

Optics

TOPIC : optics, eye, sight, focus, health, nearsighted, farsighted

LEVEL : intermediate/ upper intermediate

Time : 45 minutes

Objectives:

- to learn or revise vocabulary connected with optics
- to learn about different vision conditions
- to develop reading, speaking and listening comprehension skills
- to enable students use the Internet to gather specific information

Language functions:

- to exchange ideas about optics
- to understand listening material and a written text
- to communicate in English

CLIL: Biology, Physics, IT Technology

MATERIALS: web sites, worksheets,

For this lesson, you will need:

- Computer with Internet access

STAGE	AIMS	PROCEDURE	MATERIALS/ RESOURCES	TIME
WARM UP	<ul style="list-style-type: none"> -to get students interested in the topic -to encourage them to work in pairs -to learn idioms connected with eyes 	<p>VOCABULARY – EYE IDIOMS</p> <p>Sts are asked to come up with any idioms they know connected with seeing and vision. They are told they are going to watch a short video on a you tube channel where they will be introduced to three idioms connected with eyes. While watching, they are supposed to note down the idioms and then use them in sentences.</p>	<p>https://www.youtube.com/watch?v=fW3H2YnRWJo</p>	5 min
MAIN PART OF THE LESSON	<ul style="list-style-type: none"> -to develop listening and reading comprehension skills -to learn about two vision conditions 	<p>LISTENING</p> <p>Sts are told they are going to watch a short video on a you tube channel titled Nearsightedness vs Farsightedness (Hyperopia vs Myopia) and learn about two different vision conditions in which a person has trouble seeing objects that are either at a distance from them or close to them. While listening, they are asked to complete the gaps (worksheet 1). After completing the task, they are</p>	<p>Worksheet 1</p> <p>https://www.youtube.com/watch?v=N16IT8Nxj6A</p>	10 min

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		asked to share their answers.		
	<p>-to revise vocabulary</p> <p>- to revise basic knowledge about optics and vision</p>	<p>ONLINE QUIZ</p> <p>In this part of the lesson sts are going to complete two different quizzes. The first one can be found on the following web site: www.qldscienceteachers.com/junior-science/physics/quizzes/light-and-optics and is titled Light and Optics.</p> <p>The second one is found here: http://www.urmc.rochester.edu/encyclopedia/document.aspx?ContentTypeID=40&ContentID=EyeSightVisionQuiz and is titled Do You Know How to Preserve Your Eyesight?</p> <p>After completing the quizzes, sts are asked to compare their scores with the rest of the class.</p>	<p>www.qldscienceteachers.com/junior-science/physics/quizzes/light-and-optics</p> <p>http://www.urmc.rochester.edu/encyclopedia/document.aspx?ContentTypeID=40&ContentID=EyeSightVisionQuiz</p>	10 min
	<p>- to develop reading comprehension, vocabulary, and summarizing skills</p> <p>- to enable sts use the Internet to gather information on the given topic</p> <p>-to deepen the understanding of how the eye functions</p>	<p>WEBQUEST</p> <p>Each student receives a handout (worksheet 2) with a number of questions they have to complete and a list of websites they can visit to answer them. They are told that they can visit different websites as well. After accomplishing the task, students present their findings to the rest of their classmates.</p>	<p>worksheet 2</p> <p>http://bmckone.wikispaces.com/file/view/Eye_Webquest.docx</p>	20 min
WRAP - UP/ CLOSURE	<p>-to revise vocabulary which sts came across during the lesson</p>	<p>CROSSWORD PUZZLE</p> <p>Students get worksheet 3 with a crossword featuring words related to the human eye. If time does not allow to do it in the classroom, they will do it as their homework.</p>	<p>Worksheet 3 & 4</p> <p>http://www.armoredpenguin.com/crossword/Data/best/anatomy/human.eye.01.html</p>	5 min

SOURCES

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