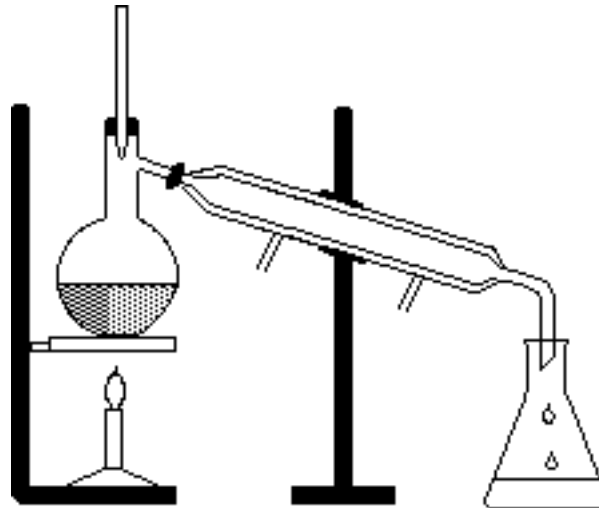
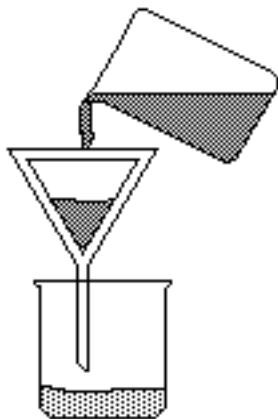


## Chemistry – Unit 4 Worksheet 1

1. Identify the separation techniques pictured below. Which technique would be useful to separate a mixture of sand and salt? Of salt and water?



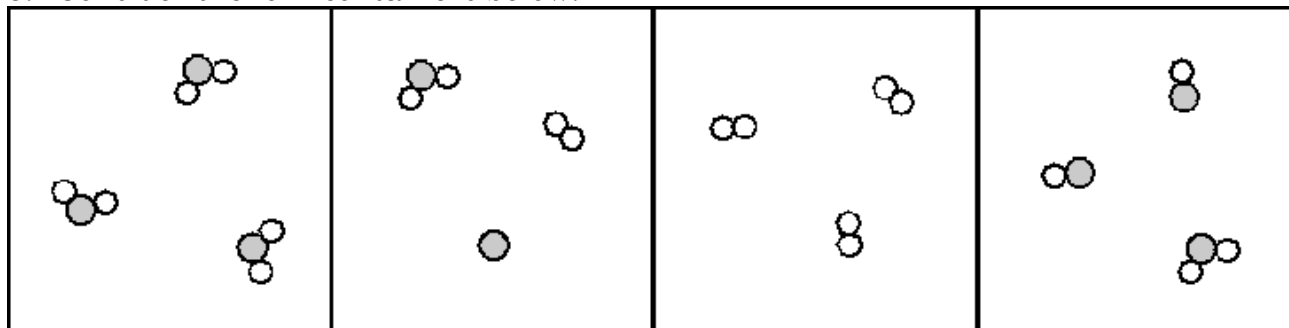
2. Explain why the technique at left would not be effective in separating a mixture of salt and sugar.

3. Draw particle representations for the following:

A mixture of iron and sulfur	A compound of iron and sulfur

4. Explain why a magnet can separate iron atoms from the mixture but not from the compound.

5. Consider the four containers below.



A

B

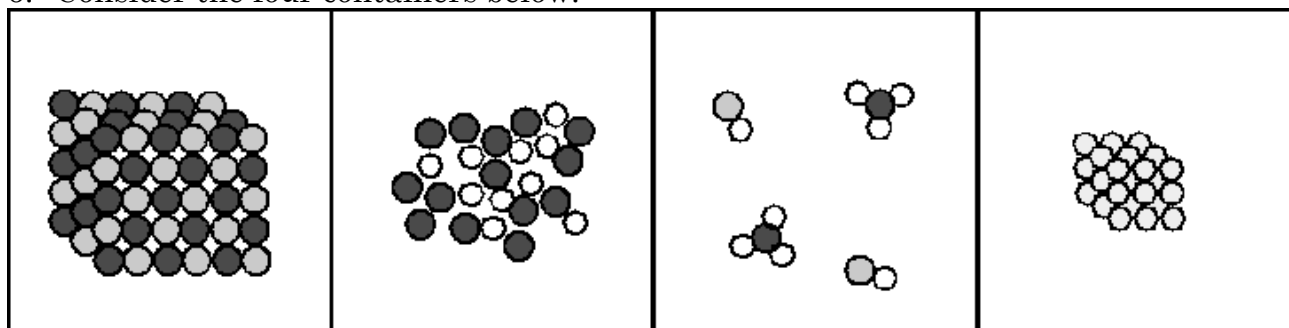
C

D

a. Which of these are mixtures? \_\_\_\_\_ pure substances? \_\_\_\_\_

b. Which contain only compounds? \_\_\_\_\_ only elements \_\_\_\_\_

6. Consider the four containers below.



A

B

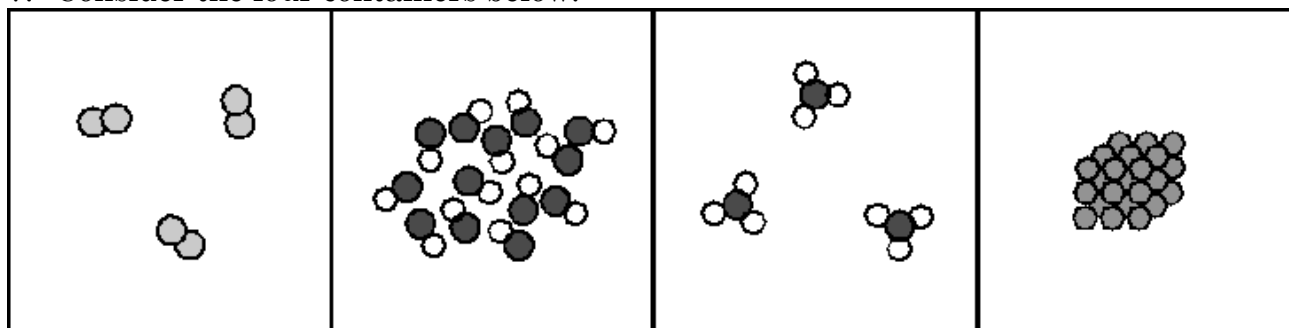
C

D

a. Which of these are mixtures? \_\_\_\_\_ pure substances? \_\_\_\_\_

b. Which contain only compounds? \_\_\_\_\_ only elements \_\_\_\_\_

7. Consider the four containers below.



A

B

C

D

a. Which of these are mixtures? \_\_\_\_\_ pure substances? \_\_\_\_\_

b. Which contain only compounds? \_\_\_\_\_ only elements \_\_\_\_\_

8. Which of the containers in #7 contain a gas? \_\_\_\_ a liquid \_\_\_\_ a solid \_\_\_\_