LT 1.5: Properties of Matter Review



Element

Mixture (of Cmpds)

Compound

Compound

Element

Mixture (of E and C)

a) Compound g) Element

b) Element h) Mixture (of compounds)

c) Compound i) Mixture (of elements and compounds)

d) Mixture (of elements and compounds) j) Element

e) Element k) Compound

f) Mixture (of compounds) l) Mixture (of compounds)


4. Explain your answer for #3. Write your answer in complete sentences.

 A compound is considered a pure substance and they are made up of two+ types of atoms. For example water H2O and carbon dioxide CO2.

5. Identify each of the following as a chemical or physical property.

1. \_\_PP\_\_ boiling point
2. \_\_ PP\_\_ color
3. \_\_ CP\_ acidity
4. \_\_ PP\_ texture
5. \_\_CP\_\_ combustibility – the ability of an object to burn or ignite
6. \_\_ CP\_\_ alka seltzer tablets fizz in water
7. \_\_ PP\_ ice will melt if left on the table
8. \_\_ CP\_\_ gases in the air react with rain to make acid rain
9. \_ PP\_\_ malleability – the ability of a substance to be hammered into a flat sheet
10. \_ PP\_ density
11. \_\_ PP\_\_ sugar dissolves in water

|  |  |  |
| --- | --- | --- |
| **PROBLEMS** | **WORK** | **ANSWERS** |
| 1. Convert 8.43 cm to millimeters |

|  |  |  |
| --- | --- | --- |
|  8.43 cm | 1000 mm | 84.3 mm |
|  | 100 cm |  |

 | 84.3 mm |
| 2. Convert 2.43 X 103 cm to meters |

|  |  |  |
| --- | --- | --- |
| 2.45x103 cm | 1 m | 24.5 m |
|  | 100 cm |  |

 | 24.5 m |
| 3. How many kilograms are in 120.52 lbs? |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 120.52 lbs | 16 oz | 28.35 g | 0.001 kg | 54.667872 |
|  | 1 lbs | 1 oz | 1 g |  |

 | 54.668 kg |
| 4. Convert 1250 lbs to kilograms |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1250 lbs | 16 oz | 28.35 g | 0.001 kg | 567 |
|  | 1 lbs | 1 oz | 1 g |  |

 | 567 kg |
| 5. If a building is 1024.5 ft tall, how many meters is it? |

|  |  |  |
| --- | --- | --- |
| 1024.5 ft | 1 m | 312.2523 m |
|  | 3.281 ft |  |

 | 312.25 m |
| 6. A 2 Liter bottle would hold how many quarts? |

|  |  |  |  |
| --- | --- | --- | --- |
| 2 L | 0.264 gal | 4 qt | 2.112 qt |
|  | 1 L | 1 gal |  |

 | 2 qt |
| 7. Convert 550 mL to quarts |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 550 mL | 1 L | 0.264 gal | 4 qt | 0.5808 qt |
|  | 1000 mL | 1 L | 1 gal |  |

  | 0.58 qt |
| 8. Convert 9018 ounces to kilograms |

|  |  |  |  |
| --- | --- | --- | --- |
| 9018 oz | 28.35 g | 0.001 kg | 255.6603kg |
|  | 1 oz | 1 g |  |

 | 255.7 kg |
| 9. Your baby has a mass of 3.94 kg. How many lbs? |

|  |  |  |  |
| --- | --- | --- | --- |
| 3.94 kg | 1 g | 1 lb | 8.6862585 |
|  | 0.001 kg | 453.59 g |  |

 | 8.69 lbs |
| 10. Convert 294.85 cm to mm |

|  |  |  |
| --- | --- | --- |
| 294.85 cm | 1000 mm | 2948.5 mm |
|  | 100 cm |  |

 | 2948.5 mm |

Name: \_\_\_\_\_\_\_\_\_\_\_ANSWER KEY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_

LT 1.1: Dimensional Analysis Review