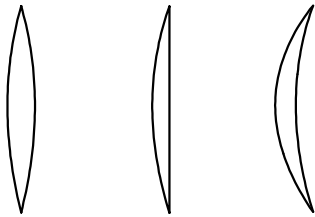


LENSES

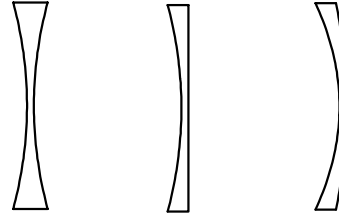
When light goes through glass (or any other transparent substance) it _____ . This causes it to *change its direction of motion*. The change in direction is called _____ .

Lenses use this change in direction to form pictures (or _____) of objects.

There are two main types of lens:



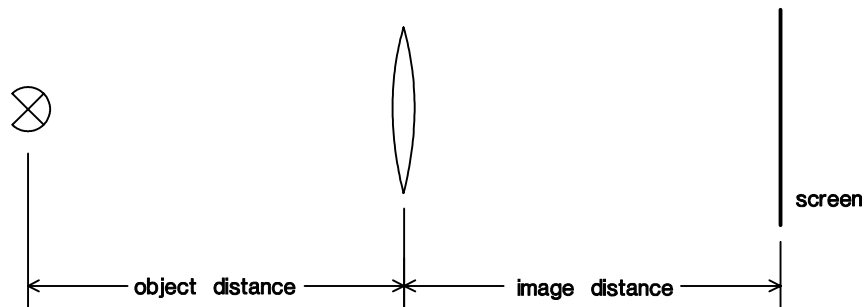
_____ lenses



_____ lenses

N.B. Most high quality optical instruments (cameras, microscopes etc) have lenses which are made from a combination of the two types of lens.

Experiment: Using a Lens



Measure the image distance corresponding to a range of object distances.
Complete the table of results on the other side.

Results

Object distance cm	Image distance cm
25	
30	
60	
80	
100	
200	
300	
400	
500	
600	
700	

Conclusions

As the object distance increases, the image distance _____, but when the object distance is large the image distance remains approximately _____.

This smallest image distance is called the _____ of the lens.