**Activity 6.2 - Testing a leaf for starch**

**Skills - A03.1 Using techniques, apparatus and materials**

Leaves turn some of the glucose that they make in photosynthesis into starch. If we find starch in a leaf that tells us if it has been photosynthesising.

* Wear eye protection if available.
* Take care with the boiling water.
* Alcohol is very *flammable*. Turn out your Bunsen flame before putting the tube of alcohol into the hot water.
* Use forceps to handle the leaf.

1. Take a leaf from a healthy plant, and drop it into boiling water in a water bath. Leave for about 30s. Turn out the Bunsen flame.
2. Remove the leaf, which will be very soft, and drop it into a tube of alcohol in the water bath. Leave it until all the chlorophyll has come out of the leaf.
3. The leaf will now be brittle. Remove it from the alcohol, and dip it into hot water again to soften it.
4. Spread out the leaf on a white tile, and cover it with iodine solution. A blue-black colour shows that the leaf contains starch.

**Questions**

**A1** Why was the leaf put into boiling water?  
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**A2** Why did the alcohol become green?  
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**A3** Why was the leaf put into alcohol after being put into boiling water?  
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