

**CALCULATOARE
ȘI INFORMATICĂ
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How to create a SMART board application

Theme presented "2015 International Year of Light and light based technologies"

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What is a SMART board and how can we use it?



The SMART board interactive whiteboard is touch sensitive and operates as part of a system that includes a computer and a projector.

- The computer sends the image to the projector.
- The projector casts the image onto the interactive SMART board.

- The interactive SMART board acts as both the monitor and input device, allowing you to control any application by touching the screen.
- There are four color-coded pens that can be used to write and an eraser but you can always use your hand in order to perform both of these actions.

2015 International Year of Light

Light plays a vital role in our daily lives and represents an important discipline of study in the 21st century. Light-based technologies

- revolutionized medicine;
- opened up international communication via internet;
- contributed to the formation of our global society.

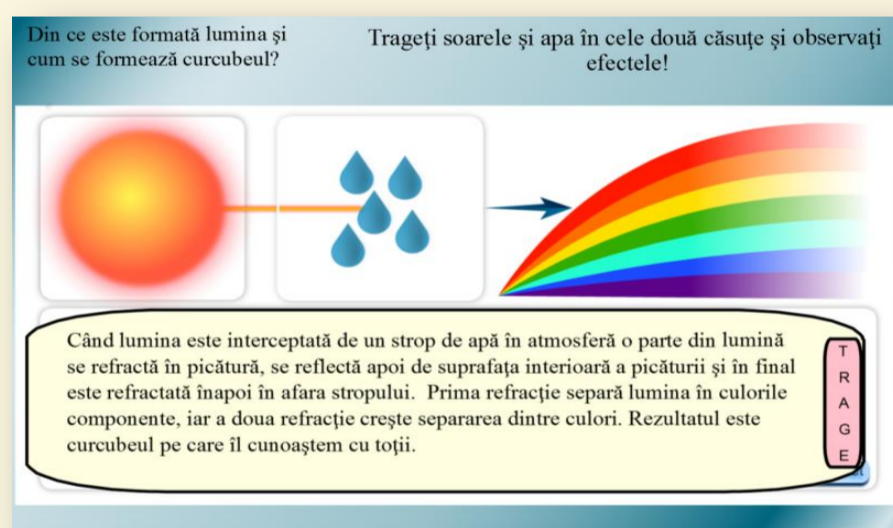
International Year of Light 2015 aims at raising awareness about how light - based technologies provide solutions to the challenges of our modern world.



In 2015 we also celebrate 1.000 years from the first studies in optics.

Interactive games presenting the multiple facets of light

We created interactive objects that contained different layers of text, images and drawings but behaved as a single object.

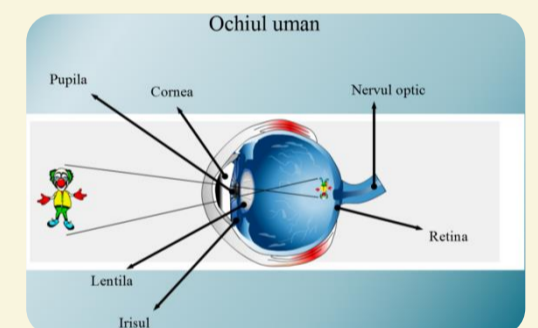


We also used hidden objects that can be slide into view by touching them for presenting supplementary information or correct answers.

A touched based flash application was used to show the formation of the rainbow. The sun and water object were dragged into the appropriate boxes and a short film and explanation about the rainbow appeared.

Human eye and Optical illusions

In the context of the international year of light, we included a section dedicated to the human eye - the organ that helps us perceive light.



Optical illusions allow us to better understand how our visual perception works. Our brain tries to find meaning, even where there is none, thus creating optical illusions.

Quizzes and tests

- Creating interactive quizzes and tests using the SMART board has the advantage that students receive feedback as they perform a certain on-screen action.
- The light spectrum was divided into equal squares that were afterwards rotated and mixed. The students had the assignment to put the spectral colors in their natural order.



Conclusions

Students want to learn in the classroom the same way they interact outside of it. The SMART board:

- stimulates interactivity and collaboration;
- promotes creativity and learning across the curriculum;
- offers a simple, easy experience that students immediately recognize and adopt.



References

- [1] <http://exchange.smarttech.com/>
- [2] Instruire-in-folosirea-tablei-interactive-smart. (2013, 07). Retrieved 05.04.2015, from <http://moldovacrestina.md/news/instruire-in-folosirea-tablei-interactive-smart-1727-iulie-2013.html>