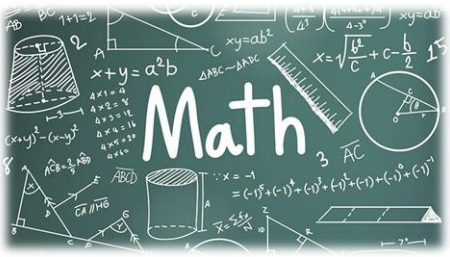
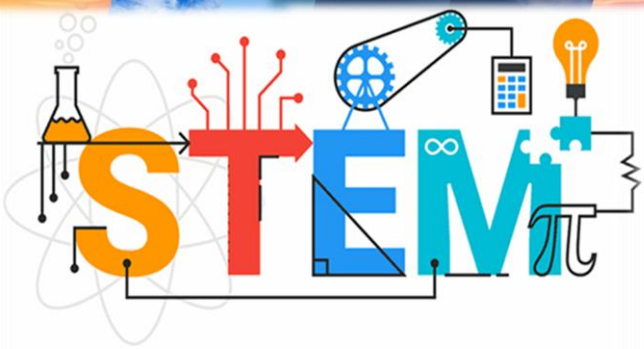




TWGHs Lo Kon Ting Memorial College
Mathematics
STEM Education

S2 Chapter 4

More about Statistical Graphs

Meteorological analysis

Name:_____

Class:_____ (_____)

Group:_____

Contents

Interesting Trivia: 7 Facts about Weather

Figure 1 – A Doppler radar

7 Fascinating Facts about Weather

1. The wind does not make a sound until it blows against an object.
2. 1 billion tonnes of rain falls on the earth.
3. At any given time, every minute there are on average 1800 thunderstorms occurring on the earth with 100 lightning strikes per second.
4. Mawsynram, which is in Meghalaya of India, is the wettest place on the earth with an annual rainfall of more than 11 meters.
5. The state most affected by tornadoes in the USA which faces on average 1200 tornadoes every year.
6. Fire whirls are tornadoes made of fire caused by wildfires.
7. Some people say they can predict the weather based on the pain in their joints such as those in their knees. This may be a result of the change in air pressure.

Mission：Analyzing 2 Monthly Meteorological Factors by using statistical graphs

A. Tips

Pay attention to the tips below.

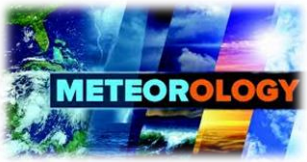
- Use a ruler and a pencil to construct different statistical graphs;
- Collect data from the website: **https://www.hko.gov.hk/cis/dailyExtract_e.htm?y=2019&m=10** and determine the types of data carefully, i.e. discrete data or continuous data;
- Construct the appropriate statistical graphs to present the data you have collected;
- Be careful with the horizontal and vertical scales when you construct statistical graphs; and
- Use precise wordings and sentences for presentation.

Meteorological factors:

Total Rainfall / Mean Amount of Cloud / Mean Relative Humidity / Mean Air Temperature / Mean Dew Point

(Please *circle 2 Meteorological Factors* as appropriate)

B. Analyzing Monthly Meteorological Factors (I)



Write down the chosen meteorological factor.

Meteorological factor: _____

Complete the table provided on the next page, and construct a statistical graph below.

1. Complete the table and construct a statistical graph on the previous page by using the data below.

Month: **Meteorological factor (Units):** **( )**

Day	1	2	3	4	5	6	7	8	9	10
Data										
Day	11	12	13	14	15	16	17	18	19	20
Data										
Day	21	22	23	24	25	26	27	28	29	30
Data										
Day	31									
Data										

2. Which type of statistical graph have you chosen? Why?

(e.g. Histograms, Frequency polygon, Bar chart, Broken-line graph...)

3. Which days have been recorded with the highest and lowest values?

4. Describe the trend of monthly meteorological factor by using the statistical graph and your geographic knowledge.

B. Analyzing Monthly Meteorological Factors (II)

Write down the chosen meteorological factor.

Meteorological factor: _____

Complete the table provided on the next page, and construct a statistical graph below.

1. Complete the table and construct a statistical graph on the previous page by using the data below.

Month: **Meteorological factor (Units):** **( )**

Day	1	2	3	4	5	6	7	8	9	10
Data										
Day	11	12	13	14	15	16	17	18	19	20
Data										
Day	21	22	23	24	25	26	27	28	29	30
Data										
Day	31									
Data										

2. Which type of statistical graph have you chosen? Why?

(e.g. Histograms, Frequency polygon, Bar chart, Broken-line graph...)

3. Which days have been recorded with the highest and lowest values?

4. Describe the trend of monthly meteorological factor by using the statistical graph and your geographic knowledge.

C. Discussion

Based on the statistical graphs you constructed, is there any co-relationship between the meteorological factors? In other words, do they affect each other? Explain your observation by using the statistical graphs and your geographic knowledge.