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<th>Activity</th>
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| **Activity 1:** Become a student scientist Sky Observer by collecting sky color and visibility observations. | 1. As a group, use a projector to review the Webstory Become an Atmosphere Observer: [http://science-edu.larc.nasa.gov/skycolor/](http://science-edu.larc.nasa.gov/skycolor/)  
2. Go outside to observe and record sky observations using the Sky Observers data collection sheet  
Crosscutting Concept: Cause and Effect  
Science Practice: Analyzing Data  
NGSS Performance Expectation: K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time |
2. Optional: Create a word wall with the students focusing on the science vocabulary and science skills. Read more about integrating other ELA strategies in the Elementary GLOBE Teachers’ Guide. | Disciplinary Core Idea: ESS3.C Human Impacts on Earth Systems  
Crosscutting Concept: Cause and Effect  
Science Practice: Obtaining Information |
| **Activity 3:** Design an Aerosol Particle Collector and analyze the results. | 1. Small groups of students can work together to design and build an aerosol particle collector using the activity Up in the Air. Once built, students will place the collectors outside and go back later to retrieve their sample and analyze what was collected.  
2. Optional: Make this into a STEAM project have the students creatively design the particle collector to showcase something artistic. For example, students can create a stencil to place over the contact paper. | Disciplinary Core Idea: ESS3.C Human Impacts on Earth Systems  
Crosscutting Concept: Cause and Effect  
Science Practice: Designing Solutions |
| **Follow up Discussion:** Talk about why NASA investigates aerosols. | 1. Lead a group discussion about why aerosols are important to understand. NASA has a very important role in studying Earth and our atmosphere. Scientists use information from satellites, aircraft and ground-based instruments to study and measure aerosols. This helps us to understand the air we breathe.  
2. Watch this short video to learn more: [NASA's Earth Minute: My Name is Aerosols](https://www.globe.gov/web/elementary-globe/overview/aerosols/story-book).  
Crosscutting Concept: Cause and Effect  
Science Practice: Asking Questions |
| **Closure:** Complete the phenomena investigation. | 1. Have students create a Cause-Effect Chain or Cartoon Strip. Here are some suggested questions:  
   - What are aerosols?  
   - How do they impact the color of the sky?  
   - What causes aerosols?  
   - How does that affect me?  
   - What can I do to help reduce aerosols?  
2. Optional: Share what you have learned or pictures of your activities or data on social media using #skycolor | Disciplinary Core Idea: ESS3.C Human Impacts on Earth Systems  
Crosscutting Concept: Cause and Effect  
Science Practice: Analyzing Data and Constructing Explanation  
NGSS Performance Expectation: K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment |