**Activity 6.3 - To see if light is needed for photosynthesis**

**Skills - A03.1 Using techniques, apparatus and materials, A03.3 Observing, measuring and recording, A03.4 Interpreting and evaluating observations and data**

* 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 healthy bean or Pelargonium plant, growing in a pot. Leave it in a cupboard for a few days, to destarch it.
2. Test one of its leaves for starch, to check that it does not contain any.
3. Using a folded piece of black paper or aluminium foil, a little larger than a leaf, cut out a shape (see diagram). Fasten the paper or foil over both sides of a leaf on your plant, making sure that the edges are held firmly together. Don’t take the leaf off the plant!
4. Leave the plant near a warm, sunny window for a few days.
5. Remove the cover from your leaf, and test the leaf for starch.
6. Make a labelled drawing of the appearance of your leaf after testing for starch.

**Questions**

**A1** Why was the plant destarched before the beginning of the experiment?  
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**A2** Why was part of the leaf left uncovered?  
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**A3** What do your results tell you about light and photosynthesis?  
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