# **Physics Photo Project**

**Purpose:** To represent and explain physics in our everyday lives

**Equipment:** You and a camera

#### **Rules & Restrictions:**

- You may work alone or in pairs.
- You may pair with only work with someone from your hour.
- You or your partner must take the photo after the date it is assigned.
- Photos may be either black-and-white or color.
- Photos may be cropped for better composition (as long as the final product is still an 8" x 10" or 8½" x 11" print). Minimal manipulation of digital images with the intention of accurately rendering the subject is acceptable e.g.: small adjustments to brightness, contrast, color balance and/or sharpness is acceptable. No other digital manipulation of an image is allowed (unless it is a photo with multiple images).
- Photos will be digitally submitted (more on that later).
- Photos are to be at least 4 x 6 inches in size and printed on photo paper.
- Photos are to be and mounted on 8.5 x 11 inches colored (not white) paper.
- Your entry must indicate your category choice of "Natural", "Contrived" or "Multiple Images".
- You will complete an essay (between 250 and 500 words) describing the physics in the photo.

#### **Categories:**



**Natural photos** are those that involve everyday situations that may demonstrate a variety of physics concepts. Any spontaneous event is considered natural.



**Contrived photos** are those that are set up to show a particular physics concept or related set of concepts. Contrived Photos represent non-spontaneous events.



**Photos with Multiple Images** are contrived photos that require some digital manipulation of the photograph.

## Where can I see some of these pictures?

This project is adapted from the American Assoc. of Physics Teachers (AAPT) annual competition. To see some of the past winners visit: <a href="http://www.aapt.org/programs/contests/photocontest.cfm">http://www.aapt.org/programs/contests/photocontest.cfm</a>

To see some of the winners from Pata's past years visit: <a href="https://plus.google.com/photos/117989969902609042211">https://plus.google.com/photos/117989969902609042211</a>

### **Calendar:**

Monday	Tuesday	Wednesday	Thursday	Friday
			March 19 Project Assigned	March 20
March 23 Picture Idea Due	March 24	March 25	March 26	March 27
March 30	March 31	April 1 Project Due		

## **Grading:**

The standard for the project is: I can take a photo of and describe the physics of an everyday event.

The descriptions will be judged by physics and non-physics teachers so they should describe the physics in a way that is understandable to anyone. Details are important so be specific.

	Hard Copy Picture	Digital Picture	Picture	Description
4	Is correct size AND		Is in focus AND is	The description meets length requirements
	is mounted	Is submitted.	visually	AND the description of the physics is correct
	correctly.		interesting.	AND is exceptionally well described in detail.
3	Is correct size OR is mounted correctly.		Is in focus OR is visually interesting.	The description meets length requirements AND the description of the physics is correct.
	Is NOT correct size		Is not in focus and	The description DOES NOT meet length
2	AND is NOT		is not visually	requirements OR the description of the
	mounted correctly.		interesting.	physics is NOT correct.
1				
0	Is not submitted.	Is not submitted.	Is not submitted.	Is not submitted.