**Pure Substances and Mixtures - Adobe Spark Video**

**Using Technology in Science to Document and Showcase Learning**

In the next few weeks, you will perform several different experiments in science to learn about different concepts related to pure substances and mixtures. You will document your learning by creating a video using Adobe Spark.

**Learning Goals:**

* Use a variety of forms to communicate your knowledge
* Investigate the properties of pure substances and mixtures (e.g., solubility, concentration, saturation)
* Demonstrate an understanding of the properties of pure substances and mixtures

**Your task:** Create a video which will show your learning about solutions, mixtures, solubility, concentration as well as the different methods of separating mixtures. You will take pictures and record your learning during each experiment. Here are some of the questions that you will include:

**Lab 1**: Rate of dissolving common kitchen ingredients

1. Which ingredient took the least amount of time to dissolve in water?
2. Which ingredient took the most time to dissolve?
3. Were all solutions identical in appearance? If not ,what was the difference?

**Lab 2:** Mixtures or Solutions?

Using your observations explain why some test tubes had a uniform appearance

 throughout them and in others you could see different parts after the test

 tubes were agitated. In your explanation, you are required to refer to all 4 tests and use the

 following scientific terms: solute, solvent, dissolve, solution, and mechanical

 mixture to communicate your understanding.

**Lab 3**: Factors that affect the rate of dissolving

 Explain how the following affect the rate at which a solid dissolves:

 a) Agitation vs. No Agitation

 b) Room Temperature vs. Hot Water

 c) Size of particles: Sugar cube Vs. Granulated Sugar

**Lab 4: Separating Mechanical Mixtures**

 Explain the methods that you’ve used to separate your complex mixture. Were these methods appropriate? Why?

**Success Criteria**

* I can use technology to document and demonstrate my learning (create a video)
* I can use science vocabulary and technology to communicate my understanding
* I can use visuals from my experiments to support my explanation
* My video answers all of the questions from each lab
* My answers demonstrate an understanding of the following concepts: solution, solvent, solute, concentration, factors that affect solubility.