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| **Topic** | Separating mixtures | **Level** | Key Stage 3 (or any course for students aged 11-14) |
| **Outcomes** | 1. To plan and carry out a method to separate salt from sand 2. To select the correct apparatus for a practical | | |

**Salt and Sand**



Each pair has been given a 5g mixture of sand and salt (3 grams of sand, 2 grams of salt). You have 45 minutes to obtain pure salt. The winner is the group with the highest yield of pure NaCl.

**We will weigh each group’s yield of NaCl at the start of next lesson.**

**RULES**

YOU CAN DEVISE YOUR OWN METHOD BUT…

YOU CAN ONLY USE THE FOLLOWING ITEMS

* Spatula
* Stirring rod
* Large beaker
* Filter paper
* Funnel
* Tap water
* Thermometer
* Conical flask
* Bunsen burner, tripod and gauze
* Petri dish
* Evaporating basin

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| **Group Name** | **Mass of NaCl produced (g)** | **% Yield of NaCl** | **Comment on purity (e.g. colour)** |
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**Progress:** further resources on separating techniques are available here: <http://thescienceteacher.co.uk/separating-techniques/>