# GCSE Required Practicals

Chemistry

How to write a method...just think of CIDER!

**Control variables**

**Independent variable**

**Dependent variable**

**Equipment**

**Repeats**

# Chemistry Practical 8 | Water purification

Analysing and purifying a sample of water and making it safe to drink.

Choose your equipment

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Analysing and purifying a sample of water and making it safe to drink.

**Activity 1: Analysing a sample of water**

1. Use the universal indicator paper to measure the pH of the water sample.
2. Accurately weigh an empty evaporating basin and record to two decimal places.
3. Pour 10 $cm^3$ of water sample 1 into the evaporating basin.
4. Heat the evaporating basin on a tripod and gauze using a Bunsen burner until the solids start to form and the majority of water has evaporated.
5. Weigh the cooled evaporating basin again and calculate the mass of the solids that were dissolved in the water.
6. Record your results in a table

**Activity 2: Purifying a sample of water by distillation**

1. Place the water sample in the conical flask. Set up the apparatus for distillation as shown in the diagram.
2. Heat the water using the Bunsen burner until it boils. Then reduce the heat so that the water boils gently.
3. The distilled water will collect in the cooled test tube. Collect about 1 cm depth of water in this way, then stop heating.
4. Analyse the water you have distilled by determining its boiling point.

## Can you find the CIDER?

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