

Name: _____

Per: _____

Name: _____

Title: Modeling the Law of Conservation of Mass

Standard 8.1.6

Student Friendly Objective: I can develop a model that shows the total number of atoms does not change in a chemical reaction.

Task:

Your task as an individual or a group is to develop a model that can be shared with the class to demonstrate the Law of Conservation of Mass. Your model needs to be hands on and be able to be demonstrated in front of the class as you explain why it accurately shows the law. This is an open ended assessment which means creativity is your best friend. You can make this simple or complex.

Choose a chemical reaction to model from the list your teacher provides. Write it down here.	
What are the Reactants?	
What are the Products?	

Show that the reaction above is balanced by writing how many of each type of atom are in the reactants and products.			
REACTANTS		PRODUCTS	
Type of atom:	How many of these are in the reactants?	Type of atom:	How many of these are in the products?

You will be using materials from home to develop and demonstrate your model. Those materials should be school appropriate. You will need to complete the Model Proposal below and get it approved with your teacher by the end of the day. You will need to make sure your model is completed and ready to present the following day for class. You will be graded on accuracy in your explanation of the Law of Conservation of Matter and how well your model represents it.

Model Proposal:

In the space below please provide a *written explanation* of your model along with a *drawing* to help explain. Please provide a *list of materials* you will be using and provide a *layout* of what your presentation will look like.

EXPLANATION: Explain how your model demonstrates the Law of Conservation of Mass.

DRAWING: Sketch your model below.

MATERIALS: Create a key that shows what materials you will use and what each material represents in your model.

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Law of Conservation Models: Critique

You will look at several models created by other students. For each one (starting with your own) describe the model and then critique it. How well does their model demonstrate the Law of Conservation of Mass?

Model	Description	Critique: How well do you feel this model shows the Law of Conservation of Mass? Explain.
Yours		

Teacher's Approval Signature: _____

Choose a chemical reaction to model from the list your teacher provides. Write it down here.	
What are the Reactants?	
What are the Products?	

Show that the reaction above is balanced by writing how many of each type of atom are in the reactants and products.			
REACTANTS		PRODUCTS	
Type of atom:	How many of these are in the reactants?	Type of atom:	How many of these are in the products?

Create a way to model how the Law of Conservation of Mass is followed when this reaction occurs.

Include a key explaining what you have used to represent each atom.

Describe, draw your model on the sheet.

Explain how your model shows the Law of Conservation of Matter

Critique other models

Revise your own based on the comments left by other students.