

SUBJECT: Geography

UNIT: Year 7 – Microclimate Investigation



Stages of a Geographical Investigation:

1. **Hypothesis** - A statement that you will prove to be true or false through the fieldwork investigation.
2. **Methodology** - Describe and justify the way that the data was collected in your fieldwork
3. **Data collection** – Collecting data/evidence to prove or disprove the hypothesis
4. **Data presentation** – Using graphs, tables, maps to present the data collected.
5. **Data analysis** – The process of analysing data to identify geographic relationships, patterns, and trends.
6. **Conclusion** - Draw together the results of your fieldwork and answer the enquiry question.
7. **Evaluation** - considers the strengths and weaknesses of the data collection, along with possible improvements or extensions.

A **microclimate** the climate of a very small or restricted area, especially when this differs from the climate of the surrounding area.

Factors that can affect the climate of an area are:

Topography – Hills create a cooler climate the higher you go.

Surface – Darker surfaces create a warmer surface as they absorb heat.

Shelter/shade – If an area is sheltered from wind it can make it warmer.

Buildings - Urban areas tend to have warmer microclimates as these are built up and sheltered from the wind.

Open Space – Open spaces can be cooler due to a lack of shelter from the wind.

Methodology:

What are we going to measure?

- Wind speed
- Wind direction
- Temperature

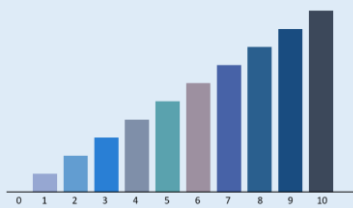
Locations we will collect the data from:

- Year 7 yard
- Year 8/9 yard
- Year 10 yard
- Playing fields
- Front of school

Data Presentation Methods:

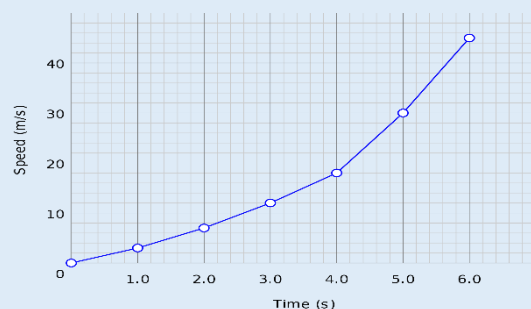
Bar Chart

- ✓ Easy to construct.
- ✓ Easy to understand.
- ✗ Should only be used with category data.
- ✗ Can be too simplistic.



Line Graph

- ✓ Easy to construct and understand.
- ✓ Anomalies are easy to identify.
- ✗ Can be time consuming to construct.
- ✗ Often require additional information to be useful.



Risk assessment: A risk assessment identifies risks associated with the investigation and looks at ways to minimise them.

For example: One risk is slips, trips and falls.

To overcome these, we can: Look where we are walking / Wear sensible footwear