

Save the Stars! Ages 4-8

Introduction: Students will see how light pollution affects the stars by creating their own constellations and then checking how well they can see them in different types of light.

Materials:

Shoe boxes (one per student)

Scissors

Flashlight

Pictures of constellations

Procedure:

1. Show students pictures of constellations (this is best done on a projector or a large screen) and have them choose their favorite to draw on the lid of their shoe box. Be creative with this project. Color the constellations or have them write a story about their chosen constellation. If you wanted to adapt this project for older students, a short research essay on their constellation is a great option.
2. Use scissors to poke holes where each star in the constellation is located. Be sure to assist younger students with this step.
3. Put a flashlight inside the box, which will light up their constellations. First allow them to view their creations with the classroom lights off and windows covered (try to make the room as dark as possible). Next, turn on the lights so they can see how the excess light washes out their designs.

Conclusion:

Discuss how the classroom lighting affected the student's view of the constellations. How does this relate to lighting that they see on the street or in their neighborhood? How does this relate to the lighting in their home?