AirCasting Actions

STEP SIX TEACHER GUIDE

Reporting Observations & Drawing Conclusions

You'll need at least one Internet connected computer per team along with an Internet connected computer and projector for the teams to use during their class presentations. Have students sit with their teams and give each team a copy of the AirCasting Data Interpretation Worksheet. Have students work within their teams to complete their worksheets. Once the students are done, have each team present their data and findings to the class, using the worksheet as a step-by-step guide for presenting and analyzing their data.

The final assessment for this activity is the Claim-Evidence-Reasoning (CER) argument. You may have students do this in class or as a homework assignment using the Claim-Evidence-Reasoning Worksheet. If students are new to writing CERs, it's worthwhile to provide feedback and have them revise their responses to ensure their final CER is high quality.

SAMPLE CER

(1.) **Claim:** The air near the bus drop-off is the least healthy for people to breathe.

(2.) **Evidence:** We recorded PM2.5 measurements as high as 105 ug/m3 when the buses were idling during morning drop-off. This was the highest of all our measurements.

(3.) **Reasoning:** PM2.5 can get into your lungs and your bloodstream, which can cause many different health problems. The "Air Quality 101 Fact Sheet" informed us that there "is no safe level of exposure to particle pollution; recent research shows that health effects occur at levels well below current regulatory thresholds, especially for the most toxic particles, like those from diesel exhaust". Since the buses burn diesel and the PM2.5 levels we measured at the bus drop-off were the highest of all our measurements, it reasons that the air at the bus-drop off was the least healthy for people to breathe out of all the locations we sampled at.