Practical: Investigating Dissolving

Resources: (per class)

* Beakers
* Sugar (granulated and caster)
* Stirring sticks or spoons
* Thermometers
* Kitchen scales
* Stopwatch or timer
* Access to water at a variety of temperatures

Activity:

Encourage the children to consider and test different factors that affect how quickly a soluble material dissolves in water. Help them to plan and conduct fair test investigations, exploring one or more of the following factors: the temperature of the water, the mass of sugar, whether or not the beaker is stirred, and the type of sugar/ particle size. This can be carried out as a class activity or in small groups.

**Note:**You may want to use the [Planning an investigation activity sheet](http://cdn-media.tigtagworld.com/learning-materials/planning-an-investigation/Planning_an_investigation_activity_sheet.pdf).

Optional Extra

Ask the children how they could use the kitchen scales to confirm that sugar is still present in a solution, even though it is no longer visible. *Weigh the sugar and water separately, then together as a solution. Both weights will be equal, indicating that the amount of matter has not changed. For example, if you add 10 grams of sugar to 100 grams of water, the solution will weigh 110 grams.*

Encourage the children to consider and test the factors that affect how quickly a soluble material, such as salt or sugar, dissolves. Ask the children to plan a fair test investigation, whereby factors including stirring, temperature of the water, mass of sugar and type or particle size can be explored. This can be carried out as a class activity or in small groups.

The children can use the [Planning an investigation activity sheet](http://cdn-media.tigtagworld.com/learning-materials/planning-an-investigation/Planning_an_investigation_activity_sheet.pdf).