Climate Graphs
Teaching Ideas

Learning Objective:	To understand how to draw and interpret a climate graph.
Success Criteria:	• To draw a climate graph using temperature and rainfall data. • To interpret a climate graph. • To compare climate graphs for different areas.
Context:	This is the tenth lesson in the KS3 Weather and Climate unit of work. Students learn how to draw and interpret a climate graph for London using rainfall and temperature data. They also compare climate graphs for different areas.

Starter

Ask students if they can remember what climate is. Climate is the average weather conditions of a place measured over a long period of time (usually averaged over 30 years). It is different to weather as weather described the daily changes in the atmosphere. Students should then name one place they have been to or know about that has a different climate to the UK.

Main Activities

Climate Graphs

Introduce the concept of the climate graph and explain what it shows. Ensure that students are clear that there is a separate rainfall axis and a temperature axis. Rainfall is plotted as a bar chart and is usually shaded in blue. Temperature is plotted as a line graph and shaded in red. The monthly rainfall and temperature figures are plotted. Ask the students when a climate graph would be useful. Students might identify tourists using a climate graph to find out the how warm their holiday destination might be. Also, water management companies would use rainfall data to manage reservoir levels, etc.

Drawing a Climate Graph

Students should complete the **London Climate Graph Activity Sheet**. Students complete some data response questions before plotting the climate graph. Ensure that students use a pencil and ruler for this activity to avoid mistakes. There is a differentiated version of this activity sheet, which has a partially complete graph to help lower ability students. Once students have completed their climate graph, discuss how you would describe the temperature and rainfall patterns shown using the PowerPoint slide.

There is an extension activity for high ability students, detailed on the PowerPoint, where they write a description of the conditions indicated by the London climate graph.

Comparing Climate Graphs

Students should then complete the **Comparing Climate Graphs Activity Sheet**, where they compare the climate patterns of Liberia and Australia and discover that some areas have wet and dry seasons.

Plenary

Students should try to write as many weather key words as they can from the letters available. They may use each letter more than once. Suggestions are provided on the final slide.