Grade 7 Science
Unit 3: Mixtures and Solutions
CORE LAB 4- PART 1

Name: $\qquad$

Partners:

Problem: How can we separate homogeneous mixtures (solutions)?

## Materials:

| - evaporating dish | - 50 mL graduated cylinder |
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| - hot pad | • hot plate |
| - stirring rod | - tongs |
| - watch glass | • salt water |

## Procedure:

1. Pour 50 mL of salt water into the empty evaporating dish. Cover the dish with the watch glass.
2. Put the evaporating dish on the hot plate. Very gently heat the solution. Observe the solution as it heats, and record your observations in your notebook.
3. When all the water has evaporated, remove the evaporating dish from the hot plate. Place the evaporating dish on the hot pad to cool.
4. When the evaporating dish has cooled, remove the watch glass. Observe the material that remains in the evaporating dish. Record your observations.
5. Clean up and put away the equipment you have used.

## Observations:

Draw a picture of your setup:

Draw a before and after picture of the evaporating dish

## Analysis:

1. Describe the appearance of the solution in step 1.
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2. Describe the material that remained in the evaporating dish in step 4.
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3. What happened to the water in the solution? (Be sure to identify the change of state.)
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4. What substance likely remained in the evaporating dish?
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5. Explain why it would be unsafe to use taste to be sure of what substance it is.
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6. Suggest one way that you could collect the water that evaporated.
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Conclusion:
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