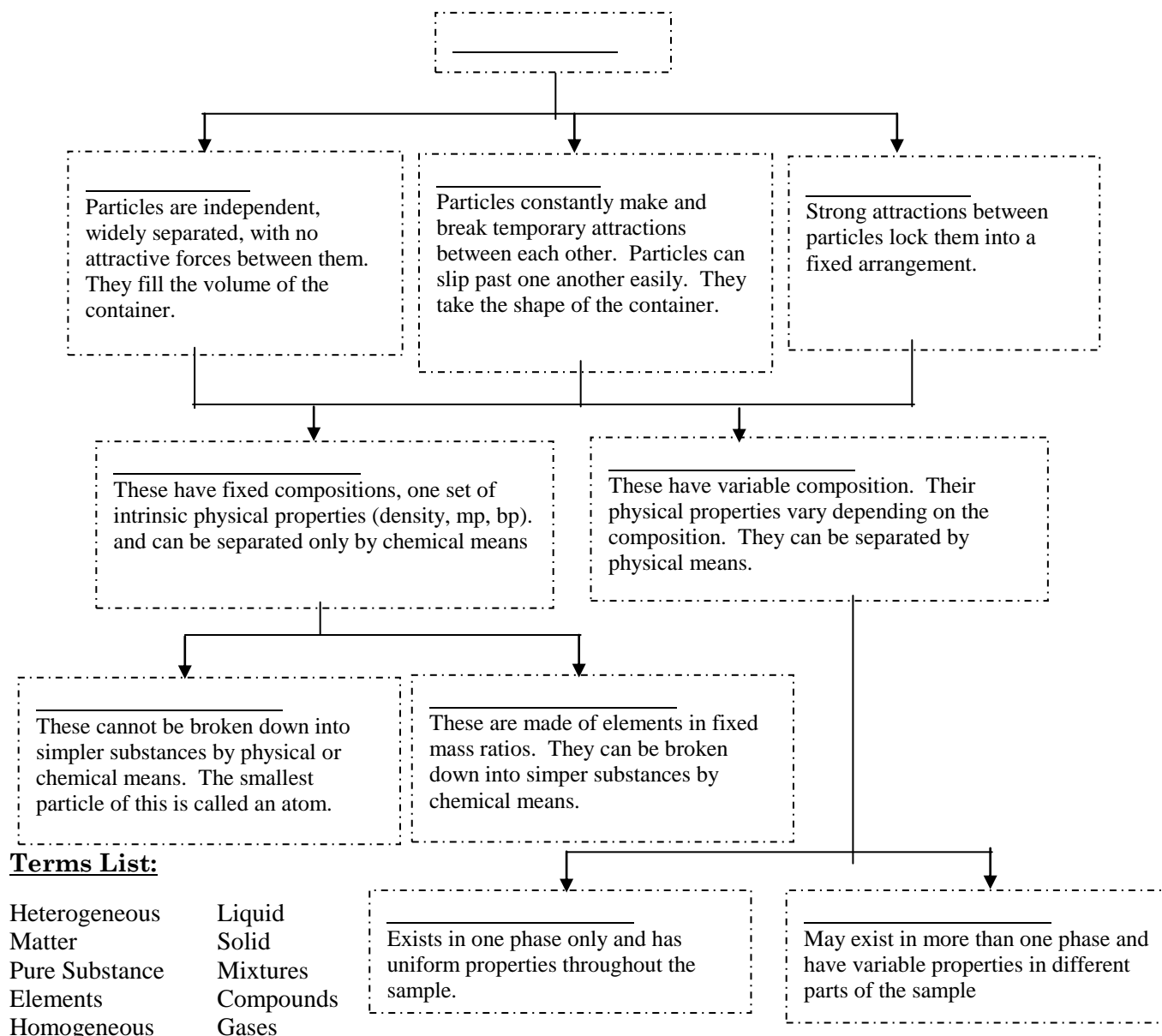


## Chemistry: Unit 4 – Concepts Review

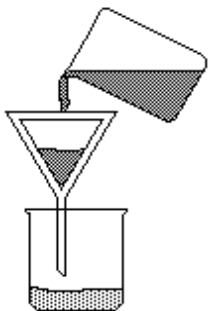
1. Fill in the blanks in the table with the words in the list below.



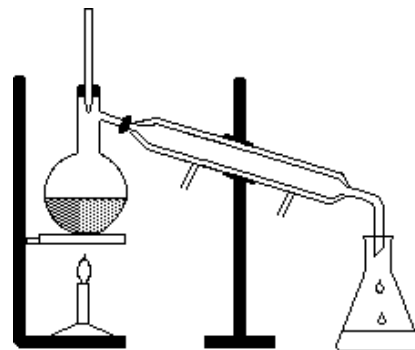
2. What is the difference between a pure substance and a mixture? Describe the characteristics of mixtures.

3. Identify the separation techniques pictured below. Which technique would be useful to separate a mixture of sand and salt? Of salt and water? What physical properties are these based on?

Figure A:  
Figure



B:

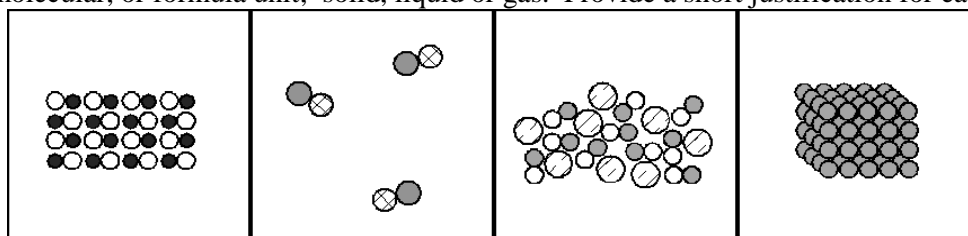


4. What is the law of definite proportions? How does the law of definite proportions support an atomic model of atoms? (Review WS 3 & 4 for quantitative problems)

5. Explain, using particle diagrams, how the law of multiple proportions supports an atomic model of matter. (Review WS 2 for quantitative problems)

6. Describe an “atom” in your own words. What are the four major ideas of Dalton’s atomic theory?

7. Describe the contents of each cell using the terms: pure substance (element or compound) or mixture; atomic, molecular, or formula unit; solid, liquid or gas. Provide a short justification for each.



A

B

C

D