

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 2013 Volume III: Sustainability: Means or Ends?

Light, Vision, Art

Guide for Curriculum Unit 13.03.01 by Carol Boynton

Science and art are ideal subjects for young students. Their innate curiosity encourages them to ask questions, look for answers, try new methods and look at things in a new way. The strategy of inquiry comes very naturally to them as they begin to navigate the physical world and learn what it has to tell them.

In this six-week curriculum unit, science students in second grade will experiment with light and how we, as humans, see objects and color. Through a variety of hands-on activities and experiments, the students will learn the fundamentals of the physics of light, the biology of vision, and art as an intersection of the two.

There are three main concepts that students explore throughout this unit: to understand that seeing (or vision) is a process that requires light; to learn how the basic vision process works; and to understand how artists (like themselves) use light and vision in conjunction with each other to create their work. There are three main areas of focus. The students will experiment with reflection, refraction, and diffusion; they will create a basic model of the exterior and interior of the human eye; and they will work with the interaction of light and vision to create and analyze art.

(Recommended for Science, grades 1-3)

https://teachersinstitute.yale.edu

© 2019 by the Yale-New Haven Teachers Institute, Yale University For terms of use visit https://teachersinstitute.yale.edu/terms