

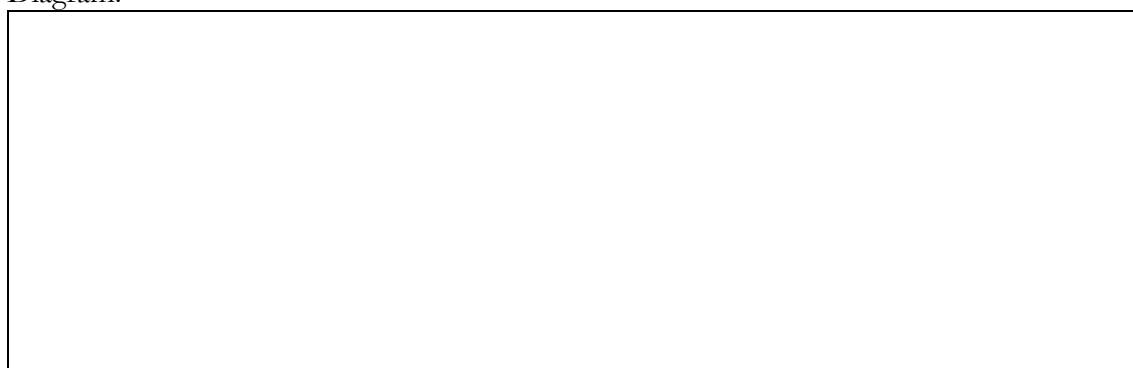
LAB – Measuring the Refractive Index Name:.....

Aim: to determine the refractive index of glass or plastic.

Method:

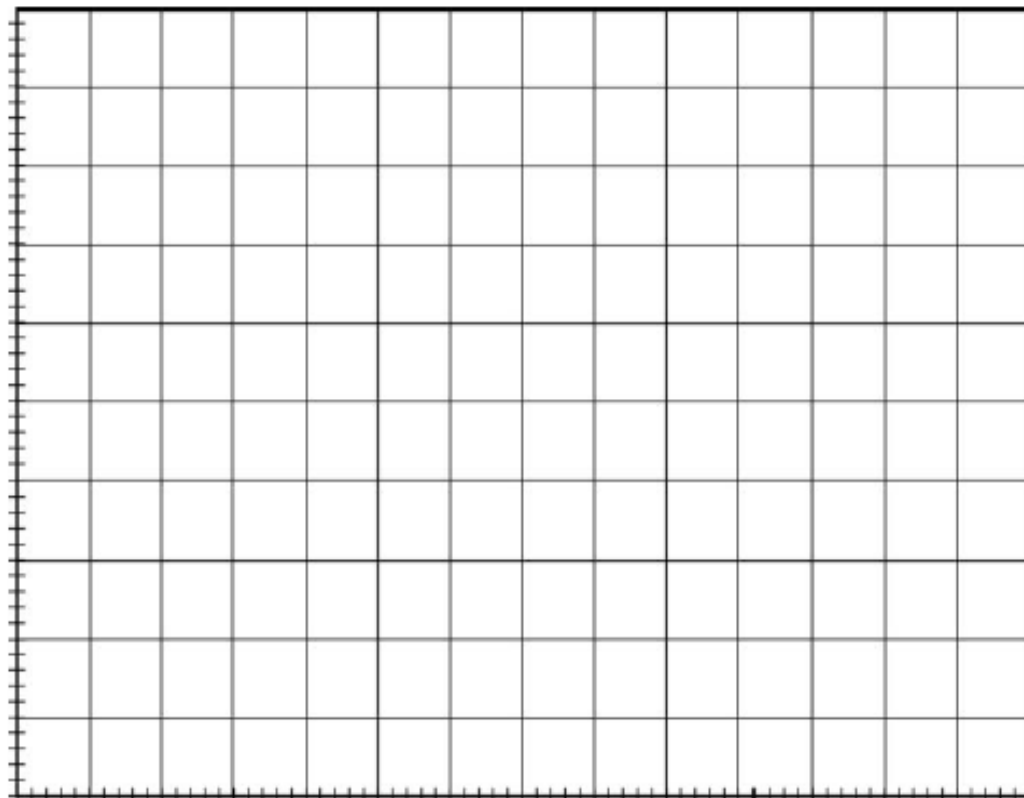
- Arrange a single slit to illuminate a glass or plastic block with a thin beam of white light.
- Draw normal lines on the block at the interface with the light rays.
- Measure the angles on incidence and refraction.
- Calculate $\sin \theta_i$ and $\sin \theta_r$.
- Repeat the measurement for differing angles of incidence.

Diagram:



Results:

| θ_i | θ_r | $\sin \theta_1$ | $\sin \theta_2$ |
|------------|------------|-----------------|-----------------|
| 0 | | | |
| 10 | | | |
| 20 | | | |
| 30 | | | |
| 40 | | | |
| 50 | | | |
| 60 | | | |
| 70 | | | |
| 80 | | | |



Conclusion:

