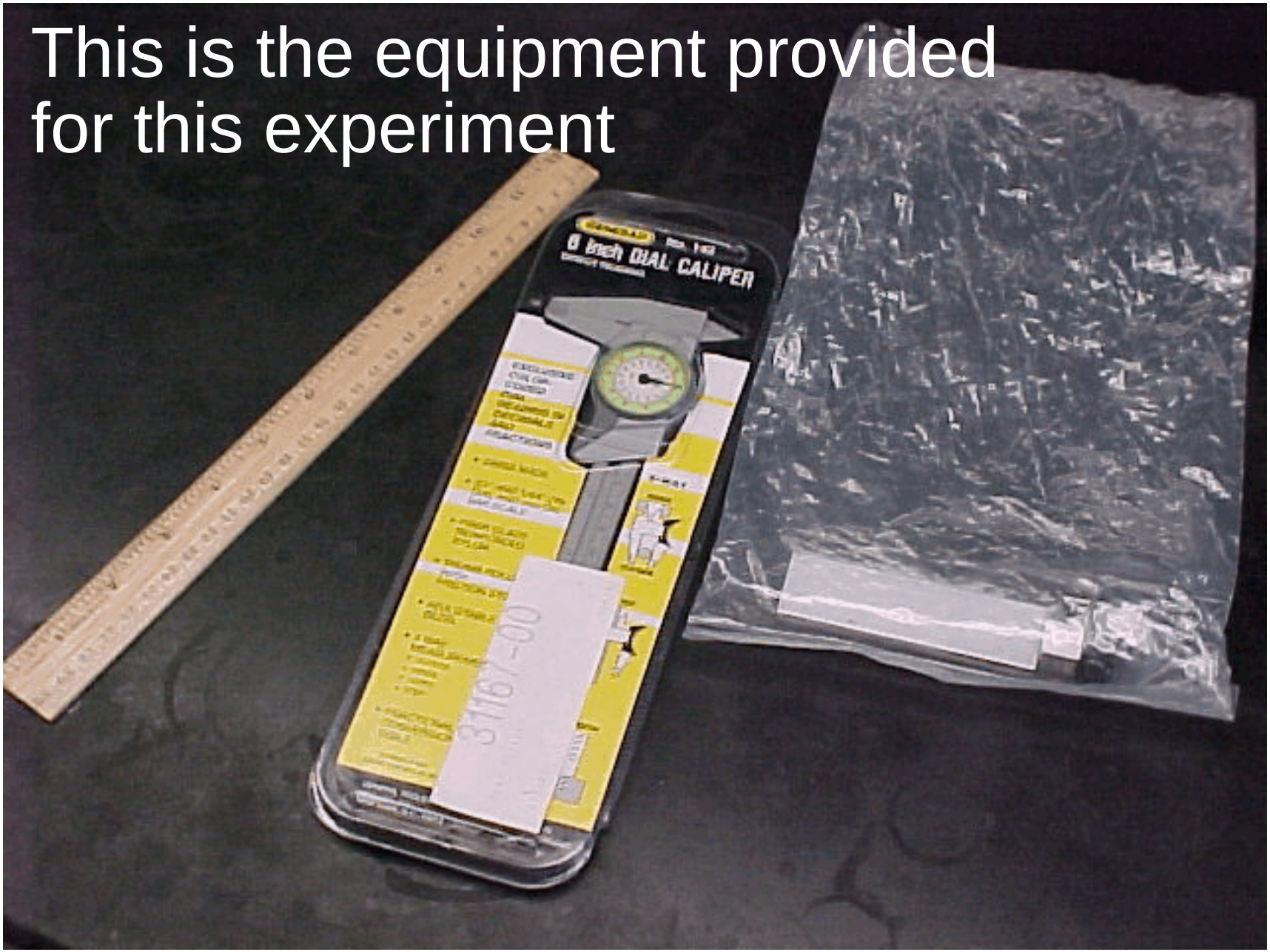
- complete data sheets in lab
- write up labs at home (answer questions/do calculations in spaces provided
- reports due next lab session

#14: Measurements

Do ONLY Parts A and B

Materials

Ruler
Cube/block
Calipers
Electronic Balance

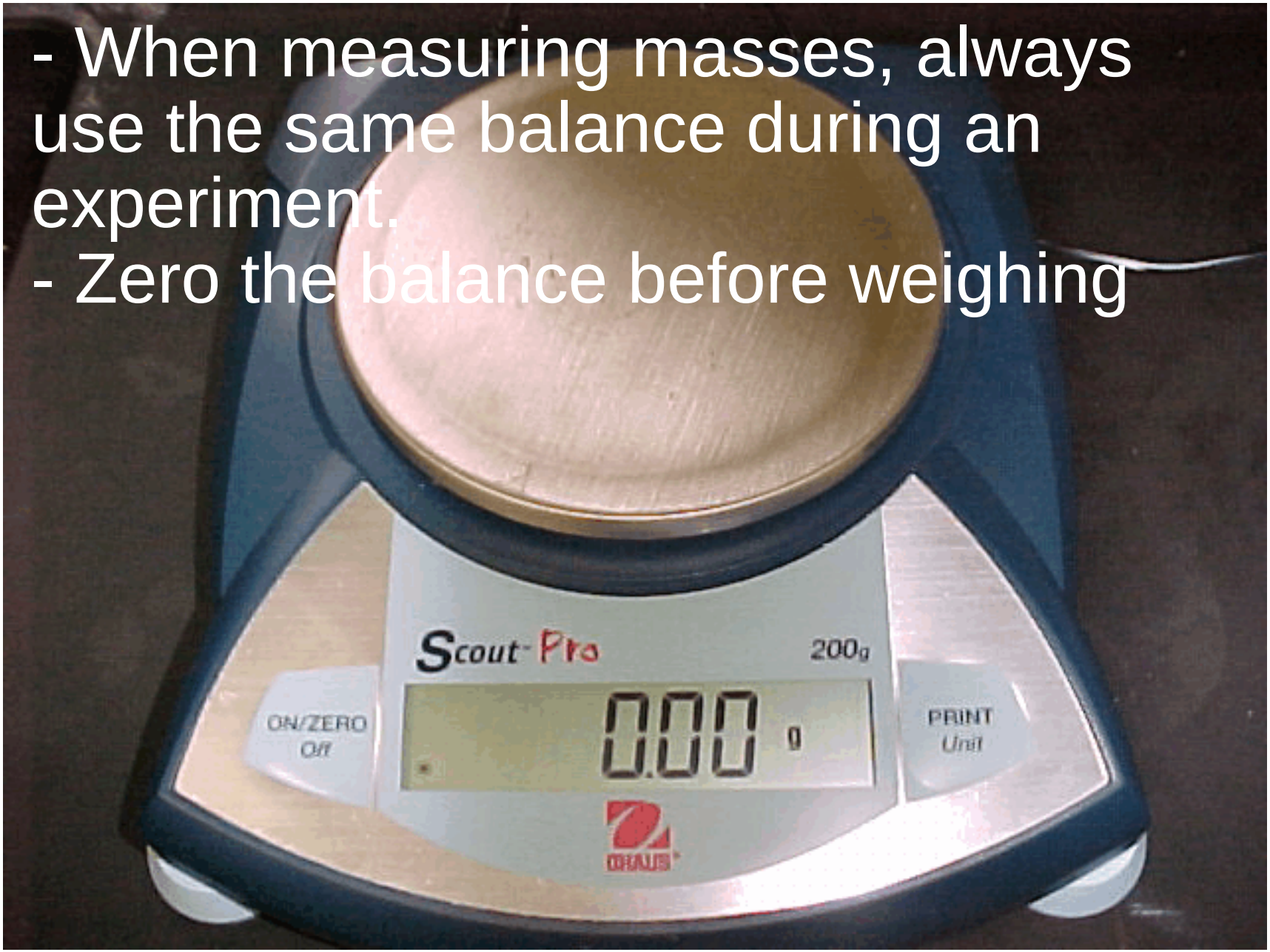

This is the equipment provided for this experiment
6 inch DIAL CALIPER

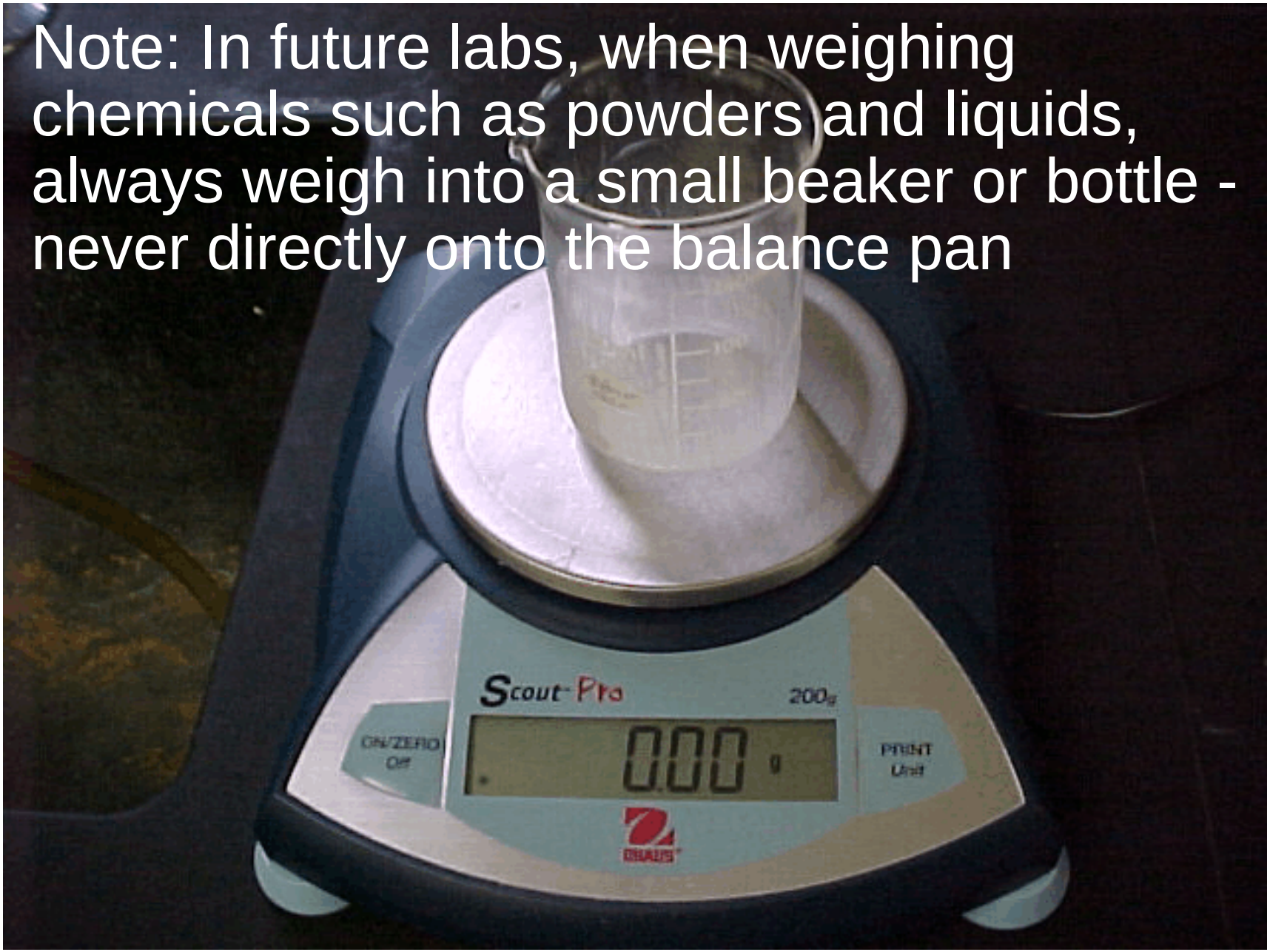
#14: Measurements

Goals

Part A. To determine the density of a metal cube.

First, you have to measure the mass of the cube.
Measure the mass of the cube on the balance.


- When measuring masses, always use the same balance during an experiment.
- Zero the balance before weighing
Scout Pro
200g
ON/ZERO
Off
0.00
g
PRINT
Unit
OHAUS


Note: In future labs, when weighing chemicals such as powders and liquids, always weigh into a small beaker or bottle - never directly onto the balance pan
Scout Pro
200g
ON/ZERO
Off
0.00
g
PRINT
Unit
OHAUS

Record masses directly on your data sheet

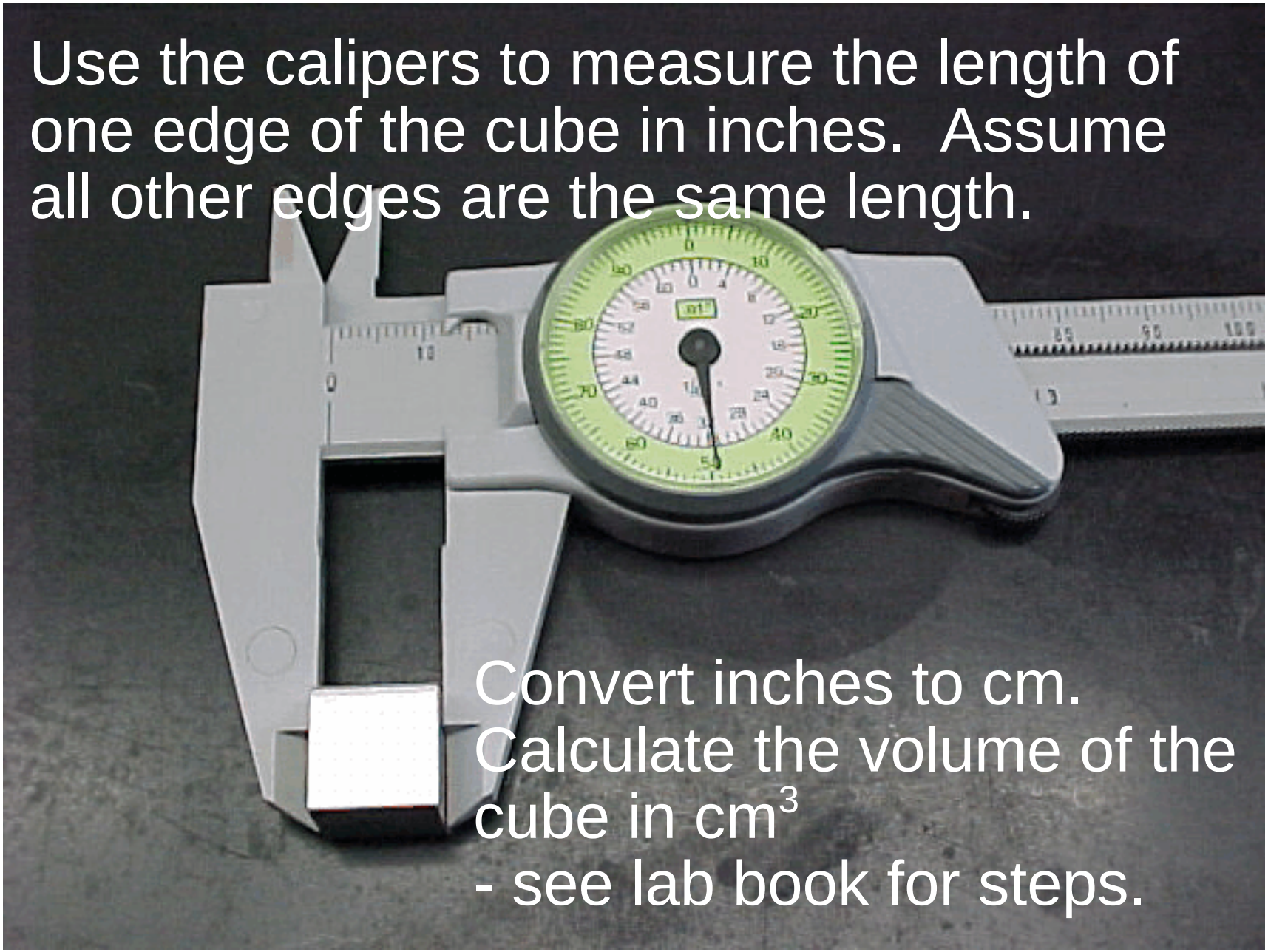
#14: Measurements

Goals

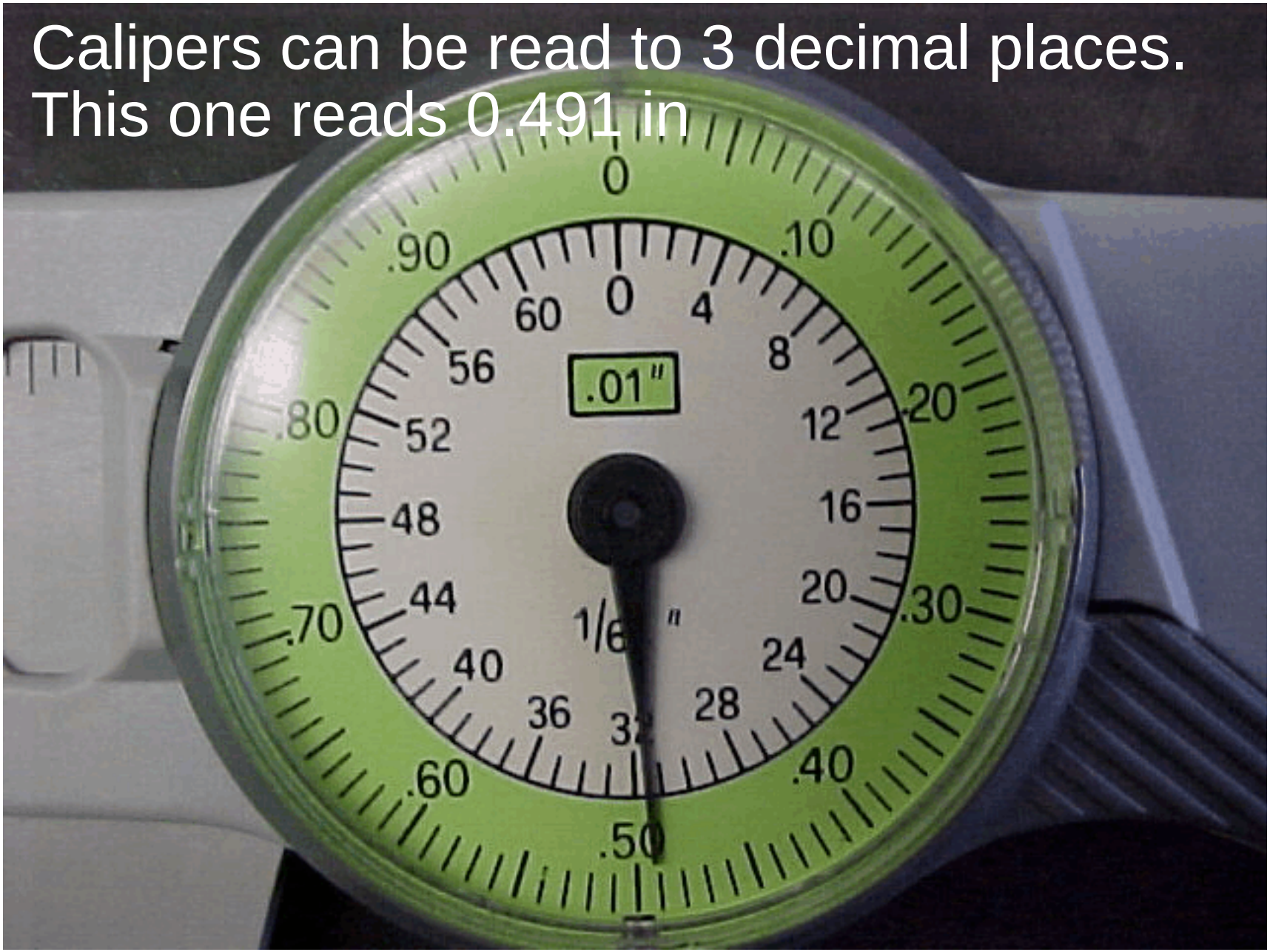
Part A.To determine the density of a cube.

Second, you have to measure the dimenions of the cube in inches with the calipers. Then convert to cm so you can calculate the cube's density.

Remember: D = M/V


Use the calipers to measure the length of one edge of the cube in inches. Assume all other edges are the same length.
Convert inches to cm.
Calculate the volume of the cube in cm^3
- see lab book for steps.

Calipers can be read to 3 decimal places.
This one reads 0.491 in



#14: Measurements

Goals

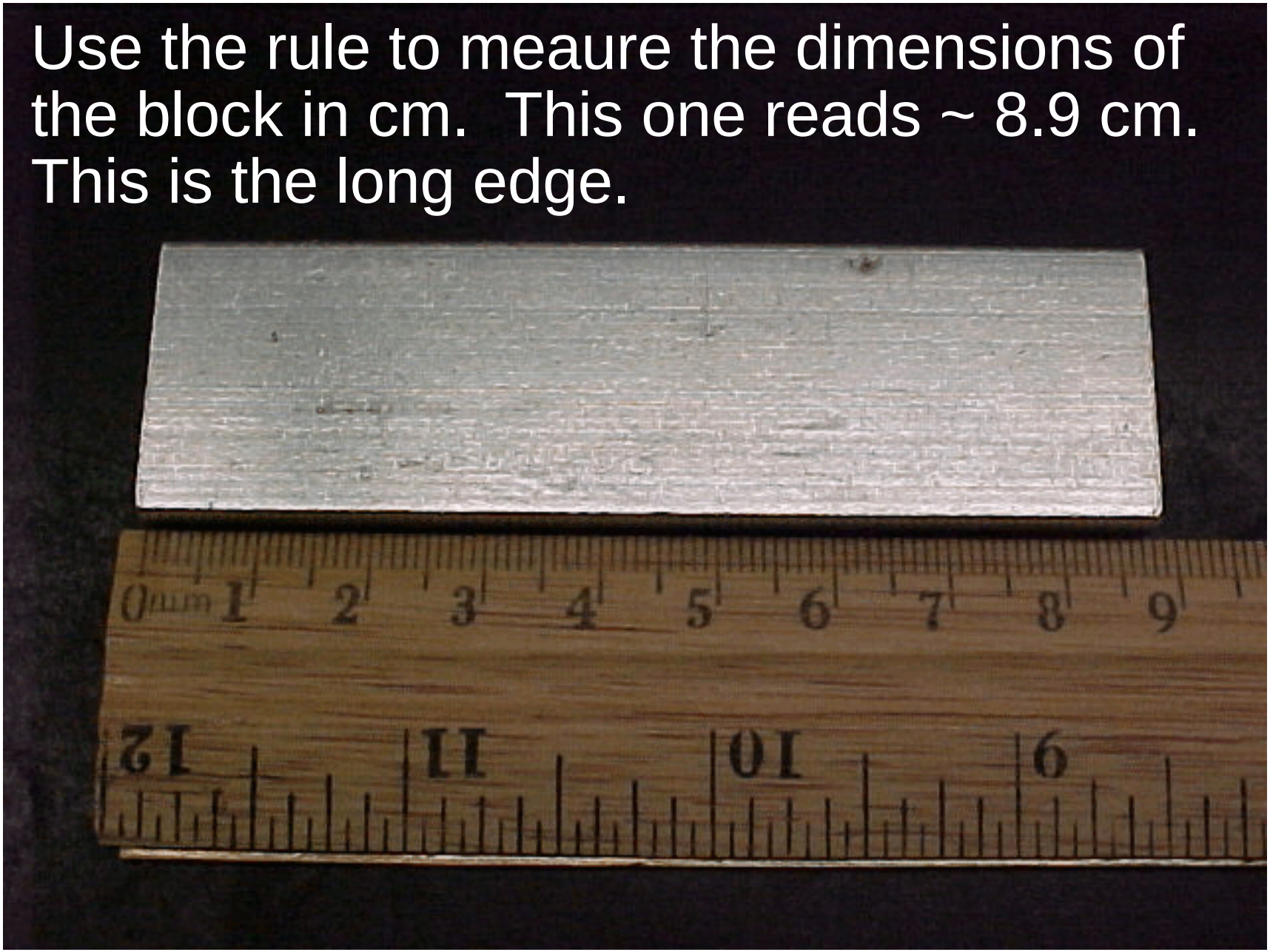
Part B. To determine the density of a metal block.

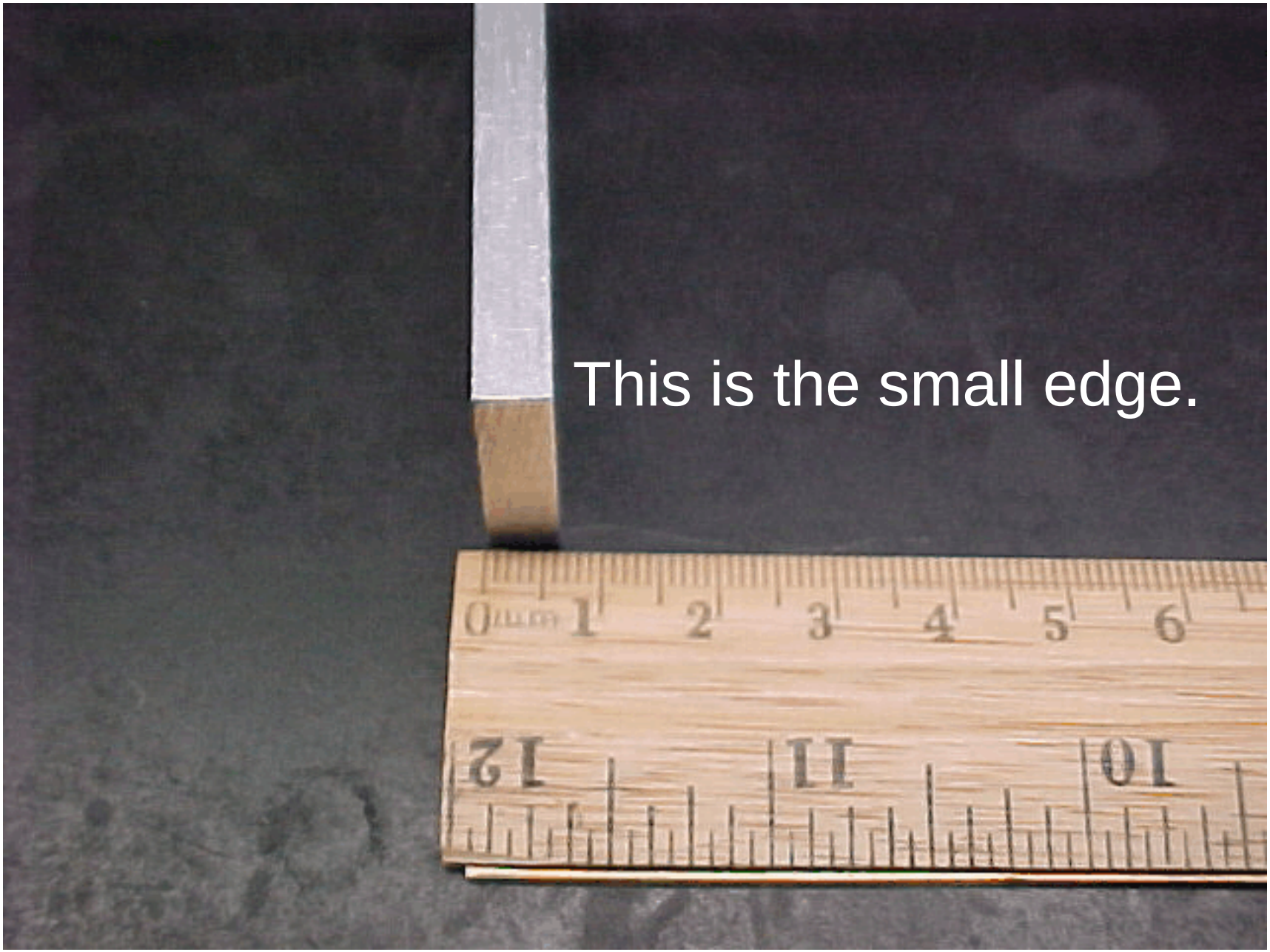
First, you have to measure the mass of the block

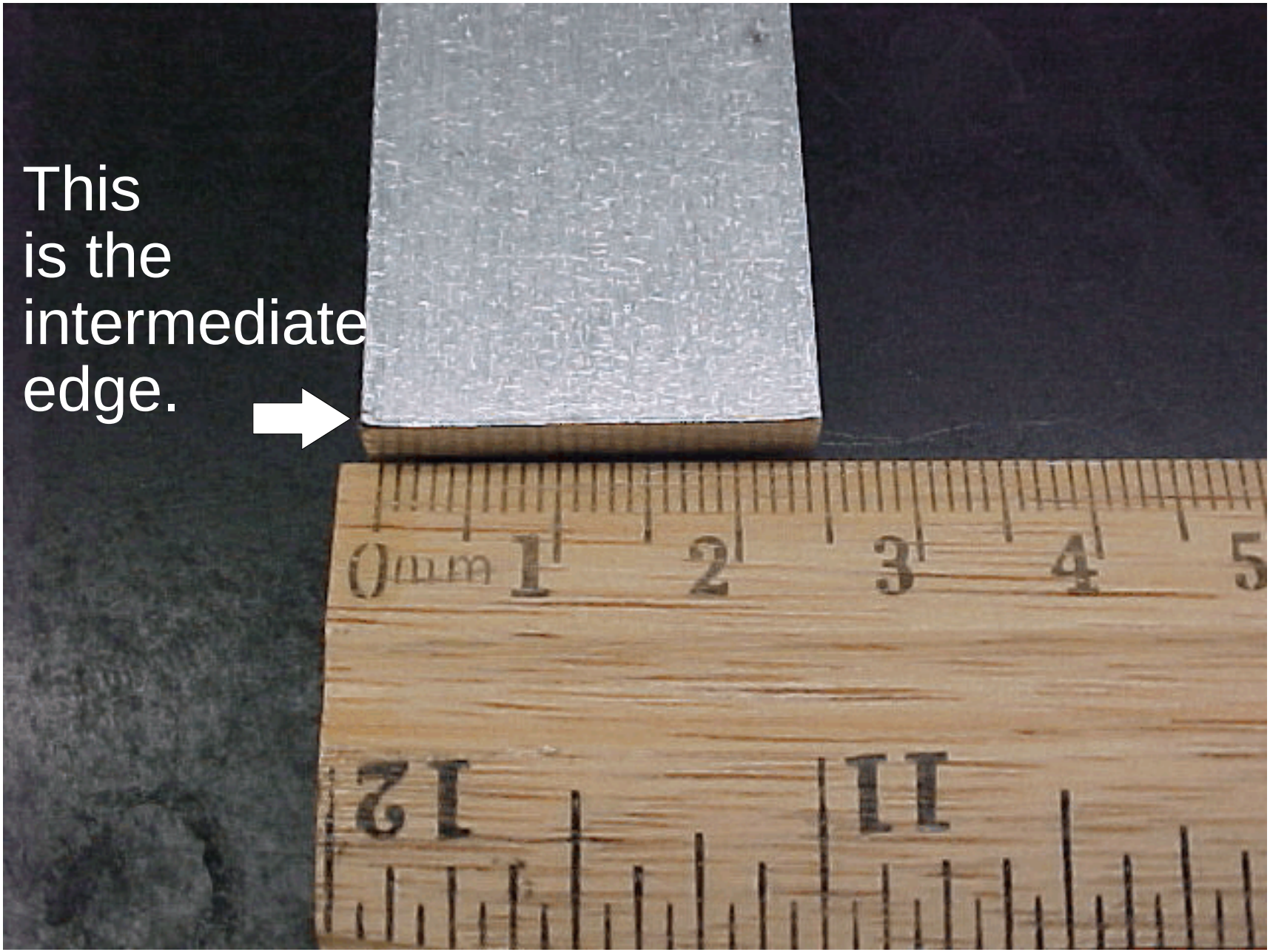
Measure the mass of the block on the balance.

Then use a ruler to measure the block's dimensions in cm. Then calculate the block's density.

Use the rule to meaure the dimensions of the block in cm. This one reads ~ 8.9 cm. This is the long edge.




This is the small edge.


This
is the
intermediate
edge.
0 mm 1 2 3 4 5
12 11

#14: Measurements

Lab Report

Do calculations for Parts A and B on a separate sheet. Show all steps in your calculations for full credit.

Staple the data sheet with the calculation sheet and submit next lab.