

A Tasty Solution Lesson Plan 6th Grade

Teacher

Date

School

SLE # NS.1.6.5: Communicate results and

conclusions from scientific inquiry, PS.5.6.7: Identify characteristics of chemical changes, NS.1.6.4: Interpret scientific data using data tables/charts, bar and double bar graphs, line graphs, stem and leaf plots, and line graphs, NS.1.6.5: Communicate results and conclusions from scientific inquiry

Objectives:

Content: I will be able to communicate results and conclusions from scientific inquiry.

I will be able to identify characteristics of chemical changes.

I will be able to interpret scientific data.

I will be able to communicate results and conclusions from scientific inquiry.

Language: I will be able to use the terms solvent, solution, solute, mixture, and solubility while working with my group.

Assessment: The teacher will be able to assess student knowledge based on completed activity sheet.

Technology/Materials: M & M's, Skittles, activity sheet, and stopwatches.

Vocabulary: solvent, solution, solute, mixture, solubility, data table, bar graph, line graph

Bloom's: X Remembering X Understanding X Applying Analyzing Evaluation Creating

Questions: Describe what a solution is. What are some examples of solutions? What are the parts of a solution? Tell me what a solute is. Tell me what a solvent is. How are solutes and solvents different?

High Yield Strategies: X Identifying similarities & Differences X Summarizing & Note Taking X Cooperative Learning

X Reinforcing Effort & Providing Recognition X Setting Objectives & Providing Feedback X Generating & Testing Hypotheses

X Cues, Questions & Advanced Organizers X Homework & Practice Nonlinguistic Representations

Instructional Strategies:

Set: Activate prior knowledge by asking the questions above. Show students pictures of solutions, solvents, and solutes. The teacher may also choose to create a list of each for the students.

Model: Explain to the students that they will be testing the dissolving rates of different candies. During the testing they will be using different techniques that may affect the dissolving rates. For the first test, they will place the candy on their tongue and leave it alone. For the second test, they will put the candy in their mouth and use only their tongue to move it around. For the third test, they can use their tongue and teeth to aid in the dissolving of the candy. They will need to time each time they place a candy in their mouth. HINT: The best way to group students in this activity is in pairs. This way, one student can time while the other one tests, and then they can switch. You could also have them both start at the same time and call out when one is done. Either way works, but the only factor will be the number of stopwatches you have!

Guided Practice/Strategies: Model for the students how to use the stopwatches and the testing methods.

Intervention Strategies: Remodel as necessary. Walk around the room to help facilitate learning. **Accommodations & Modifications (IEPs)** See individual IEPs. Shorten assignment as needed.

Independent Practice/Activities: Allow students to conduct tests on their candy and complete the activity sheet. There are 3 empty rows on the activity sheet if you choose to add in any other solutions for the students to break down.

Enrichment Activities: Have students brainstorm other candies or foods of which they could test the solubility.

Closure: Have the students write about the following questions:

1. What factors influenced the dissolving rates of the different candies?
2. What could you do differently the next time you test the candies?
3. What other ways could you do the test instead of using your mouth?

Homework: Have students go home and test the solubility of other foods at their homes.