

Testing leaves

Read the information below about testing a leaf with iodine solution.

Put the leaf in boiling water for 30 seconds. Carefully remove the leaf from the water and put it into a boiling tube which contains methylated spirits. Heat the boiling tube in a water bath for 5 minutes. Then wash the leaf and spread it onto a petri dish. Add a few drops of iodine solution.

- a) Draw a line from each step of testing a leaf with iodine solution, to the purpose of that step. One of the purposes is not needed.

Step	Purpose
i) Leaf in hot water •	• Remove the methylated spirits
ii) Leaf into methylated spirits •	• Remove any proteins
iii) Wash the leaf •	• Remove the chlorophyll
	• Break down the cell walls

- b) If the iodine solution turned blue-black, what substance is present in the leaf? _____

- c) A leaf was removed from a plant and left beside the plant for a week. Explain what would happen if this leaf was now tested with iodine solution.
