LAB 5.2

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

Procedures-
Same as in book

Vocabulary-

1. Ionic compound- compounds that form by the transfer of electrons between metals and nonmetals.
2. Covalent compound- compounds that are formed when two nonmetal atoms create a covalent bond by sharing valence electrons.
3. Polar Compound- Chemical compounds that are held together by polar covalent bonds.
4. Nonpolar (purely) covalent compound- A type of chemical bond that is formed when electrons are shared equally between two atoms.
5. Immiscible- not forming a homogeneous mixture when added together.
6. Mixture- A substance made by mixing other substances together.
7. Suspension- the temporary prevention of something from continuing or being in force or effect.

Data/Observations-
The water with the salt has foam on top. Lots of tiny bubbles. Cannot see any salt. Cooking oil has a sort of film on the surface with bits of salt stuck to the glass. Lots of tiny bubbles. Lots of salt resting on bottom of glass

Conclusion-
Salt is ionic; its formula is Na Cl. Na is the metal sodium and Cl is the nonmetal chlorine. Water is polar covalent. Both compounds are held together by positive and negative charges, and they will be attached to each other. Water separates the salt molecules; you see that the salt is dissolved. Oil is nonpolar covalent. It has no charges. So, it is not attracted by charges to ionic or covalent compounds. Thus, it didnt dissolve the salt.
This experiment demonstrates that like does not dissolve like.

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