

Y5 Dissolving

KS2 Y5 Science · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Salt is stirred into water and seems to vanish. Where has it gone?

Step 1 · Is the salt still there?

Yes — the water tastes salty (only taste in a clean kitchen, never in a lab)

Step 2 · Why can't we see it?

It has broken up into pieces far too tiny to see, spread through the water

Step 3 · What have we made?

A solution — a liquid with something dissolved in it

Answer: The salt has dissolved: it is still there, mixed evenly through the water solution.

Check: A solution is see-through (though it may be coloured). A cloudy mixture means something hasn't dissolved.

2. Now try one with the steps

How can you get the salt back from salty water?

Step 1 · Pour the solution into a shallow dish

Step 2 · Leave it somewhere warm for a few days

Step 3 · Look at the dish

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. What do we call a material that dissolves in water?

2. What do we call a material that does not dissolve in water?

3. Is sand soluble or insoluble in water?

4. Name TWO materials that are soluble in water.

5. What is a solution?

6. When sugar dissolves, does it disappear?

7. Give ONE way to make sugar dissolve faster.

8. How can you get salt back from a salt solution?

9. Flour makes water cloudy and settles at the bottom. Has it dissolved?

10. 250 g of water and 15 g of salt are mixed until the salt dissolves. What is the mass of the solution in grams?

11. What word describes a solution where no more solid will dissolve?

12. Kai wants to test whether temperature affects how fast sugar dissolves. What should he change?

13. Name TWO things Kai should keep the same in his test.

14. Sugar dissolves in 60 seconds in warm water and 180 seconds in cold water. How many times faster is it in warm water?

4. Before you hand it in

Dissolving is the same

Ice melts. Sugar dissolves in tea.

When salt dissolves it disappears and is gone.

Say 'it has dissolved' — not 'it has disappeared'.

A coloured liquid can't be a solution.

Clear (see-through) = dissolved. Cloudy = not dissolved.

If you stir long enough, anything will dissolve.

Stirring only makes soluble materials dissolve faster.