

Name: _____ Period: _____

Light & Color and E-spectrum TEST: April 24

SPS9. Students will investigate the properties of waves.

- a. Recognize that all waves transfer energy.
- b. Relate frequency and wavelength to the energy of different types of electromagnetic waves and mechanical waves.
- c. Compare and contrast the characteristics of electromagnetic and mechanical (sound) waves.
- d. Investigate the phenomena of reflection, refraction, interference, and diffraction.

- 1. Identify and properly arrange the different regions of the electromagnetic spectrum according to energy, frequency, & wavelength.
- 2. List & describe applications of different electromagnetic waves.
- 3. Describe how the speed of light changes in different medium
- 4. Know the difference between polarized and unpolarized light
- 5. Explain how energy is related to the color of light.
- 6. Understand that seeing objects and color depends on how light is reflected and absorbed.
- 7. Describe the properties of light
- 8. Compare & contrast light and sound waves
- 9. Describe white light and color
- 10. Know how the eye see light and interpret color.
- 11. Distinguish between primary colors of light and pigment
- 12. Predict colors produced by the mixing of primary/secondary colors of light and pigment
- 13. Observe and explain afterimages

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Use this sheet to keep track of reading & homework assignments from your textbook. Due dates for all assignments are noted on this sheet and assignments must be turned in on time to receive credit. Late homework will NOT be accepted.

The story is pretty simple. Homework is the one grade you have FULL control of. Homework is graded on QUALITY and COMPLETION, not accuracy. Homework is exercise for your brain and preparation for quizzes and tests. If you are in pursuit of a good grade, not doing homework is not the route to take. Your grade will gradually go down as you fail to do homework despite the fact that it is only 10% of your grade. On a larger scale, the effect of not doing homework will be realized on the test grade.

The choice of doing or not doing homework lies completely with you. Know that old homework zeros cannot be made up at any time. That is completely unfair to those that sacrifice other things and time to do the assignments by the due dates. Look at the schedule below and budget your time. It is always an option to do the work ahead of schedule. Do not wait until the last minute.

Textbook Reference – Physics A First Course – CPO Science

Textbook Homework

UV-Understanding Vocabulary RC-Reviewing Concepts SP- Solving Problems AYK- Applying Your Knowledge

Due Date	Read	Assignment	Teacher Signature
April 14	24.1 p. 521-527	p. 538-539 UV: 1-7 RC: 1-6 SP: 1-6 Define vocabulary (see terms below)	
April 16	24.2 p. 528-532	p. 538-539 UV: 8-11 RC: 7-14 SP: 7,8	
April 17	24.3 p. 533-535	p. 538-539 UV: 12,13 RC: 15-18 SP: 9-11	
April 21	22.1 p. 477-482	p. 494-495 UV: 1-3 RC: 1-6 SP: 1-4	
April 22	22.2 p. 483-486	p. 494-495 UV: 4-10 RC: 7-11 SP: 5-7	
April 23	22.3 p. 487-491	p. 494-495 UV: 11-14 RC: 12-19 SP: 8-12	

Lingo to be Learned-

Define:electromagnetic wave, electromagnetic spectrum, visible light, photon, diffraction grading, polarizer, incandescence, fluorescence, intensity, white light, color, photoreceptors, cones, rods, additive color process, additive primary colors, subtractive color process, subtractive primary colors, CMYK color process, RGB color process

Check the class Website to get updates or to print out a new assignment sheet or other docs.

www.waltonhigh.org → Departments→ Science →Honors Freshmen Physics → Spring Handouts → Current unit.