|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Warm-up #1  HW:** *(You copy it down from the board/PowerPoint)*  **Questions:** *(provided for you - here is an example)*  1) What does temperature measure?  2) Convert 25°C into Kelvin |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | **Average movement! Don’t forget!** |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Calorimetry – using one substance to find values for another substance**  **Target: I can determine unknown information for a substance by using calorimetry since energy is simply transferred not created or destroyed.**   * **Cant always know the values for everything** * **Energy in = energy out**   + **But opposite sign! Careful! Pay attention to sign** * **Exothermic = - Endothermic = +** * **Qwater = -Qmetal**   + **mCΔT = -(mCΔT)**   **(15g)(4.18J/gC)(31C-20C) = -(5g)(0.75J/gC)(31C-Ti)**  **Ti = 214.92C**  **You can do calorimetry with two cups of water!  Instead of Qmetal and Qwater 🡪 Qw1 and Qw2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| K *Add any key terms, vocab words, equations, etc. Bullet points are fine!* |  |  |  |  |  |  | C *Add connections to other things you have learned about in the past. It could be from this class, another class, the news, a book, etc.* |  |  |  |  |  |  |  | Q *Add* ***two*** *questions that are representative of the material learned in the notes. Questions you want to ask me, you think someone else would ask, or that you think would be on a quiz/test* |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**R-4**

**Target in red below the title**

**Descriptive underlined title for notes**

**Highlighter to show separation btwn work  
ALWAYS!**

**Don’t need a new page, just continue!**

**Include ALL important details**

**Practice problems are required!**

**Add THREE additional colors**

**Add color in a meaningful way!**

**KCQ Boxes at the end of the set of notes**

* Notes are graded assignments.
* If you are absent you are required to make up the missed Notes.
* Your notes need to look readable to another person, and should not be cramped together. Use space!
* KCQ Boxes are required to be finished by the start of the next class period. All efforts will be made to post this as an assignment on Schoology each day, but it is expected and required even if something happens and it is not posted. You now know it is a daily requirement!
* You are responsible for knowing, understanding, and following the formatting requirements.
* If you have questions about the formatting requirements it is your responsibility to ask.
* Notes should reflect effort, thought, detail, reflection, and should demonstrate processing and learning taking place.

1. **Molecular movement**
2. **K = C +273**

**K = 25C + 273 = 298 K**