

Reversible changes, including dissolving and changes of state, and irreversible...

compare reversible changes, including dissolving and changes of state, and irreversible changes, including cooking and rusting that produce new substances

Learning intention

- compare reversible changes, including dissolving and changes of state, and irreversible changes, including cooking and rusting that produce new substances

Teach and model

- discussing what makes a change reversible or irreversible, using everyday examples
- examining the substances produced in cooking and rusting and comparing them with the original substances
- comparing how the amount of heat energy added affects whether a change in state or an irreversible change occurs

Check understanding

- Explain the main idea in reversible changes, including dissolving and changes of state, and irreversible... using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.