

Nurse Visits and Highest PM_{2.5} Air Quality Index – Daily (Real-World Data Graph)

Focus: Use real-world data from your school to address learning standards and learn about air quality and health.

Steps:

1. **Print pages 2 and 3. Post** them in your room or on a bulletin board.
2. **Make a plan** (pick one day each week to check air quality and nurse visits).
3. **Check the air quality.** Go to www.lovemylair.com/wisconsin/Home/Map.
4. **Click on the sensor closest to your school** and click “view.”
5. **Look at the past week** (7 days).
6. **For each day, find the highest AQI by color.**
 - **AQI Guide:** [See Love My Air’s Activity Guide](#)
 - On the chart, write the date in the box and color it to match the highest AQI for that day.
 - You can also write the time of day when it peaked.
7. **Keep coloring each box** to show the highest AQI for each day of the past week until you reach today. **Do not color today’s box.** The AQI might change before the day ends. You can record today the next time you check.

Consider: Add a column and record NO₂ data using [Tropospheric Emissions: Monitoring of Pollution \(TEMPO\) Satellite data](#).

8. Track visits to the nurse for asthma and breathing problems.

How to record visits to the school nurse:

1. **Work with your school nurse** to track the number of students who visit with **breathing concerns**.
 - If your school does not have a full-time nurse, find the person students see when the nurse is away.
 - **Do not record names or any personal information.**
2. **Write the number of visits for each date on your chart.**

Consider: Add a column and record absences – students may stay home if they have breathing problems.

Add helpful notes:

- Was there a field day event?
- Was there an air quality alert?
- What time of day was the AQI highest?
- What time of day did students visit with concerns?

Outcome: When you finish collecting data, look for patterns. You can graph the data using the scatterplots below. Use questions that address standards in your subject.

Health and Air Quality: Does air quality affect nurse visits?

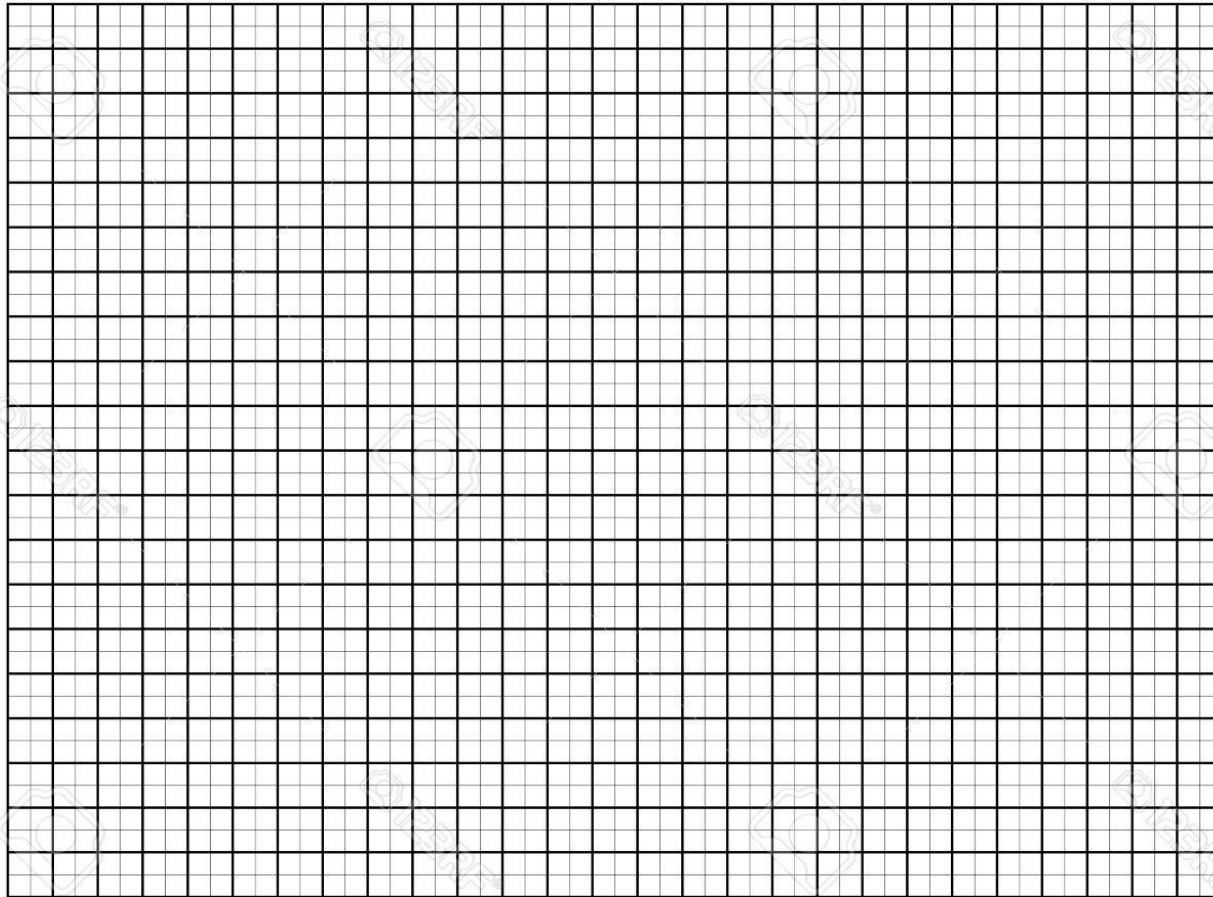
Date	Highest air quality index (AQI) and particulate matter 2.5 (PM 2.5) for the day. Color square (include time).	Number of visits to nurse with breathing concerns	Notes
9/16/25	<div style="background-color: yellow; padding: 5px; display: inline-block;">57 8a.m.</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-left: 20px;">Example</div>	5	Outdoor recess, nurse said many students have not brought inhalers to school yet.

Create scatter plot graphs

Instructions: Use the graphs below to plot your data and look for patterns.

Title: _____

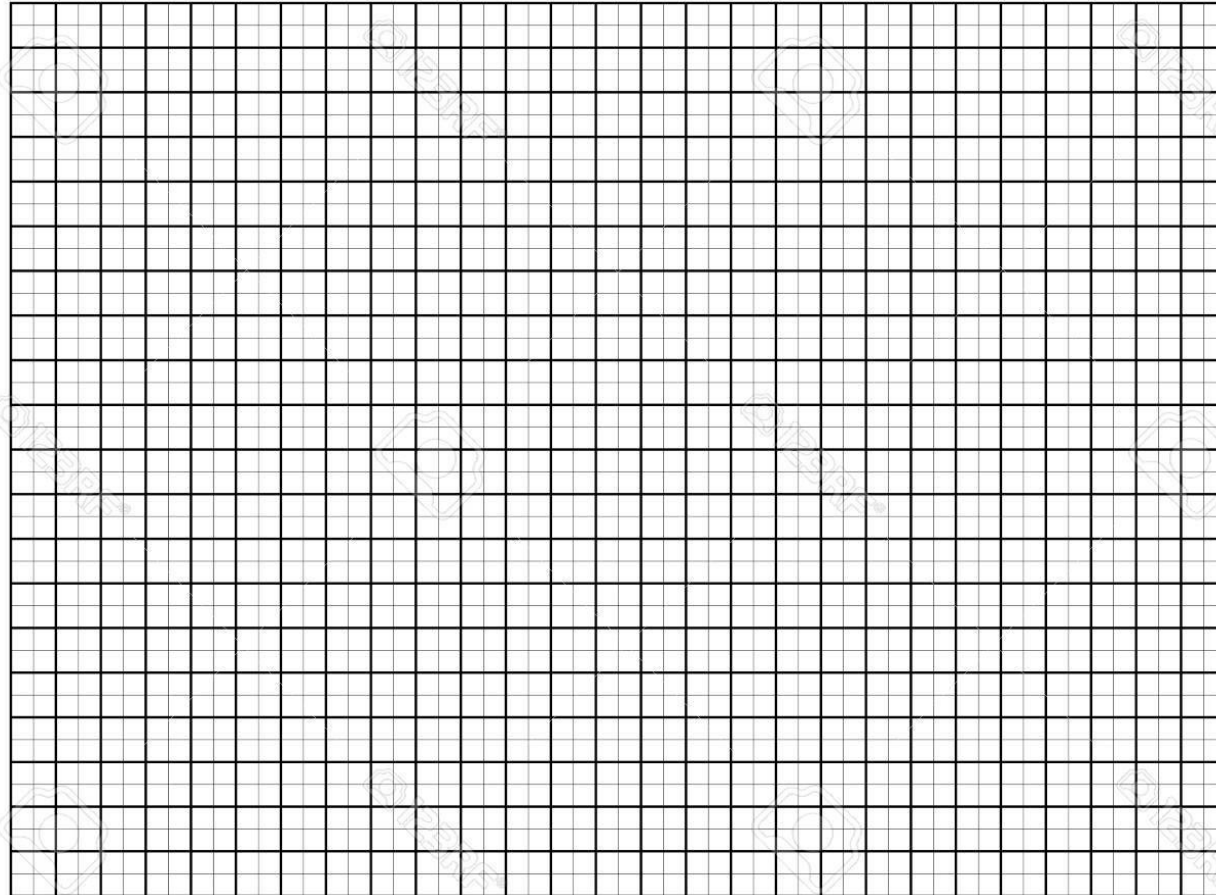
Number of visits to the nurse each day



Date

Title: _____

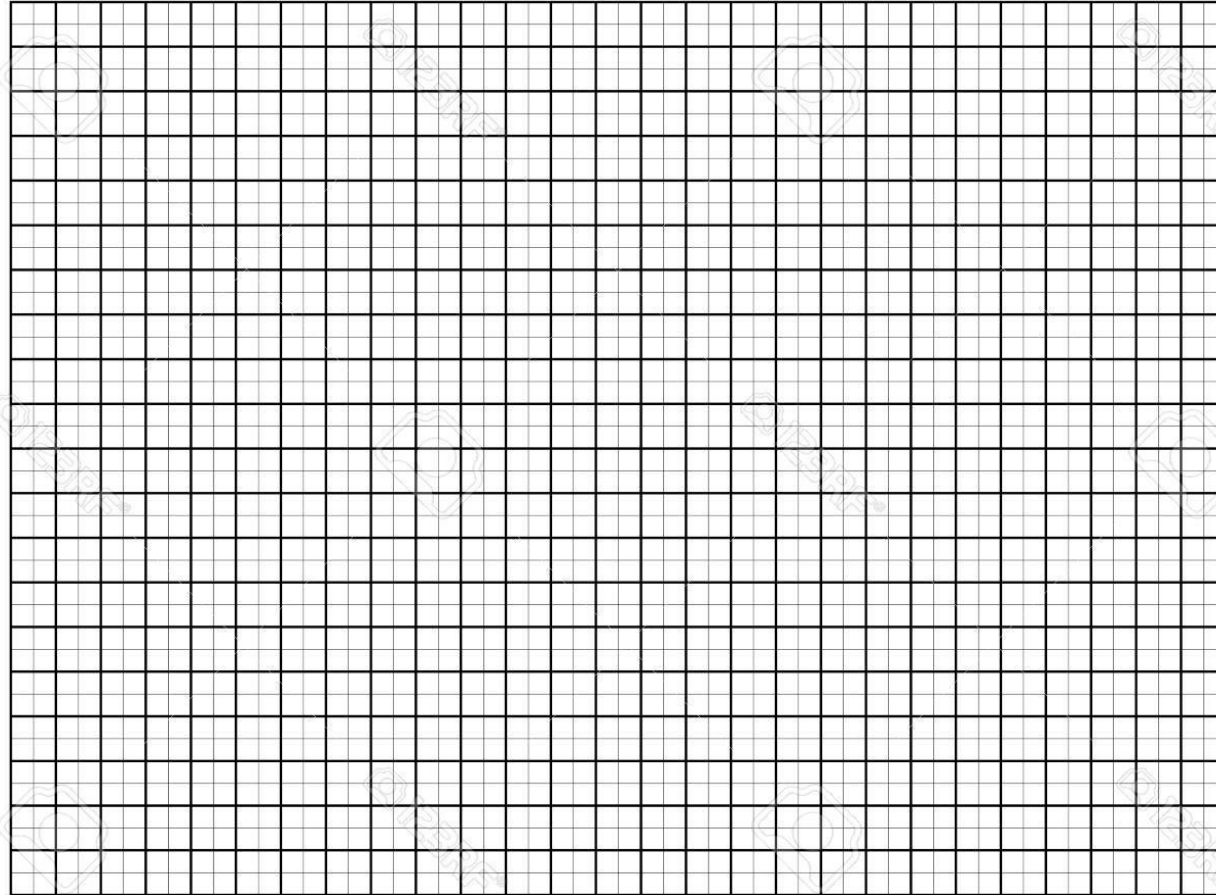
Highest PM2.5 for the day



Date

Title: _____

Highest NO₂ for the day



Date

Title: _____

Daily Absences

A large grid for recording daily absences. The grid consists of 30 columns and 20 rows. The grid is empty and ready for data entry.

Date