

## Student Worksheet for Lesson #1

**Make a Prediction about what will happen when oil is added to the bottle of water.**

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### Conduct an Experiment

1. Your teacher will now mix together colored water and vegetable oil.

### Analyze the Results

1. Did you observe what you predicted?

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If not, how did your observation differ from your prediction?

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2. Do your observations leave you with any more questions? Do they enable you to make more predictions? If so, what are they?

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### Draw Conclusions

3. Example: Based on your results, do you feel that \_\_\_\_\_? Explain your answer.

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### Student Worksheet on Polarity

**Instructions:** Determine whether the following are covalent or ionic compounds. If covalent, determine if they contain polar or nonpolar bonds. Finally, determine if the molecule is polar or nonpolar.

Compound	Ionic or Covalent	Polar/Nonpolar bonds	Polar/Nonpolar Molecule
NaCl			
CO <sub>2</sub>			
CCl <sub>4</sub>			
H <sub>2</sub> O			
MgCl <sub>2</sub>			
NO <sub>2</sub>			
NH <sub>3</sub>			
NH <sub>4</sub> <sup>+</sup>			
HCl			
CH <sub>4</sub>			
CH <sub>3</sub> Cl			
BF <sub>3</sub>			
KBr			
N <sub>2</sub>			