Biophysics Flash Cards

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Reflection & Refraction Flash Cards

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Instructions

Print the flash cards from the templates on pages 2-3. Each page has 4 flash cards.
The concept is on the left side of the template and the explanation is on the right side.

To create individual flash cards:

1) Trim the margins on the top, bottom, and sides of the page where you see the scissors icon
2) Cut between the cards where you see the scissors icon to create individual cards.
3) Fold the cards in half at the dashed "Fold" line and align the front and back edges of each card.
4) Each template makes 4 flash cards of 2.5 x 3.75 inch (H x W). There are 8 cards in a set.
   The colored border indicates that the cards are in the same set.

Objectives & Grade Level

Teach students basic concepts about biophysics. Appropriate for middle school to high school students. Students can use the flash cards singly or in groups by studying the cards and testing themselves or others on concepts from the cards.

Acknowlegdements

Designed and created as Broader Impacts with support by National Science Foundation Grant #CMMI 1660924 to SAE.

Biophysical Society

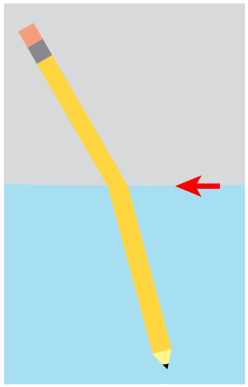
BiophysicsWeek

Reflection

Change of direction of light when it strikes an object

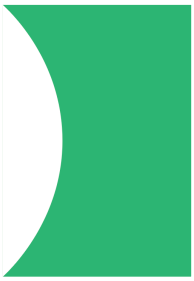
Refraction

Bending of light as it travels between substances



Concave

A surface or object that curves inward



Convex

A surface or object that curves outward

With support from the National Science Foundation

Index of Refraction

Ratio of the speed of light (c) to the speed of light in a medium (c')

$$n = \frac{c}{c'}$$

Snell's Law

Change in light direction (θ) as it moves from medium of one refractive index (n_1) to another (n_2)

$$n_1 \sin \theta_1 = n_2 \sin \theta_2$$

_____ of light explains why you can see yourself in a _____

Reflection

mirror *(or window, pool of water, other surface)*

_____ Law describes refraction, which is caused by a change in the direction of _____

Snell's

light *(or other wave)*

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