

Name: _____

Date: _____

Science Period: _____

LAB: Separating Mixtures

A. Separating a Mixture

1. Given a mixture of iron dust, salt, wood chips, and sand; **describe** a method to separate each into their own component using **complete sentences & scientific vocabulary**.

a. **Wood chips:** _____

b. **Iron dust:** _____

c. **Sand:** _____

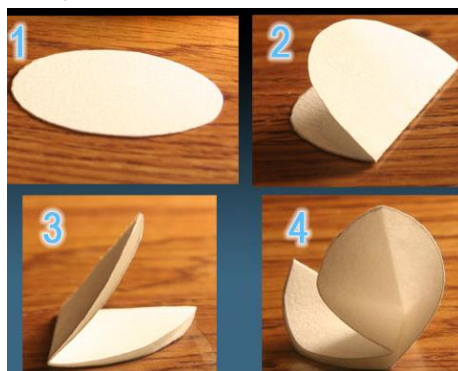
d. **Salt:** _____

2. After you complete Part A, **separate** the wood and iron filings from the mixture using a magnet and your fingers.

B. Procedure for Filtration

Materials needed: funnel, filter paper, beaker, petri dish

1. *Fold* the filter paper in half and then, in half again. Fit the filter paper into the funnel. One side of the filter paper should be *single* layer and the other should be a *triple* layer. *Wet* the filter paper so it sticks to the funnel.



2. *Add* water to the mixture of sand and salt in the petri dish. *Stir* the mixture for ~2 minutes.

3. *Slowly pour* the mixture of sand, salt, and water through the funnel into the beaker. *Do not* pour the mixture above the *top* level of the filter paper.

4. After **all** the solution has passed through, *carefully remove* the filter paper. *Spread out* the filter paper and allow it to dry. Leave the contents on the filter paper.

5. *Swirl* the solution in the **beaker** a few times. Pour the liquid in the beaker into a petri dish. Label

your petri dish and filter paper. Place the petri dish on the counter and observe it the next day.

6. **CLEAN** equipment and lab station; put materials back in correct containers.



C. Results: The Next Day . . .

- 1. What material was left on the filter paper? _____
- 2. What was the residue left on the petri dish? _____

D. Conclusion: *using pen, restate & answer with complete sentences. Use your science jargon!*

- 1. Why was the salt able to pass through the filter paper? _____

- 2. Why was the sand not able to pass through? _____



- 3. Could a mixture of sugar and salt be separated using this same method? Why or why not?

- 3. What are the major differences between a mixture, solution, and suspension? (suspension: sand & water)

