Name:

Date:

**Air Quality Measurement Stations – PM2.5**

Look at the map of air quality measurement stations at <https://cyclone.unbc.ca/aqmap/v3/#4/50.32/-78.22> to answer the following questions.

1. Count the number of stations in your Province/Territory (both Ο and ). Use the roller on your mouse to zoom in if there seem to be more stations in a small area, then zoom back out to continue counting. How many stations?
2. Look at the colours of the station markers. The colour indicates the level of PM2.5 measured at that station. Match the colour to the legend on the right of the map. What colour range (or ranges) do the stations fall into?
3. The units for the PM2.5 measurement are g m-3 (say: “micrograms per metre cubed”). This is a very small amount. Recall when you learned about mass in math class, and how much one gram is. A gram is pretty small. But there are one million micrograms in a gram! So a microgram is *really* small. A measurement of 1 g m-3 means one microgram of PM2.5 inside one cubic metre of air. To understand how much space a cubic metre of air is, imagine a metre stick being one side of a big cube. That’s one cubic metre. So a measurement of 1 g m-3 means one millionth of a gram inside one cubic metre of air. That may seem really small (and it is!), and truly, a PM2.5 measurement of 1 g m-3 is pretty clean air. But constantly breathing in air that has, say, 30 g m-3 of PM2.5 in it adds up to a lot of particles going in to your lungs, and can cause or worsen health issues such as asthma. That’s why the government sets a threshold level of PM2.5. If an area’s PM2.5 is consistently higher than this safe threshold, we look at ways to make the air quality better. **What are some things that can be done to make air quality better in an area?**

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