

Name _____ Period _____ **Attach this page to front of review assignment**

The day of the final exam: This assignment is due at the final exam. Also, you will need to bring calculator, pencil with eraser, and 4"x6" note card with your prepared notes. You will have use of a periodic table during exam. Bring something quiet to do if you finish exam before end of period. Make locker and bathroom trips before exam starts as you will stay in the room the whole exam period.

Instructions: The material we have covered this semester includes learning definitions, concepts, applications and calculations. The section learning goals found on the indicated pages are your guide to make sure you get the most from your studying.

Complete the reading review problems on notebook paper. Be sure to list the page and problem number for each. These problems should be completed individually. We will complete additional review material in class. These review problems are homework.

Chapter and Topic	Section Learning Goals	Reading Review problems
Chapter 1: Standards of Measurement	Section 2: All reading goals pg. 14 Section 3: All reading guide goals on pg. 22	Pg. 21 # 2,5 Pg. 874 Practice Problems Pg. 26, # 1,2,3 Pg. 34 # 1,2,5 Pg. 879 # 5
Chapter 3: Describing Motion	Section 1: All Reading guide goals from page 70 Section 2: All Reading guide goals from page 76 Section 3: Reading guide goals except static and sliding friction on page 81	Pg. 75 #1-4, 6, 7 Pg. 80 #1, 4-7 Pg. 86 #2, 4, 5, 7
Chapter 4: Laws of Motion	Section 1: All Reading guide goals from page 98 Section 2: Reading guide goals except centripetal concepts on page 104 Section 3: Reading guide goals except momentum friction on page 113	Pg. 103 #1-6 Pg. 111 # 1, 2, 4 Pg. 117 #1
Chapter 5: Energy	Section 1: Reading guide goals except energy calculations on page 128 Section 2: All Reading guide goals from page 135	Pg. 133 #1-2 Pg. 143 #2, 4
Chapter 7: The Earth-Moon System	Section 2: Reading guide goals concerning text pages 192-195 Section 3: Reading guide goals except Moon's surface on page 197.	Pg. 195 #4-5 Pg. 207 #1, 3
Chapter 10: Waves	Section 1: All Reading guide goals from page 288 Section 2: All Reading guide goals from page 294	Pg. 293 #1, 2, 4, 6 Pg. 299 #2-4, 6-7

Chapter and Topic	Section Learning Goals	Reading Review problems
Chapter 15: Electromagnetic Radiation	Section 1: All Reading guide goals from page 456 Section 2: All Reading guide goals from page 462	Pg. 461 #1, 4, 6, 7 Pg. 46 # 1-6
Chapter 16: Energy Resources	Section 2: All Reading guide goals from page 494	Pg. 500 #3
Chapter 17: Weather and Climate	Section 1: All Reading guide goals from page 518 Section 3: All Reading guide goals from page 529 Section 4: All Reading guide goals from page 535	Pg. 522 #2, 3 Pg. 534 #1, 4, 5 Pg. 539 #1, 3
Chapter 19: Structure of the Atom	Section 1: Reading Guide p. 578 Section 2: Reading guide p. 584 Section 3: Reading Guide p. 588	Pg. 583,# 1,2,6 Pg. 587 # 1,2,4 Pg. 596 # 3 Pg. 602 # 2,6,9,11,22 Pg. 604 # 2,5,6,
Chapter 21: Geologic Time	Section 4: All Reading guide goals from page 669	Pg. 675 #3
Chapter 25: Radioactivity	Section 1: All Reading guide goals from page 786 Section 2: All Reading guide goals from page 791	Pg. 790 Pg. #3 Pg. 795 #1, 2, 6

Chapter 1 section 2:

Reading Guide

What You'll Learn

- Name the prefixes used in SI and indicate what multiple of ten each one represents.
- Identify SI units and symbols for length, volume, mass, density, time, and temperature.
- Convert related SI units.

Why It's Important

By using uniform standards, nations can exchange goods and compare information easily.

Review Vocabulary

measurement: the dimensions, capacity, or amount of something

New Vocabulary

- precision
- accuracy
- volume
- mass
- density

Chapter 1 Section 3:

Reading Guide

What You'll Learn

- Identify three types of graphs and explain the ways they are used.
- Distinguish between dependent and independent variables.
- Analyze data using the various types of graphs.

Why It's Important

Graphs are a quick way to communicate a lot of information in a small amount of space.

Review Vocabulary

data: information gathered during an investigation or observation

New Vocabulary

- graph

Name _____ Period _____

Review problems for chapter 1 and chapter 19:

Directions: Complete these problems showing work and giving answer with correct number of significant digits:

1. Write answer in scientific notation.

$$2.3 \times 10^{13}(1.4 \times 10^2) / 6.21 \times 10^{23} =$$

2. Round 0.003560 to 2 significant figures =

$$3. 3675000 (0.01123) / (3.00)(4.29 \times 10^{-21}) =$$

Density: Remember the formula: $D = M/V$

4. The mass of an object is 896.1 g and its volume is 280.5 cm³. Will the object sink in water? Explain your reasoning.

5. If the density of mercury is 13.45 g/mL, and the volume of an amount of mercury is 35.9 mL, what is the mass of the mercury? Round the answer to the proper number of sig figs.

Chapter 19: Atoms and periodic Table

6. Isotopes-What is the definition of an isotope?

³²P₁₅ is an isotope of _____. How many p _____, n _____, and e⁻ _____?

⁹⁹Ru₄₄ is an isotope of _____. How many p _____, n _____, and e⁻ _____?

7. A period in the Table runs _____ (horizontally, vertically,). The period of an element indicates what about the element? _____

8. A family in the Table will always have the same number of _____ electrons.

9. Name 2 metals, 2 nonmetals, and 2 metalloids (semi-conductors). Note that these areas on supplied periodic table will NOT be marked.

_____, _____, _____, _____, _____, _____

10. What is the difference between the meaning of the mass number and the average atomic mass? Include how each is calculated.