**Experiment: Green Leaves and Photosynthesis**

**Aim:**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Equipment:**

|  |  |
| --- | --- |
| **Geranium leaf****2 cm x 20 cm Aluminium foil strip****paper clips****Iodine solution****Scissors****Metal tongs** | **3 beakers of boiling water****Two large test tubes of ethanol****Two watch glasses****SAFETY GLASSES** |

**Method:**

1. Place the geranium plant in a cupboard for at least 5 days



1. Remove the plant from the cupboard and cover one leaf with a strip of aluminium foil for at least 24 hours. Hold down with paper clips.
2. Place plant in the sun for several days
3. Drop leaf into one beaker of boiling water for a few minutes. This kills the leaf cells so that no further reactions can occur.



1. Use forceps to remove the leaves and place in a test tube of ethanol. Label test tubes with a whiteboard marker with the name of your group.
2. Stand test tube in a second beaker of boiling water that is sitting on a hot plate on the teacher’s desk. After around 10 minutes the leaves should look quite pale and are ready.
3. Using the tongs, remove the leaf from the test tube and dip it the third beaker of boiling water that is ON YOUR DESK for a few seconds to remove the ethanol and softens the leaf
4. Place the leaf on a watch glass and add iodine solution. Draw your observations.