TRO 6ᵗʰ Edition

Note: The answers to all suggested review problems are in the back of the book

You will be given:

Any conversion factors you need

A list of the metric prefixes

A table of densities

Memorize-

Density = mass/volume

Heat = mass x specific heat x change in Temperature

Topics

Chapter 1- all sections

1. Understand the scientific method
2. Define the terms hypothesis, scientific law, and theory **Problems to review on this topic Chapter 1 # 7, 9, 13**

Chapter 2 – all sections
1. Know how to convert numbers in and out of scientific notation: **Chapter 2 # 31, 37**
2. Know how to round numbers to significant figures when doing multiplication/division (sig figs), addition/ subtraction (decimal places) or a problem with both multiplication/ division and addition/subtraction **Chapter 2 # 57, 61, 65**
3. Know the proper way to estimate when reading a measuring device **chapter 2 # 41**
4. Be able to do problems converting between the English and Metric system **Chapter 2 # 73 (note 1 yard = 3 feet)**
5. Be able to do problems converting with squared or cubic units **Chapter 2 # 93**
6. Be able to do problems converting using the metric prefixes **Chapter 2 # 79**
7. Be able to do problems converting with mixed units **Chapter 2 # 109, 117**
8. Be able to use the density equation to solve for mass, volume or density when given the other two. **Chapter 2 # 99, 103, 105, 115**

Chapter 3 - all sections except 3.9
1. Be able to classify mater as an element, compound, homogeneous mixture, or heterogeneous mixture **Chapter 3 # 33, 35**
2. Understand the differences between a solid, liquid and gas

3. Be able to determine if a change is a physical change or chemical change **Chapter 3 # 41, 43**
4. Understand the difference between heat and Temperature
5. Be able to covered between the Fahrenheit, Celsius, and Kelvin **Chapter 3 # 65**
6. Be able to use the equation   Heat = mass x specific heat x change in Temperature to solve mathematical problems. **Chapter 3 # 75, 77, 79, 81, 85, 95**