No.: Date:

Weather and Climate Geographical Investigation (GI) notes!

Measuring wind:

Wind speed:

instrument - anemometer

location - high open area with no obstruction to wind.

how to ensure accuracy:

- conduct over a period of at least 7 days
- check the wind speed at least 3 times a day (8am, 12pm, 6pm)
- collect 3 sets of readings per timing, and take the average.
- read the wind speed at eye level to prevent parallex errors.

wind direction:

instrument - wind vane

location - high open area with no obstruction to wind

how to ensure accuracy:

- conduct over a period of at least 7 days
- check the wind direction at least 3 times a day (8am, 12pm, 6pm)
- collect 3 sets of readings per timing, and take the average.
- record the direction that the wind vane points to. This is the direction that the wind is blowing from.

Measuring relative humidity:

instrument - sling psychrometer

how to ensure accuracy:

- ensure that the wet bulb wick is fully saturated with water to be able to accurately measure the wet temperature.
- conduct over a period of at least 7 days
- record the relative humidity at least 3 times a day (8am, 12pm, 6pm)
- spin at a speed of 2 turns per second and swing for 1 minute. Check and record the reading immediately.
- repeat this until the reading remains almost consistent.
- collect 3 sets of readings per timing, and take the average.

No.: Date:

Measuring rainfall:

instrument - rain gauge

how to ensure accuracy:

- conduct over a period of at least 7 days
- leave the rain gauge in an open field field away from trees and buildings so that rain will not be obstructed.
- sink the rain gauge into the ground, with at least 30 cm protruding out of the field to prevent the rain gauge from toppling over.
- this will prevent surface water runoff from entering the rain gauge.
- check the rainfall amount immediately after rain stops to prevent the rainwater from evaporating, which will affect the data.

Measuring air pressure:

instrument - barometer

- the dial expresses mercury measurements in millibars (Mb).
- places with high temperature will experience low pressure. Places with low temperature will experience high pressure.
- a greater difference in temperature or air pressure between 2 places will result in higher wind speed.

Measuring temperature:

instrument - six's thermometer

how to ensure accuracy:

- conduct over a period of at least 7 days
- record the temperature at least 3 times a day (8am, 12pm, 6pm)
- at each timing, collect 3 sets of data and take the average.
- Ensure that the locations remain the same over the 7 day period.
- Read the thermometer at eye level to prevent parallex errors.
- students should put the thermometer in a stevenson's screen and it must be at least 1.5m above the ground to prevent the thermometer from measuring the heat from the ground.

No.: Date:

~~can be used to represent... questions:~~

How to answer 'what type of graph should be drawn' related

- The method is _____ graph.
- x-axis represents _____ and y-axis represents _____.
- Plot the points accurately then draw in the bars / lines accurately.
- Include a title for the graph.

tip: the dependent variable always goes on the y-axis!