

Y5 Reversible Changes

KS2 Y5 Science · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

What makes a change reversible?

Step 1 · Is a new material made?

No — the materials are the same before and after

Step 2 · Can you get back what you started with?

Yes — by cooling, heating, evaporating, sieving or filtering

Answer: A reversible change makes no new material and can be undone.

Check: Dissolving, mixing and changes of state (melting, freezing, evaporating, condensing) are all reversible.

2. Now try one with the steps

Is making a jelly from jelly cubes and hot water reversible?

Step 1 · What happens?

Step 2 · Can it go back?

Answer:

3. Practice

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

1. What is a reversible change?

2. Is melting ice a reversible change?

3. Is dissolving sugar in water reversible?

4. How do you reverse melting?

5. How do you reverse freezing?

6. How do you reverse dissolving salt in water?

7. Sand and gravel are mixed. Is this reversible?

8. Name THREE types of reversible change.

9. What is the reverse of evaporating?

10. 250 g of chocolate is melted. What mass of melted chocolate is there in grams?

11. Is a puddle drying up in the sun a reversible change? Explain.

12. Salt water evaporates and 12 g of salt is left. It was made with 100 ml of water. How many grams of salt were dissolved?

13. What do ALL reversible changes have in common?

14. Ali says melting butter is reversible but toasting bread isn't. Is he right? Explain.

4. Before you hand it in

If something looks different, it must be a new material.

Ask: can it be changed back? Has a new material formed?

Reversible means it reverses on its own.

Reversible means it CAN be undone, not that it will be.

Dissolving is irreversible because the solid vanishes.

Evaporation gets it back, so dissolving is reversible.

All changes caused by heating are reversible.

It depends on whether a new material forms — see the next lesson.