

<b>Topic</b>	Separating mixtures	<b>Level</b>	Key Stage 3 (or any course for students aged 11-14)
<b>Outcomes</b>	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

<b>Group Name</b>	<b>Mass of NaCl produced (g)</b>	<b>% Yield of NaCl</b>	<b>Comment on purity (e.g. colour)</b>

**Progress:** further resources on separating techniques are available here:  
<http://thescienceteacher.co.uk/separating-techniques/>