Unit 15: Light Waves

- You should be spending at least **60 minutes** a day on Physics Curriculum.
- **Completing** the note taking guide is required and **printing** the guide is highly recommended.
- Seeking help if you are not passing your post assessments and/or practices is essential.
- If you are behind you MUST spend additional time on Physics to catch up and meet due dates!
- If you cannot meet a due date, extensions must be requested and approval received **in advance**.
- To keep on track Unit 13 should be completed by May 20.

Goals:

1. I can compare the different electromagnetic waves based on energy, frequency and/or wavelength.
2. I can use mathematics and computational thinking to determine the wavelength or frequency and then use apply it to identify the unknown electromagnetic wave
3. I can use a simulation to determine the effect different filters have on visible light.
4. I can measure the angle of incidence and the angle of refraction to calculate the index of refraction.

Complete Unit 15 Pretest

Unit 15 Vocabulary

- Unit 15 Vocabulary is optional

Electromagnetic Waves & Color Notes

- Complete note taking guide

Electromagnetic Waves Notes- Post Assessment

- take assessment after watching video notes and completing note taking guide
- must score a 80% or redo
- seek remediation if PA is not passed on 3rd attempt
- Pass by 5/7, end of class period

Electromagnetic Waves & Color Practice

- must score a 74% or redo
- Pass by 5/7, end of day

Color Simulation Lab

- Use the PHET simulation *Color Vision* and the *Color Filters* Interactive on PhysicsClassroom.com
- Answer the follow up questions after completing the Simulations. Submit DATA and answers to the questions through Blackboard by 5/8, end of day
- Lab report is NOT required for this lab.

Mirror Notes

- Complete note taking guide

Mirror Notes - Post Assessment

- take assessment after watching video notes and completing note taking guide
- must score a 80% or redo
- seek remediation if PA is not passed on 3rd attempt
- Pass by 5/9, end of class period

Mirror Practice

- must score a 74% or redo
- Pass by 5/10, end of class period

Who Can See Who? Interactive

- Use the PhysicsClassroom.com link
- Answer the follow up questions after completing the Interactive. Submit DATA and answers to the questions through Blackboard by 5/10, end of day
- Lab report is NOT required for this lab.

Lens & Eye Notes

- Complete note taking guide

Lens & Eye Notes - Post Assessment

- take assessment after watching video notes and completing note taking guide
- must score a 80% or redo
- seek remediation if PA is not passed on 3rd attempt
- Pass by 5/13, end of class period

Lens & Eye Practice

- must score a 74% or redo
- Pass by 5/14, end of class period

Optical Instruments

- Read pages 432-437 information to discover the importance of lenses in technology.
- After reading, complete the questions via Blackboard.
- Due 5/15, end of day.

Refraction of Light Lab

- will open up after scoring 74% on Lens & Eye
- You may work by yourself or with a partner to collect data; however, each student is responsible for analyzing data and answering questions. You should construct your answers as an individual. Do NOT submit someone else's answers as your own work.
- Submit Lab Report by 5/16, 11:59 PM
- Refer to Scoring Rubric prior to submitting
- No corrections will be accepted on this lab.

Redo Practices for Review

Submit Unit 15 Warm Ups on May 20

Unit 15 Test

- Test will open up after passing all Post Assessments and Practices and completing all Labs for this unit.
- Test should be taken by 5/20

Retake Unit 15 Test

- If you score below 65% you must watch video notes:
  - Complete note-taking guides for the unit and all practices in the unit again
  - Seek remediation as needed
  - Retake Unit 15 Test and pass with 65% or higher
  - **COMPLETE the RETAKE as soon as possible to avoid falling behind in the next unit**