



### 1. Download the PocketLab mobile app for [iPhone](#) or [Android](#)

*Instead of using the app, you can also use [pocketlab.com](http://pocketlab.com) on a web browser*

### 2. Download and Print the Field Form

Download the two-page field form at [azdeq.gov/AirLab](http://azdeq.gov/AirLab). This is where measurements and observations are recorded while in the field.

AIR QUALITY MONITORING LAB: <b>POCKET LAB FIELD FORM</b>					
<p><b>TEAM MEMBERS:</b> _____</p> <p><b>SCHOOL NAME:</b> _____</p> <p><b>SITE NAME:</b> _____</p>					
<p><b>INDEX CARD: PARTICULATE VISUAL OBSERVATION</b></p> <p>WHAT YOU WILL NEED:</p> <ul style="list-style-type: none"> <li>DRAW 1"X1" SQUARE ON YOUR INDEX CARD</li> <li>ADD VASOLINE OR DOUBLE SIDED TAPE TO THE SQUARE</li> <li>IDENTIFY STUDY AREA AND ATTACH THE INDEX CARD 1 METER OFF THE GROUND</li> <li>PHOTO OF BEFORE AND AFTER</li> </ul> <p><b>DAY 1: SET UP</b></p> <p>DATE: ___/___/20__</p> <p>TIME: ___:___ AM/PM</p> <p><b>NOTES:</b> WEATHER, LOCATION, ETC.</p> <p><b>DAY 2: RETRIEVAL</b></p> <p>DATE: ___/___/20__</p> <p>TIME: ___:___ AM/PM</p> <p><b>NOTES:</b> WEATHER, LOCATION, ETC.</p>					
<p><b>CLASSROOM AMBIENT AIR DATA:</b> USE THE POCKET LAB</p> <p>PARTICULATE MATTER: _____ ug/m<sup>3</sup></p> <p>CARBON DIOXIDE (CO<sub>2</sub>): _____ ppm</p> <p>OZONE: _____ ppb</p> <p>AIR QUALITY INDEX: _____ AQI</p> <p>BAROMETRIC PRESSURE: _____ mBar</p> <p>TEMPERATURE: _____ °C</p>	<p><b>LOCAL AIR DATA AND RESOURCES:</b></p> <ul style="list-style-type: none"> <li><b>POCKET LAB:</b> DOWNLOAD THE APP OR VISIT <a href="http://WWW.USEPOCKETLAB.COM">WWW.USEPOCKETLAB.COM</a> TO CONNECT A POCKET LAB DEVICE.</li> <li><b>PURPLE AIR:</b> CHECK TO SEE IF ANY COMMUNITY SCIENTISTS ARE COLLECTING AIR QUALITY DATA NEAR YOU AND NOTE IN THE SECTION BELOW (<a href="http://WWW.PURPLEAIR.COM/">WWW.PURPLEAIR.COM/</a>)</li> <li><b>ADEQ:</b> CHECK TO SEE IF ANY ADEQ OR COUNTY AIR QUALITY DATA IS AVAILABLE NEAR YOU. (<a href="http://WWW.AZDEQ.GOV/AIRVISION/">WWW.AZDEQ.GOV/AIRVISION/</a>)</li> </ul> <p><b>NOTES AND OBSERVATIONS:</b></p>	<p><b>LOCAL AIR DATA:</b></p> <table border="1"> <tr> <td> <p><b>PURPLE AIR QUALITY DATA</b></p> <p>PARTICULATE MATTER 2.5: _____ ug/m<sup>3</sup></p> <p>PARTICULATE MATTER 10: _____ ug/m<sup>3</sup></p> <p>OZONE: _____ ppb</p> </td> <td> <p><b>ADEQ AIR QUALITY DATA</b></p> <p>PARTICULATE MATTER 2.5: _____ ug/m<sup>3</sup></p> <p>PARTICULATE MATTER 10: _____ ug/m<sup>3</sup></p> <p>OZONE: _____ ppb</p> </td> <td> <p><b>OTHER AIR QUALITY DATA</b></p> <p>SOURCE: _____</p> <p>RESULTS (INCLUDE UNITS): _____</p> <p>NOTES: _____</p> </td> </tr> </table> <p><b>POCKET LAB OUTDOORS: STUDY</b></p> <p>DATE: ___/___/20__</p> <p>TIME: ___:___ AM/PM</p>	<p><b>PURPLE AIR QUALITY DATA</b></p> <p>PARTICULATE MATTER 2.5: _____ ug/m<sup>3</sup></p> <p>PARTICULATE MATTER 10: _____ ug/m<sup>3</sup></p> <p>OZONE: _____ ppb</p>	<p><b>ADEQ AIR QUALITY DATA</b></p> <p>PARTICULATE MATTER 2.5: _____ ug/m<sup>3</sup></p> <p>PARTICULATE MATTER 10: _____ ug/m<sup>3</sup></p> <p>OZONE: _____ ppb</p>	<p><b>OTHER AIR QUALITY DATA</b></p> <p>SOURCE: _____</p> <p>RESULTS (INCLUDE UNITS): _____</p> <p>NOTES: _____</p>
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<p><b>SUBMIT DATA: ELECTRONICALLY</b></p> <p>1. CLASSROOM EXCEL SHEET</p> <p>2. ADEQ SURVEY 123</p> <p>REVIEW DATA</p>		<p><b>NOTES:</b></p>			

### 3. Gather Data

Carefully follow the two-day monitoring lab procedure outlined in the [Lesson Plan >](#)

#### Step 1

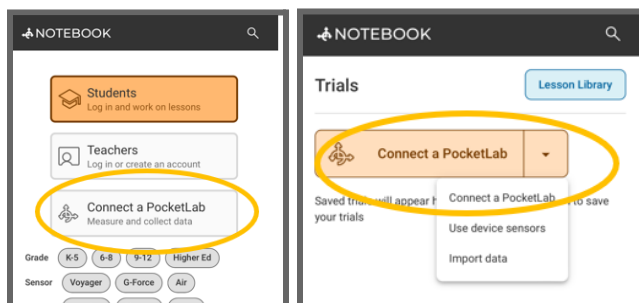
Charge the air PocketLab prior to the PocketLab study:

- The PocketLab takes 2 hours to fully charge. The device can continuously run and gather data for 24 hours on a single battery charge.
- Charge using the USB cable that is provided with the device.

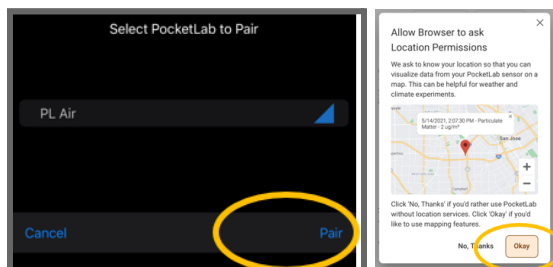
#### Step 2

Turn on and connect the PocketLab to a device:

- Turn on the PocketLab by pressing the button at the top of the device. The light will blink green and red.
- Open the app on your device (or visit [app.thepocketlab.com](http://app.thepocketlab.com) from a web browser) and select *Connect a PocketLab*.
- From the drop down menus, select *Connect a PocketLab*.



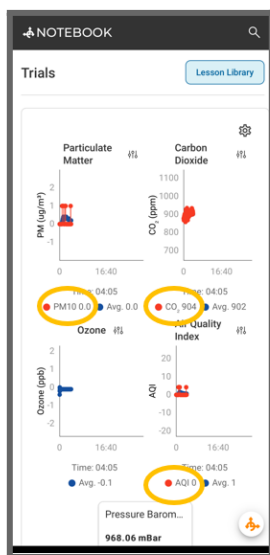
- On the bottom right corner of the screen, select *Pair*.
- Select *Okay* for location permissions.



### Step 3

Collect ambient data:

- Allow the PocketLab to sit for 5 minutes in the study area. Note that for ambient conditions, it is better to step away from the device. Heat from your hands and CO<sub>2</sub> from your breathing can influence the results.
- After 5 minutes, have a student read the red values noted at the bottom of the graph. The values can fluctuate, just commit to a value and add it to your form.



*Tip: Consider taking a screenshot of the results and reading from the photo.*

To collect 24-hour data:

- Leave your device in a secure location for 24 hours.
- After 24 hours, write down the average (Avg.) results, which are blue on the PocketLab graph. Make a note in your field form that the results are of a 24-hour average.

## 4. Submit Data

Submit the data collected using our [online data submission form >](#)