

# Reversible and irreversible changes

materials

**What you need:** plain chocolate pieces (allergy-checked, small squares) · chilled plates or saucers for re-hardening chocolate · clean spoons or spatulas for moving chocolate (not palms) · cups of warm hand-safe water with lids for gentle chocolate warming (teacher-prepared) · table salt · labelled pre-dried salt samples ("salt came back") · clear plastic cups or beakers · water in small jugs · dark paper or dark plates for drying salt drops · baking soda (bicarbonate of soda) · white vinegar · teaspoons and tablespoons · plastic trays for stations (two of each station type) · sliced bread for toast demo · toaster or toaster oven (teacher only) · paper towels

Words to use

Reversible change · Irreversible change · Evidence

Our question

Which of these changes can we undo, and which make something new?

I predict...because...

Words to sort

chocolate melt then cool · salt dissolve then dry · baking soda with vinegar · toasting bread

Sort each change as reversible (can be undone, same material back) or irreversible (makes something new, cannot be undone).

| reversible | irreversible |
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Which changes gave the same material back?

Which changes made something new?

What evidence did you use?

