Sweet and Slow
Which dissolves faster, a whole sugar cube or a crushed one?

What to do: Crush one of the cubes in the container. Leave the other sugar cube whole, as is. Place each in its separate glass of water at the same time.

What happens: The crushed sugar cube dissolves faster.

Why: The water molecules must dissolve all of the outside parts of the solid sugar cube before they can reach and dissolve the inside. This takes longer. Because the water molecules come in contact with more outside surfaces when the sugar cube is crushed, the rate of solubility (or how fast a substance dissolves) is quicker.

YOU NEED
• two sugar cubes
• small disposable container
• Hammer or rock
• two glasses half filled with water