Name: \_\_\_\_\_

- 1. Print this homework sheet.
  - Record your work and answers for the below problems in the spaces provided.
  - Write out the textbook problem solutions on additional pages (see the last problem on page 4).
  - Always put your name on all pages.
  - Staple or bind this print-out and the textbook problems into a single packet.
  - Submit it in at the beginning of the second class, 2/6/2016.
- 2. Read the syllabus. When is the first quiz for Chem30A?

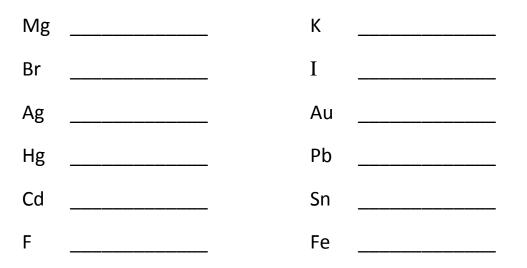
3. Which states of matter have molecules/particles that are physically touching each other?

4. Describe the following as an element, a compound, a homogenous mixture, or a heterogeneous mixture:

a) a pure silver ring	
b) pure water	
c) sugar water	
d) pure magnesium oxide (MgO)	
e) air, containing $O_2$ and $N_2$	
f) soil	

Name: \_\_\_\_\_

## 5. Provide names for the following elements. Spelling counts!



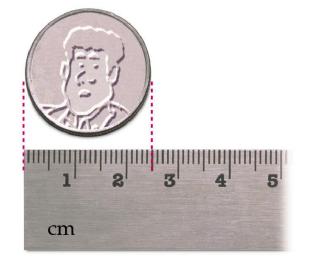
6. List 2 diatomic elements. Give the name and formula for each.

7. List 3 properties of metals, and 3 properties of nonmetals.

8. What is the difference between a chemical and physical change? Is an egg cooking a physical or chemical change? Explain in 1-3 sentences.

Name: \_\_\_\_

9. Provide a measurement for the coin (below figure) with the correct number of significant figures.



Copyright © 2002 Pearson Education, Inc., publishing as Benjamin Cummings

## 10. Count the significant figures, and covert to scientific notation.

	<u># sig figs</u>	scientific notation
892		
892,000		
0.00892		
0.100		
0.00100		
100.000		
8008.0		

11. Complete the following problems from the McMurry 7<sup>th</sup> Ed textbook on separate 8 ½ x 11" paper, and attach your solutions behind this completed printout. Put your name on all pages.

You can check most of these answers in McMurry Appendix A-13. For other problems such as 1.51, try searching the internet.

- 1.30 metal, nonmetal, metalloid
- 1.32 measurement (sig figs)
- 1.34 measure in centimeters only, please
- 1.35 measurement (sig figs)
- 1.38 physical or chemical change?
- 1.44 mixture or pure?
- 1.46 a reaction
- 1.51 element names and symbols
- 1.56 chemical formula
- 1.64 scientific notation
- 1.66 counting significant figures