Refraction class practical

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Lesson Objectives

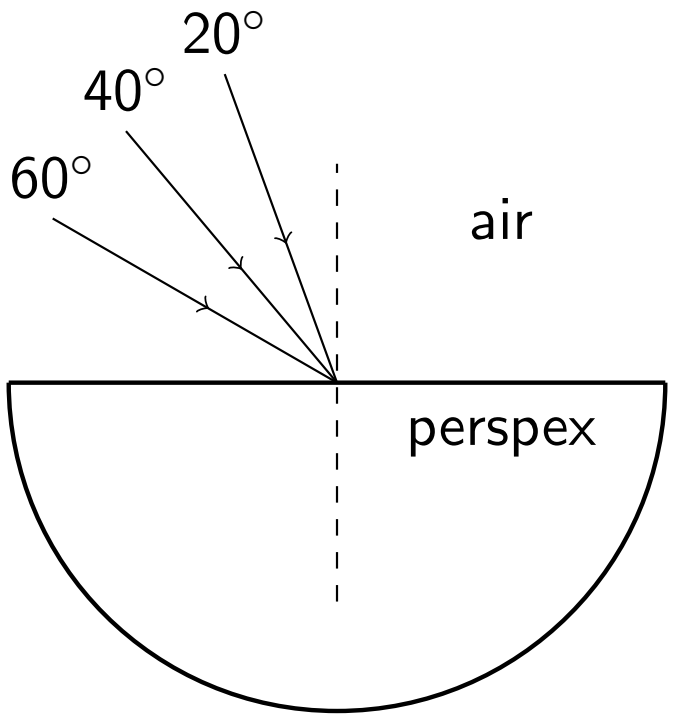
1. To investigate the bending of light (refraction).
2. To gain intuition about the way light behaves.
3. To find a pattern in the results.
4. (if time) To observe dispersion (i.e. a rainbow) in a prism.

REMINDER: Office hours are week 2 Tuesdays 3.45–5.0 p.m. in room 19.
Next office hours: Tuesday 31 January 2012

Equipment

- Power suppply
- Ray box
- Pencil & ruler
- Perspex D-block
- Blank Paper (for drawing)
- Lined Paper (for results)
- Protractor
- Scientific calculator

Experiment 1

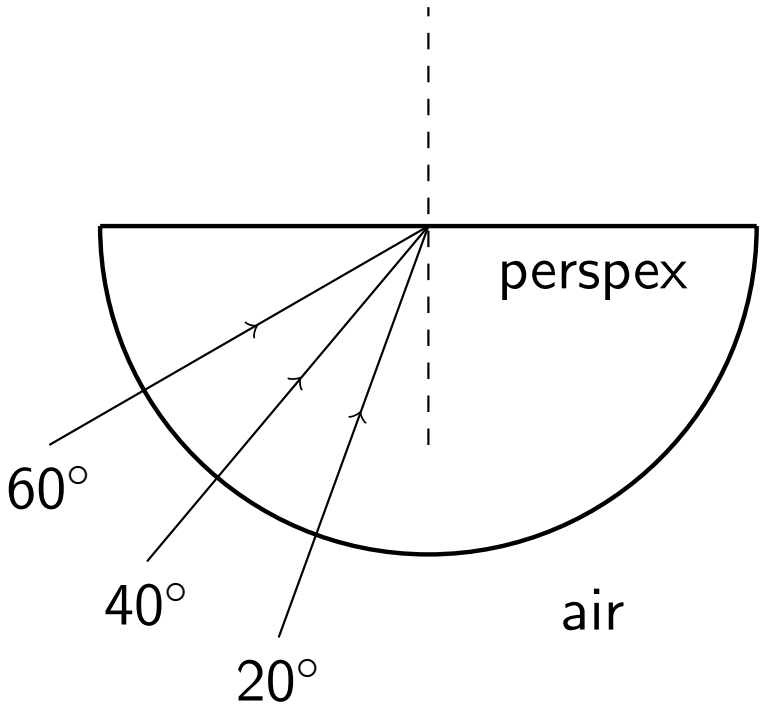


Results

Record your results like this; if you cannot measure an angle, record this in the table too.

Angle of incidence θ_i / $^\circ$	Angle of refraction θ_r / $^\circ$	$\sin(\theta_i/^\circ)$	$\sin(\theta_r/^\circ)$
0		0.000	

Experiment 2



Results

Record your results like this; if you cannot measure an angle, record this in the table too.

θ_i / °	$n\sin(\theta_i/°)$	θ_r / °	$\sin(\theta_r/°)$	Angle of reflexion r / °