



# Connected Chemistry

## Solutions Unit

### Lesson 4: Predicting Solubility



## Student's Lesson at a Glance

### Lesson Summary

Students complete a wet lab in which they explore the solubility of different solvents and solutes. Some substances may be soluble, insoluble, or partially insoluble. This lab is designed to help students begin to think about what factors influence solubility. These factors are explored in Lesson 5.

### SWBAT (Students Will Be Able To)

- Use the experimental method to design their own lab to test a hypothesis about the solubility of different solutes in different solvents.
- Classify the solubility of three solutes (salt, sugar, and cornstarch) in three solvents (water, cooking oil, and rubbing alcohol).

### Essential Vocabulary

Keep a list of all important words from this lesson. This list, in addition to the lists from other lessons, will make studying easier and improve scientific communication skills. The essential vocabulary from the unit is in bold. Additional words that will expand your scientific vocabulary are in italics.

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### Connected Chemistry Reminder

- Follow lab safety procedures at all times.
- Keep good notes when completing the lab. Include all labels. Good notes and data collection make lab write ups easier to complete.
- A good hypothesis is a proposed explanation about what outcomes will occur in an experiment based on limited information. Your hypotheses should be clearly written, testable, and observable.
- In science, it is OK if you gather data that shows your hypothesis is incorrect.
- Use scientific vocabulary appropriately from the previous Lesson at a Glance vocabulary sections to create your lab writeup.
- Supporting claims with evidence is not only a skill that scientists use, but a skill that will help you in other classes and everyday life.

### Notes

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### Homework

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### Upcoming Quizzes/ Tests

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## Activity 1: Wet Lab - Testing Substance Solubility

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You will explore the solubility of different solvents and solutes in the following lab. Some substances may be soluble, insoluble, or partially soluble. This lab will also help you think about what factors influence solubility.