

Name

Ozone Testing Worksheet

Test Site (Describe)	Schoenbein Color Scale Number	Relative Humidity	Ozone ppb
1			
2			
3			
4			

- 1. Record the relative humidity reading for each test site in the chart above.
- 2. Determine the best approximation of the Schoenbein Number using the relative scale description. Record the number in the chart above.

0–3	No change to little change
4–6	Pink to lavender hues
7-10	Blue to purple

Schoenbein Number Scale

3. Refer to the Relative Humidity Schoenbein Number Chart below. Along the bottom of the chart, find the point that corresponds to the Schoenbein number recorded for #2 above. From that point draw a line upward until it intersects the curve that corresponds to the relative humidity recorded in #1 above. To find the ozone concentration in parts per billion, draw a line perpendicular from the intersection point to the vertical axis on the chart. Record the ppb number for the test site.



- 4. Discuss these questions:
 - a. Compare test papers from various test sites. Does the concentration of ozone vary from site to site?
 - *b*. How does the relative humidity affect the ozone readings?
 - c. Would the parts per billion of ozone be the same for a Schoenbein number of 3 for 20% and 80% humidity?
 - *d*. Do you think this is a good method for measuring tropospheric ozone?

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