

## 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       $\times$  ----- =

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## Wednesday 2/4 – Counting Atoms in Chemical Formulas

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

### 1. $\text{H}_2\text{O}$

- H: \_\_\_\_\_
- O: \_\_\_\_\_

### 2. $\text{Ca}(\text{OH})_2$

- Ca: \_\_\_\_\_
- O: \_\_\_\_\_
- H: \_\_\_\_\_

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

- Al: \_\_\_\_\_
- S: \_\_\_\_\_
- O: \_\_\_\_\_

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## Thursday 2/5 – Calculating Molar Mass

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

*Molar masses are whole numbers.*

### 1. $\text{Ca}(\text{NO}_3)_2$

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

Molar mass = \_\_\_\_\_ g/mol

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

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

Molar mass = \_\_\_\_\_ g/mol

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## 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 ----- =

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### 2. Counting Atoms

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

- Mg: \_\_\_\_\_
- P: \_\_\_\_\_
- O: \_\_\_\_\_

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### 3. Molar Mass

Calculate the molar mass of  $\text{Na}_2\text{CO}_3$ ,

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

Molar mass = \_\_\_\_\_ g/mol