

Science: How can we separate mixtures into pure substances?

Answer these questions as you watch the lesson. Mark / edit your answers as Miss Couves answers the questions for you.

Q1) Draw a diagram representing the particles in a solid, a liquid and a gas

Solid	Liquid	Gas

Separating solids – separating sand and iron filings

Q2) Draw a particle diagram representing:

Sand/iron mixture	Sand	iron

Q3) Why was the mixture of sand and iron impure?

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Q4) Why was the sand sample at the end pure?

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Q5) Why could we use a magnet to separate iron and sand?

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Separating a solid and a liquid – pasta and water

Q6) Draw 2 diagrams showing the two different methods of separating a solid from a liquid (pasta and water, and sand and water).

Q7) Why was the mixture of sand and water impure?

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Q8) Why could pasta be removed from the water using a sieve?

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Q9) Why could sand not be removed from the water using a sieve?

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Q10) Why was filter paper better for removing sand from water?

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Q11) Why was the sieve better for removing pasta from water?

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Separating a dissolved solid and a liquid – you can have a go if you have some salt, water and a spoon and an adult

Q12) Draw a particle diagram representing:

Salty water	Salt	Water

Q13) Why was the mixture of salt and water impure?

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Q14) Why could we not use filtration to separate the salt and water?

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Q15) Why could we use evaporation to separate the salt and water?

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