# Preparing a soluble salt: supporting resources

## **This resource supports the practical video Preparing a soluble salt, available here:** [**rsc.li/3pmV9sw**](rsc.li/3pmV9sw)

## **Intended outcomes**

It is important that the purpose of each practical is clear from the outset, defining the intended learning outcomes helps to consolidate this. Outcomes can be categorised as hands on, what learners are going to do with objects, and minds on, what learners are going to do with ideas to show their understanding. We have offered some differentiated suggestions for this practical. You may wish to focus on just one or two, or make amendments based your learners’ own needs. (Read more at <rsc.li/2JMvKa5>.)

Consider how you can share outcomes and evaluation with learners, empowering them to direct their own learning.

**Hands on Minds on**

**Effective at a lower level Students correctly:**

* + Safely warm the acid and add copper oxide until the sulphuric acid is neutralised
	+ Set up the filtration equipment including folding the filter paper
	+ Safely evaporate and leave the concentrated solution to crystallise

**Effective at a higher level Students correctly:**

* + Recall all the correct equipment for the practical
	+ Plan a method to produce a soluble salt starting with an insoluble base

**Students can:**

* Talk about adding copper oxide until no more reacts as a way of ensuring all the acid has reacted
* Discuss how filtration removes unreacted reactants
* Talk about how water is being evaporated leaving the salt behind
* Write a word equation for the reaction
* Explain the term neutralisation

**Students can:**

* Carry out a risk assessment for the preparation of a soluble salt
* Discuss how evaporation leads to an increase in concentration of the salt solution
* Explain that the solubility of solutes can vary with concentration
* Write a symbol equation for the reaction