

Science - KS3

Particles - Lesson 6

Solutions

Mrs Wolstenholme



**Sugar dissolves in milk, but rice does not dissolve in milk.
Answer the following questions:**

- 1. Identify the solute and solvent in a sugar and milk solution.**
- 2. Is sugar soluble or insoluble? How do you know?**
- 3. Is rice soluble or insoluble? How do you know?**



Please only do this with adult supervision.

Task:

Fill up a cup of water all the way to the top.

Pour some salt in.



- Draw your own particle model of a salt water solution.**
- 1. Start by drawing the particles model of a liquid.**
 - 2. Add salt particles in the gaps between the particles.**

Reminders:

Water particles must all be the same size.

Salt particles must all be the same size.



Together

Some sugar is dissolved in 35 g of ethanol. The mass of the solution is 40 g.
What is the mass of the sugar?

Mass of solute + Mass of solvent = Mass of solution



1. 30 g of sugar dissolves in 50 g of water. What is the mass of the solution?
2. 10 g of water is used to dissolve some salt. The solution has a mass of 11 g.
What is the mass of the salt?
3. 17 g of coffee was dissolved in some milk. The solution has a mass of 28g.
What is the mass of the milk?

