

3rd - 5th Grade

30-minute Science Lesson

Mini-Lesson: Discussion

- Who can remind us what matter is? What is matter made of? What do we mean when we talk about particle size?
- What do you think will happen to a whole sugar cube in water?
- What do you think will happen to a crushed sugar cube in water?

Group Work:

Person 1: Get 2 cups, 2 sugar cubes, 1 wooden stick, 1 graduate

Person 2: Measure and pour 25mL of water into 2 separate cups.

Person 3: Use the wooden stick to crush 1 sugar cube. Be sure you keep all of the sugar.

Everyone: Observe the crushed and the whole sugar cube with the magnifying lens.

Sketch what you see in the chart below.

Person 4: Add the crushed sugar cube to a cup with 25mL of water.

Add the whole sugar cube to the other cup with 25mL of water.

Observe each for 3 minutes.

Everyone: Write down a summary of what your group observed in the chart below.

Answer the questions below the chart.

Group Observations:

	View with the Magnifying Lens	What did you see happen during 3-Minutes?
Whole Sugar Cube		
Crushed Sugar Cube		

Sharing:

How did crushing one sugar cube change its particle size?

How can you explain what happened to the crushed vs. the whole sugar cube?

Why do you think you were instructed not to stir?

If the water had been a different temperature, do you think it would have affected your results?

Based on what you did today, define the following words.

- Solid:
- Particles:
- Liquid:
- Dissolve:
- Mixture:
- Solution:

5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen.