**AIA K-12 Lesson Guides**

<https://www.aia.org/pages/6319595-k-12-problem-based-lesson-guides>

**Activity Sheet**

[Hot in Here Activity Sheet >](http://content.aia.org/sites/default/files/2020-09/Activity-sheets_Elem_Hot-in-here_0.pdf)

**Background**

The sunlight coming through the large picture windows in your classroom is heating the room and making the you uncomfortable. You will explore envelope design, shade structures, and solar energy.

**Problem**

Your teacher has just created a new seating chart and your desk is next to two large windows. You've noticed that on sunny afternoons your section of the classroom gets really hot. Your teach won't assign a new seating chart, so you will need to devise a solution to protect your section of the classroom!



ENVIRONMENTAL NATURE CENTER AND PRESCHOOL (LEARN MORE ABOUT THIS PROJECT IN THE LEARNING RESOURCE TAB)

**Learning Resources**

* [Building Science and Technology: Better Envelope >](https://www.aia.org/articles/5521-from-research-to-practice-build-a-better-enve)
* [Environmental Nature Center and Preschool >](https://www.aia.org/showcases/6280251-environmental-nature-center-and-preschool)

**Better Lesson**

* [A Place in the Shade >](https://betterlesson.com/lesson/644795/a-place-in-the-shade-an-engineering-challenge)

**Science A-Z**

* [Light >](https://www.sciencea-z.com/main/UnitResource/unit/53/physical-science/grades-k-2/light)

**Teach Engineering**

* [Let the Sun Shine! >](https://www.teachengineering.org/lessons/view/cub_energy2_lesson09)

**Hands-On**

* [Sun or Shade? >](https://www.uen.org/lessonplan/view/11067)
* [Made for the Shade >](https://eatinc.org/wp-content/uploads/2017/06/made-for-the-shade.pdf)

**Video Resources**

* [AIA Film Challenge >](https://aiafilmchallenge.org/)