

Reversible and Irreversible Changes

This worksheet links to the science video on Nexus TV, 'Reversible and Irreversible Changes' <https://www.nexuscsia.co.uk/nexus-tv/> and the accompanying PowerPoint presentation.

Task 1: Indicate whether each statement is true or false by putting a cross in the correct box below.

Statement - True or false?	True?	False?
1. Irreversible changes always make new materials.	<input type="checkbox"/>	<input type="checkbox"/>
2. In reversible changes, it is possible to get back the substances that you started with.	<input type="checkbox"/>	<input type="checkbox"/>
3. Burning is an example of a reversible change.	<input type="checkbox"/>	<input type="checkbox"/>
4. Melting a lollypop is an example of an irreversible change.	<input type="checkbox"/>	<input type="checkbox"/>
5. Dissolving is an example of a reversible change.	<input type="checkbox"/>	<input type="checkbox"/>

Task 2: Fill in the gaps using the following words - *useful, irreversible, not, egg, burning, acid, materials*.

When calcium carbonate reacts with _____, frying an _____, and _____ are all examples of _____ changes. This is because new _____ are made and it is _____ possible to get back the substances that you started with. Sometimes the new materials are _____ to us, for example, a cooked egg can be eaten!

Challenge: In the video, copper sulphate crystals were dissolved in water. Explain how it is possible to get the solid copper sulphate crystals back out of the solution. Include whether this is a reversible or irreversible change.

ANSWERS - Reversible and Irreversible Changes

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5. Dissolving is an example of a reversible change.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Task 2: Fill in the gaps using the following words - *useful, irreversible, not, egg, burning, acid, materials*.

When calcium carbonate reacts with acid, frying an egg, and burning are all examples of irreversible changes. This is because new materials are made and it is not possible to get back the substances that you started with. Sometimes the new materials are useful to us, for example, a cooked egg can be eaten!

Challenge: In the video, copper sulphate crystals were dissolved in water. Explain how it is possible to get the solid copper sulphate crystals back out of the solution. Include whether this is a reversible or irreversible change.

Heat the solution in an evaporating basin using a Bunsen burner. The water from the solution evaporates, leaving the solid blue crystals. This is a reversible change.