H

Higher Assignment  
Guide Sheet A: A.C. D.C.



**A.C. D.C relationship.**

![A diagram of a light bulb

Description automatically generated]()

**Instructions:**

* Switch on the left hand lamp.
* Adjust the a.c. voltage to give a peak alternating voltage of 1 V
* Leave this circuit switched on.
* Switch on the right hand circuit.
* Adjust the d.c. voltage so that the lamp is the same brightness as the left hand lamp.
* Measure the deflection of the spot on the oscilloscope. This gives a measure of the direct voltage across the lamp.
* Alter the a.c. peak voltage.
* Plot a graph.
* State the relationship between V d.c. and V peak using the value obtained from the graph.