

Lesson Plan

Grade/Class	ELEVEN	Date	21/10/19
Topic	HISTORICAL MODELS OF THE NATURE OF LIGHT	Time	50 MINUTES
Unit title	LIGHT	Designer	PAMELA SARFO

Lesson Outcomes

Essential Understandings

The students will know:

- The historical models of the nature of light
- Students will be able to identify the scientists who started with the investigation of light.

Essential Questions

- Why is the history of light important?
- Can someone's theory of light help build your knowledge about light?

Curricular Outcomes

The student will be able to:

- Know Galileo and his theory of measurement of light
- Know Ole Romer and Leon Bernard
- Know Max Planck and Albert Einstein and their knowledge about light and how they ended up with photoelectric effect.
- Know Plato and Christian Huygens and the tactile and emission theory respectively.

Cross-Curricular/Real World Connections

- The sun and the moon give us light during the day and at night respectively.
- Light is needed at home and in school for vision hence the need to know how it happened.

Materials (ICT considered)

Materials needed are;

- Smartboard presentation on historical models of nature of light
- Get jigsaw instructions printed
- Get jigsaw chart printed
- Color notes and pencils
- Get the jigsaw activity printed
- Get research project assignment printed out.
- Get KWL chart printed

Differentiation Strategies

Consider cultural diversity, adaptations, and groupings

- I will go round as students participate in the jigsaw activity in order to check their understanding of what they are reading. If any questions arises, I will make sure I give them answers I know.
- Students who find it difficult to work at a faster rate will be given extra 5 minutes.
- Students will be in groups of 5 and music cues will be used to alert them to change from one group to the other.

Assessment Evidence

Assessment **FOR** learning
Students will be asked to fill the jigsaw chart after the jigsaw activity.

Assessment **AS** learning
Students will be asked to write a one-page essay on the wave and particle theory of light.

Assessment **OF** learning
Students will be formally assessed on the history of light before we move to the next lesson which will be 10 multiple choice questions and two short form questions.

Learning Plan

<p>Activating</p> <p>The KWL chart will be given out to students to fill. This will show what they already know, what they want to know and what they have learnt on light. This is to check their prior knowledge of light. Afterwards, I will hand in my jigsaw activity with the instructions. Students will read in their expert groups. Then write a summary of what they learnt down</p>	<p>Timeline</p> <p>20mins</p>
<p>Acquiring</p> <p>Students will share what they summarized with their non expert groups.</p>	<p>15mins</p>
<p>Applying</p> <p>In applying, all the sections in the jigsaw chart need to be filled after the activity and students will be asked to continue with the conversion practice questions from the previous lesson I taught.</p>	<p>15mins</p>
<p>Reflections about the lesson:</p>	