

Model the rearrangement of atoms in chemical reactions using a...

model the rearrangement of atoms in chemical reactions using a range of representations, including word and simple balanced chemical equations, and use these to demonstrate the law of conservation of mass

Learning intention

- model the rearrangement of atoms in chemical reactions using a range of representations, including word and simple balanced chemical equations, and use these...

Teach and model

- identifying reactants and products in chemical reactions
- using models and representations to show the rearrangement of atoms in chemical reactions
- investigating chemical reactions in closed and open systems and relating data obtained to the law of conservation of mass

Check understanding

- Explain the main idea in model the rearrangement of atoms in chemical reactions using a... 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.