

Y5 Properties Materials

KS2 Y5 Science · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Is dissolving salt in water reversible or irreversible?

Step 1 · Is a new material made?

No — the salt is still there, just in pieces too small to see

Step 2 · Can the salt be recovered?

Yes — let the water evaporate and salt crystals are left

Answer: Dissolving is reversible.

Check: Reversible changes don't make new materials, so you can get back what you started with.

2. Now try one with the steps

Is burning wood reversible or irreversible?

Step 1 · What is made?

Step 2 · Can they be turned back into wood?

Answer:

3. Practice

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

1. Which of these does NOT dissolve in water: sugar, salt or sand?

2. What is a solution?

3. Is melting ice reversible or irreversible?

4. Is baking a cake reversible or irreversible?

5. Which method separates sand from water?

6. Which method gets salt back from salty water?

7. Which method separates rice from flour?

8. Name a material that is a good thermal insulator.

9. Give TWO signs that a new material has been made.

10. What gas is made when vinegar is added to bicarbonate of soda?

11. 20 g of sugar is dissolved in 200 g of water. What is the mass of the solution in grams?

12. Why is rusting an irreversible change?

13. Explain how you would separate a mixture of sand and salt.

14. Melting and burning both need heat. Why is only one of them reversible?

4. Before you hand it in

When sugar dissolves it disappears.

Evaporate the water to show the sugar or salt is still there.

All changes caused by heat are irreversible.

Ask whether a new material forms.

You can sieve sand out of water.

Filter sand out of water with filter paper.

Dissolving and melting are the same.

Ice melts; sugar dissolves.