

**Department of Mathematics and Science**  
**Science Department Chair/Coach**

**FOLLOW-UP: ACTION PLAN**  
**Required for Master Plan Points**

To be received no later than **Friday, October 11, 2013**

**Electronically:** Please be advised that sign-in sheets/teacher reflections will have to be scanned

To: Edmodo Group **9hab2h**  
 Subject: Follow-up *Science Leaders Discourse* \_\_\_\_\_ (*indicate session attended*)

Action	Person Responsible	Date Completed
Meet with principal to share the content of this professional development and collaborate to present to targeted staff.	Mrs. Nwachiri	10/09/13
Conduct in-depth planning sessions with grade appropriate science teachers focusing on <i>Science Leaders Discourse</i> for targeted grade level. to include but not limited to: <ul style="list-style-type: none"> <li>• Data-Driven Instruction</li> <li>• Inquiry</li> <li>• Common Core Literacy in Science</li> <li>• Differentiated Instruction</li> </ul> For these planning sessions, attach: <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Agenda with date(s)</li> <li><input checked="" type="checkbox"/> Sign-in sheets of planning sessions</li> <li><input checked="" type="checkbox"/> Student work sample</li> </ul>	Mrs. Nwachiri	10/09/13

Participant Instructor: JULIET NWACHIRI Work Location #: 8121

School: COPE CENTER NORTH Region: CENTRAL

Principal's Signature: Colleen Deel Thego

Comments:  
 I am the only middle school teacher due to the size of our school

**Cope Center North**

**Science Department Meeting**

**October 09, 2013**

**Agenda**

**District Resources**

1. Pacing guides/ Year-at-a-glance
2. Learning Village
3. NBC Learn
4. Gizmos
5. FCAT explores and Florida achieves

**Common Core State Standards in Science**

1. General information
2. CER (Claim Evadale Reasoning )
3. CIS (Comprehensive Instructional Sequence)
4. RAFT

**Data**

1. Edusoft Update
2. Thinkgate
3. Date driven instruction

**Differentiated Instruction**

**Inquiry Based Instruction**

**Graduation Requirement and Students Progression Plans**



# Density lab

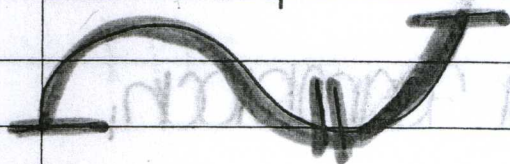
Theodore, Suzanne

10-16-13

Ms. Newmiki

Period 2

Science



## \* Benchmark

(Define a problem from the eight grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observation or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. Explore and describe the densities of various materials through measurement of their masses and volumes.)

## \* Objective

(In this experiment, the student to measure the mass, volume, and the length of foam block, and a rock. Then use their data to find the relationship between the mass and volume of the foam block and the rock and calculate their density.)

\* Problem Statement  
(Which object, rock or foam block,  
has more density)

\* Hypothesis  
(My hypothesis is I think the rock  
would have more density than the foam  
block)

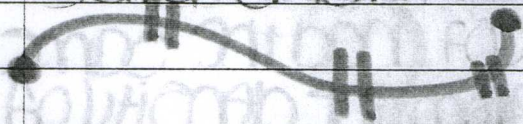
\* Materials  
(Ruler, foam block, Rock, Beaker full  
of water, measuring cylinder, Tripple  
Beam balance)

- \* Procedure of the foam block
1. Measure the length, width, and  
height of foam block by using  
the ruler.
  2. Calculate the volume by multiplying  
(length x width x height)
  3. Using the tripple beam balance to  
find to find the mass).
  4. Then divide the mass by the volume  
to calculate the density.

## \* procedure of the rock

1. Pour water into the measuring cylinder; read the volume.
2. Carefully drop the rock in the measuring cylinder with water and record the volume.
3. Find the difference
4. Use tripple beam balance to find the mass
5. Find the density

### Data chart



Object	length	width	height	mass	volume cm <sup>3</sup>	density
Block	7cm	8cm	8cm	24.1g	256	0.094g/cm <sup>3</sup>
Rock	X	X	X	11.4g	5ml	2.3g/ml

# Conclusion

Claim

Evidence

Reasoning

my hypothesis is that the rock would have more density than the foam block.

After multiplying the length, width, and height of the foam block the volume of the foam block was  $256 \text{ cm}^3$  the mass  $24.19 \text{ g}$  the density of the foam block after dividing the mass by volume was  $0.094 \text{ g/cm}^3$ . The volume of the rock from the amount of water it displaced was  $5 \text{ mL}$ . The mass of the rock was  $11.4 \text{ g}$  and the density was  $2.3 \text{ g/mL}$ .

The rock is denser than the foam block from my experiment. In addition to my result, other groups in my class with different length, width, and height of the foam block had the same results. The density of the rock is greater than the density of the foam block.