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| **Date** | **Topic** | **Homework** | | |
| **CB** | **PA** | **H** |
| M – Sept 29 | Phases of Matter & Phase Changes | **Week 4 Agenda:** 13-15, 16.a-d | **Week 4 Agenda:**  13-15, 16.a-f | **Week 4 Agenda:** 13-16 |
| T – Sept 30 | Phase Diagrams | **Week 5 Agenda:**  1.a-d, 2, 5-7 | **Week 5 Agenda:**  1.a-f, 2-3, 5-7 | **Week 5 Agenda:**  1.a-h, 2-7 |
| W – Oct 1 | Unit 1 Exam Review | 8-11 | 8-15 | 8-15 |
| Th – Oct 2 | **PA/Honors: Unit 1 Exam** College Bound: Review | 12-15 | TBD | TBD |
| F – Oct 3 | **College Bound: Unit 1 Exam** PA/Honors: Intro to Unit 2/Unit 1 Reflection |  | | |

**Do not write your answers on this sheet. Only answers written in your notebook will be graded.**

1. Rank the following from **largest** to **smallest:** 1 cL, 1 L, 1 mL, 1 hL, 1 daL, 1 kL
2. How many times larger is a kilometer than a meter?
3. How many times larger is a kilometer than a millimeter?
4. Determine if the following items are made of matter or energy.
   1. Sound e. oxygen
   2. Cars f. wind
   3. Corn g. Bluetooth
   4. Light h. microwaves (\*not microwave ovens)
5. Convert the following:
   1. 725g to dg
   2. 0.0042 kL to mL
   3. 8.05 m to hm
   4. 1,000,000 mm to m
6. Write the following values in standard notation:
7. 7.25 x 10-5 m
8. 4.33 x 106 g
9. 2.10 x 10-3 L
10. Write the following values in scientific notation:
    1. 20,001,000 mL
    2. 0.0000455 km
    3. 55,000 cg
11. Name which phase change is occurring in the following examples:
    * 1. Solid Iodine 🡪 Iodine Gas
      2. Solid Silver 🡪 Molten (liquid) Silver
      3. Nitrogen Gas 🡪 Liquid Nitrogen
      4. Water Vapor 🡪 Frost on Glass Window
      5. Rubbing Alcohol 🡪 Rubbing Alcohol Vapor
      6. Liquid Agar 🡪 Solid Agar’
12. If two objects have the same mass, but different volumes, do they have the same density? Explain your answer using examples from the stations you observed during class.
13. If two objects have the same volume, but different masses do they have the same density? Explain your answer using examples from the stations you observed during class.
14. The density of a substance is 3.25 g/mL. What is the mass of 12.50 mL of the substance in grams? **40.6g**
15. What is the volume of a 850 gram block of silicon if the density of silicon is 2.336 g/cm³? **360cm3**
16. The density of pure solid copper is 8.94 g/mL. What volume does 30.5 g of copper occupy? **3.41 mL**
17. Describe the motions of particles in the three common states of matter.
18. What are the signs that a physical change has occurred? Chemical change?