

## 5.2 Lab Report: Compound Interaction

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### Research Question:

What behavior do ionic and covalent compounds exhibit when combined as a mixture?

### Introduction:

Some compounds have charges and some don't. This will affect how they interact. Salt, water and oil are examples of these types of compounds and are common.

### Procedures:

Same as book.

### Results:

The salt in the oil was still visible. It didn't dissolve in the oil.  
The salt in the water was hardly visible. It was mostly dissolved.

### Conclusion:

Salt is an ionic compound: NaCl. sodium is a metal and chloride is a nonmetal. water is polar covalent. both compound or held together by positive and negative charges. they will be attracted to each other. water separates the salt molecules. you see the salt is dissolved.

Oil is a nonpolar covalent. It has no charge. it is not attracted by charges to ionic or covalent compounds. Thus, it did not dissolve the water.

This experiment demonstrates that "like dissolves like."

1. Polar covalent compounds and ionic compounds are compatible.
2. Polar covalent and polar covalent compounds are compatible.
3. Nonpolar and nonpolar compounds are compatible.
4. Nonpolar is not compatible with polar or ionic.