Particle model

Unscrambling definitions is a fun way to test and consolidate learners' understanding of the key terms and definitions. Instruct learners to piece together the definitions of key terms and then use their understanding of the terms to complete sentences. Answers are given below and are also provided as slides. Like the accompanying Frayer models, unscrambling definitions probe learners' understanding and target the trickier terms in the key terms list.

Ideas for adaptation

Integrate speaking and listening skills into this activity:

- Print the unscrambling definitions grid and cut around the individual boxes. Ask learners to each take a box and – as a class or group – arrange themselves into the various definitions. When everyone is ready, ask each learner to read out their own part of the definition in turn.
- Ask learners to read out the connection completion slide in full.
- For a quicker adaptation, consider doing a think, pair, share activity where learners discuss and decide on the correct definitions in pairs or small groups.

Provide more support by linking the term in column A to the correct entry in column B and perhaps the entry in column B to the correct entry in column C, for the first few key terms in the grid.

Read more about unscrambling definitions and their use: rsc.li/3Gda32t

Answers

Also supplied on the accompanying PowerPoint slides.

Unscrambled definitions answers

A **solute** is a substance that dissolves in a solvent to make a solution.

A **solvent** is a substance that dissolves the solute to make a solution.

A **solution** is the mixture produced when a solute dissolves in a solvent.

Condense is when a gas is cooled, energy is transferred from the gas to the gas' surroundings and the gas turns into a liquid.

Evaporate is when the surface of a liquid gains energy and turns into a gas; this can happen below the boiling point.

Boil is when a liquid is heated, gains energy and turns into a gas, at its boiling point.

Connection completion answers

Learners should choose row B as the correct connections for the sentences.

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B	both	However	Whereas

Completed sentences:

Evaporation and boiling **both** involve liquids changing state to become gases. **However**, boiling happens to all of a liquid at once and occurs only when the liquid reaches its boiling point. **Whereas**, evaporation can happen below the boiling point of a liquid, but only to the particles at the surface of the liquid.

Other key terms support resources

This resource is part of the key terms support for the topic of **particle model**. Find the following accompanying resources at rsc.li/4cmvSbS:

- a key terms list – carefully selected vocabulary, with definitions, that learners will come across when studying this topic at this stage
- an accessible glossary – uses diagrams, examples, pronunciation guides and more to bridge the gap between key terms and definitions
- Frayer models – a way for learners to organise their understanding of a new piece of vocabulary by working through four conceptual quadrants with the key terms: explore, break down, explain, consolidate.

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