Name _____ **Date** _____ **Class** _____

Concrete Redesign Lab

Today you are to improve upon your first brick. Have fun!

Pre-questions.

1. What did you learn from your experiment or a peer's during the first design round?

2. What are some ideas that you wish to test? Provide some sketches on the back of this sheet.

3. What do you have to record while making your brick?

4. What is your engineering design challenge?

5. What is a composite?

6. What are the four categories of materials as defined in materials science?

7. Based on the above questions, what are the ideal physical and chemical properties that you want your concrete block to have?

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Materials: Refer to the Making Concrete Blocks worksheet.

Procedure

1. Redesign your brick. Refer to the Making Concrete Blocks worksheet.
2. Keep very accurate records (recording masses, volumes, etc.) as before.

Material Added (cement, water, etc.)	Mass or Volume (if a liquid)

SUBSTANCE	TOTAL MASS

TOTAL MASS OF BRICK:

Find the percent composition of your sample.

Material	Percent Composition