

Inside Cover	Costa's Levels of THINKING Level 1 - Who, What, Where, Why, How Level 2 - Explain Compare Contrast Level 3 - Predict Apply Evaluate
INB Score Sheet	

Left Side OUTPUT	Right Side INPUT
<ul style="list-style-type: none">- Summaries- 1-pagers- Practice Problems	<ul style="list-style-type: none">- Notes- Whiteboard Pictures- Lab Notes

Table of Contents	Table of Contents

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	SWBAT: Model taking Cornell Notes	
		1

	SWBAT define <u>Chemistry</u> and explain how to use a mass balance	
	2 L1 Q	
	1 L3 Q	
2	Sum: 3-5 sent.	
		3

	Mass and Change Lab Summary	

4

5

6	SWBAT explain Law of Conservation of Mass and Physical vs. Chemical Chgs.	
	3 Qs 2 L2	
	Summary	
		7

	SWBAT Compare and Contrast between Accuracy and Precision.	
	3 L2 Qs	
	Summary	
8		9

<p>Notes: Metric Prefixes</p> <p>BIG Kilo - 1000</p> <p>Base - gram Liter meter</p> <p>Centi - $\frac{1}{100}$</p> <p>Small Milli - $\frac{1}{1000}$</p> <p>10</p>	<p>SWBAT define mass, volume and Density.</p> <p>3 L2 Qs</p> <p>Summary</p> <p>11</p>
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U2 KWL		
What Do You KNOW?	What Do YOU WANT to know?	What Did You LEARN?
12		13

Demo	Observations	Whiteboarding	
PopCorn Demo		1	2
		3	4
Summary: See website for instructions		Note: See website for Notes	
14			15



Demo	Observations	Whiteboarding	
Water & Dye Demo		1	2
		3	↑
Summary: See website for instructions 16		Note: See website for Notes 17	

<p>1-pager of Demos</p> <ul style="list-style-type: none">• One-page Summary of Notes and what you learned from the 2 demos <p>Must Include:</p> <ul style="list-style-type: none">-Color-Border-3 pictures-2 Level 2 Qs with Answers <p>18</p>	<p>Video Notes:</p> <p>Molecules in Solids</p> <p>Molecules in Liquids</p> <p>Evaporation & Condensation</p> <p>19</p>
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Partide Diagrams		CN : States of Matter	
Melt 1	2	3	
Freeze		L2	
Condensation		Qs	
Evaporation			
	20	Summary:	21

<p><u>Demo</u> Expansion of Liquids</p> <p>Observations:</p> <p>Video & Demo Summary:</p> <p>22</p>	<p>Expansion and Contraction</p> <hr/> <p>Heat & Temperature</p> <p>23</p>
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Practice Problems	P, V, T, n Notes
P, V *	See next SLIDE for Set-up
P, n	
P, T	
24	25

Parameter and Units	Relationship & Explanation	Picture
Pressure (P) is the number of collisions particles have with their container. <u>Units</u> atm = atmospheres <u>mmHg</u> = <u>millimeters of Mercury</u>	Volume $\uparrow V, \downarrow P = \text{inverse}$ $\downarrow V,$	1 atm  \downarrow 2 atm 
	Particles	
	Temp	<u>Standard</u> 1 atm <u>760 mmHg</u>

kPa = kilopascal

If a container has a volume of 2.0L and a pressure of 1.5 atm, what is the new pressure if increase volume to 3.0L?

	P	V
Initial	1.5 atm	2.0L
Final		3.0L
Effect	↓	↑

Show work

$$1.5 \text{ atm} \times \frac{2.0\cancel{\text{L}}}{3.0\cancel{\text{L}}} = \frac{3 \text{ atm}}{3.0} = 1 \text{ atm}$$

~~$$1.5 \times \frac{3.0\text{L}}{2.0} = \frac{4.5}{2} = 2.25$$~~

- 1) Explain Problem (Introduce)
- 2) Explain Table
- 3) Explain Calculation
- 4) Does this answer make sense?