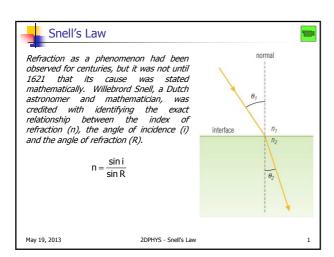


LIGHT & GEOMETRIC OPTICS
Snell's Law
(P.441-442)

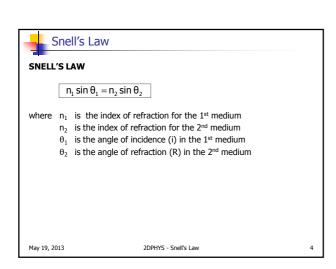


Snell's Law		
However, this formula wa that it only worked wi travelling from air (or a another substance – it did light travelled from a sub. With further study a more was discovered.	hen light was vacuum) into not work when stance into air.	normal θ_t
RECALL!		n_2
The angles of the incident	t and refracted	\
light rays are always mea	sured from the	θ_2
normal.		σ ₂
		*
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Snell's Law	
Snell's law is a formula that uses values for the index of refraction to calculate the new angle that a ray will take as a beam of light strikes the interface between two media. If you call the indices of refraction of the two media n_1 and n_2 and call the angles of incidence and the angle of refraction θ_1 and θ_2 then the formula for Snell's law is:	normal θ_1 interface n_1
$n_1 \sin \theta_1 = n_2 \sin \theta_2$ NOTE! θ is a Greek symbol used in science and math to represent an unknown angle.	θ_2

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beam is passed fi The angle of incid	a block of cubic zirconia is placed in water. A rom the water ($n=1.33$) through the cubic zir ence is 50° , and the angle of refraction is 27° . fraction of cubic zirconia? (Be sure to use these questions.)	conia. What
$n_{cubic} = n_2 = 2.24$		
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2. When light passes from air (n = 1.00) into water (n = 1.33) at an angle of incidence of 60° , what is the angle of refraction?			
$R = \theta_2 = 41^{\circ}$			
	_		
	_		
	_		
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NOTE!

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