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Science Lesson Plan 3

ELD 376

12-5-13

Grade: 5th

Subject: Science

Standard: 5.1.4.A.1 Demonstrate understanding of the interrelationships among fundamental concepts in the physical, chemical, life, and Earth systems sciences.

Objective:

* Students will create mixtures and solutions.
* Students will discuss what makes mixtures and solutions.
* Students will analyze the differences between mixtures and solutions.
* Students will take apart or attempt to take apart the mixtures and/or solutions.

Introduction:

* "Boys and girls, today we are going to be doing a great, interactive experiment with mixtures and solutions."
* "For the past few days we have been working on mixtures and solutions and identifying their properties."
* "Why don’t you take out your science notebooks and we will have a little bit of a review of what mixtures and solution are. What are examples of mixtures? Solutions? What makes these either a mixture or a solution? Turn and talk to a partner." (Wait for responses, do a group share, and expand on them or correct them if necessary).
* "Wonderful! (repeat what the students said).
  + Should be along the lines of:
    - Mixtures are two or more substances that are mixed together but not chemically combined.
    - Solutions are substances that are mixed together where a solid dissolved completely into a liquid.

Procedure:

* "Today we are going to be using what we learned about and make it come to life. We are going to be creating and taking apart or trying to take apart both mixtures and solutions. What do you scientists think would be easier to take apart, a mixture or solution? Can both of them be taken apart?” Wait for answers and discuss.
* “If you take a look at your science bins on your desks you will see a bag of pretzels, cheeze itz, cranberries, water and sugar. You will be using these to make one mixture and one solution. Work as a group to figure out which items mixed together will form a mixture and which ones will form a solution. After you have created both, separate them OR think about ways to separate the objects and if you can separate them. Once you have done that, you will individually fill out a worksheet that I will hand out. Get going scientists!”

Assessment: Class discussion, worksheet and their experiment.

Worksheet:

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Please answer the following questions in complete sentences:

1. What was the mixture that you created? List the items.
2. What was the solution that you created? List the items.
3. What makes the mixture you created a mixture?
4. What makes the solution that you created a solution?
5. Can you / were you able to take the mixture apart? If so, how?
6. Can you / were you able to take the solution apart? If so, how?
7. What made the mixture different from a solution?