Sky Color and Visibility: Student Activity

Student Directions
In this lesson, students explore the effect of aerosols on sky color and visibility by using an interactive virtual model in the Google Slide presentation. The simulations model looking through cups of clear water with different amounts of a mystery substance added to them. There are question slides throughout the activity to assess students' understanding.

**Student Directions:**

1. Your instructor may request that you use the the Google Form to submit the answers. Use the Google Slides for this interactive simulation in presentation mode until you see the STOP slide. Then, go into display or edit mode.
2. On Slide 3 click to reveal the background color looking down through each cup. Then, exit presentation mode and continue in edit mode.
3. On Slide 6, drag and drop cups with different amounts of the mystery substance to the horizon shown in the picture. Then, evaluate the difference in visibility related to different amounts of the mystery substance.
4. Slides 8 and 9 explain basic information about aerosols and their impacts on sky color and visibility. After reading this information, summarize your findings.
5. Answer the following questions as instructed. There is a Google Form for Sky Color and Visibility. There is a Google Form for Sky Color only, and there is a Google Form for Visibility only.

Background information is provided in the Teacher Key.

This virtual lesson is modified from the original Elementary GLOBE Learning Activity Why (Not) So Blue? created by the UCAR Center for Science Education. There is an activity mat (poster) for the original activity.