

Monday 2/2 - Check In

Write on an index card how you are feeling about life and world events. I will allow 5 minutes of uninterrupted writing. You have 2 choices:

1. Put your card in my sink where I will burn it in front of you
2. Turn it into the box if you want me to read it.

Tuesday 2/3 – Dimensional Analysis (Metric & Imperial)

Directions: Select the correct unit from the drop-down menu. Then **type your final numerical answer**. Show work on paper.

1. **Metric**

Convert **250 centimeters to meters**

- Conversion factor: 1 m=100 cm

250 centimeters x ----- =

2. **Metric**

Convert **3.5 kilograms to grams**

- Conversion factor: 1 kg=1000 g

3.5 kilograms x ----- =

3. **Imperial**

Convert **48 inches to feet**

- Conversion factor: 1 ft=12 in

48 inches x ----- =

4. **Imperial**

Convert **2.5 miles to feet**

- Conversion factor: 1 mi=5280 ft

2.5 miles x ----- =

Wednesday 2/4 – Counting Atoms in Chemical Formulas

Directions: For each formula, write the **number of atoms of each element**.

1. H₂O

- H: _____
- O: _____

2. Ca(OH)₂

- Ca: _____
- O: _____
- H: _____

3. Al₂(SO₄)₃

- Al: _____
 - S: _____
 - O: _____
-

Thursday 2/5 – Calculating Molar Mass

Directions: Calculate the **molar mass** of each compound.

Molar masses are whole numbers.

1. Ca(NO₃)₂

- Ca = 40
- N = 14
- O = 16

Molar mass = _____ g/mol

2. $\text{Al}_2(\text{SO}_4)_3$

- Al = 27
- S = 32
- O = 16

Molar mass = _____ g/mol

Friday 2/6 – Weekly Review (Mixed Skills)

Directions: Answer all questions. Show work where needed.

1. Dimensional Analysis

Convert **7200 seconds** to min

- Conversion factors: 60 s = 1 min

7200 seconds x ----- =

2. Counting Atoms

For $\text{Mg}_3(\text{PO}_4)_2$, count each element:

- Mg: _____
- P: _____
- O: _____

3. Molar Mass

Calculate the molar mass of **Na₂CO₃**

- Na = 23
- C = 12
- O = 16

Molar mass = _____ g/mol