

## CP Physics Assignment – “Physics Is”

Mr. Côté

Use the internet to find out some answers to the question, “What is Physics?” You may use sites like Wikipedia if you wish. Once you have done some searching, please answer the question, “What is Physics?” in three different ways:

- 1) Answer the question as if a 1<sup>st</sup>-grader asked you.
- 2) Answer the question as if your mother or father asked you.
- 3) Answer the question as if your high school Physics teacher asked you.

To clarify the difference between the three types of answers, below is an example:

**Question:** “Why is the sky blue?”

**Answer to 1<sup>st</sup>-Grader:**

“The sky is blue because the sun’s light is made up of all types of colors, like a rainbow, and only the blue color gets bounced around in the air, sort of painting the air blue.”

**Answer to Mom or Dad:**

“Sunlight is made up of all of the colors of the rainbow (ROYGBIV). The yellowish colors are not affected much by molecules in the air, so that’s why the sun appears yellow. The blue part of the sunlight gets scattered around in different directions by the molecules in the air, making it appear blue.”

**Answer to your high school Physics teacher:**

“Sunlight, sometimes referred to as “white light” or “visible light,” is a mixture of all of the colors of the rainbow, from red to violet (red, orange, yellow, green, blue, indigo, violet). Red light has the longest wavelength, and violet the shortest. The human eye contains color receptors, which respond most strongly to red, green, and blue wavelengths. When white light from the sun enters our atmosphere, long-wavelength light like yellow pass through almost undisturbed. This helps explain why the sun appears yellowish to the naked eye. Higher-frequency light, like blue, is absorbed by gas molecules in our atmosphere and scattered to nearby molecules. This scattered light reaches our eyes from all directions, giving us the perception that the sky is blue.”

Now it’s your turn. Submit your three answers on a single, typewritten page. Remember, spell- and grammar check your work, and do not plagiarize anyone else’s work.