**Worksheet 2.4 Studying Lenses**

What is your estimate for the focal length of the lens?

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

You will now investigate the relationship between the object distance (U) and the image distance (V). You should also measure the width of the image formed on the screen and compare this to the actual width of the object (the magnification).

Bulb

Lens

Screen

Distance ‘U’

Distance ‘V’

Tabulate your results:

|  |
| --- |
|  |

Plot a graph of image distance versus object distance.

What do you notice about the shape of this graph?