Name: _____ Date: _____ Pd: _____

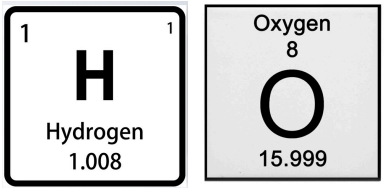
LECTURE NOTES:
Moles & Molar Mass

ADDITIONAL NOTES: _____

Lesson #4:

Student Notes: Moles and Molar Mass

Learning Target - Goes There →	
Chemistry can save your life?	If you were going to live in space or on mars, what would be your biggest concern? **Answer:**
Who discovered the mole?	Avogadro first theorized the mole in _____ and was confirmed by _____ 1909. **Avogadros #**: _____  **Conversion Factor:** grams ⟷ moles ⟷ atoms / molecules (molar mass; Avagadro's #)
MUST WATCH VIDEO!!	
Question	How many donuts are there in…? 1. (1) dozen donuts = 2. (2) dozen donuts = 3. (3) dozen donuts = 4. (4) dozen donuts = 5. (4.5) dozen donuts =
Key Definitions:	**Definition: MOLE -** 1 mol = _____

	or 1 mol = _____ **Definition: MOLAR MASS -**  **Example:** Molar Mass = 1 mole H 1 mole O Molar Mass of **H_2O** **(#of atoms per element) x (atomic mass per element)** __H x _____ = _____ g/mol __O x _____ = + _____ g/mol Molar Mass H_2O = _____
Calculating Molar Mass Step 1: Find # of Atoms Step 2: Add up total masses to find molar mass Step 3: Units = g/mol	Find Molar Mass of **$CaCl_2$** __Ca x _____ = _____ g/mol __Cl_2 x _____ = + _____ g/mol Molar Mass $CaCl_2$ = _____

Example Molar Mass Problems:

<u>WORK WITH A PARTNER!!!</u>

Find Molar Mass of the following Molecules

Molecule	Work
CO_2	
H_2SO_4	
$C_6H_{12}O_6$	
$Mg(NO_3)_2$	