Science 10

Unit D: Energy flow in global systems

Climatographs and biome comparison

Two annual patterns

- A climatograph combines monthly temperature and precipitation on one set of axes.
- Seasonal range and precipitation timing distinguish locations with similar annual averages.



Pair temperature and precipitation curves to classify biomes

Reading a climatograph

- On a climatograph, temperature is a line and precipitation is a set of bars. They use different units.
- A yearly average hides the coldest month and the month when the rain actually falls.
- Compare biomes using the shape of the whole year.

Key terms

climatograph

A graph of monthly average temperature and precipitation for a location.

temperature range

Difference between the highest and lowest values in a period.

annual precipitation

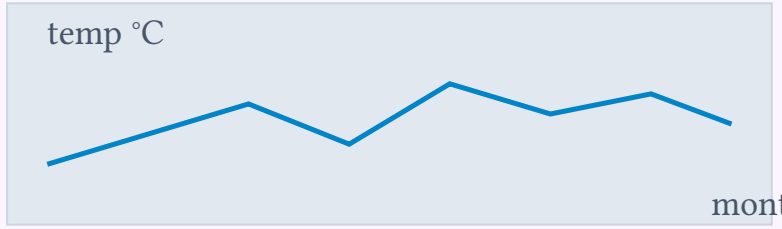
Total precipitation measured over one year.

biome

A large ecological region characterized by climate and typical communities.

Major biomes

- Grassland, desert, tundra, taiga, deciduous forest, and rain forest name broad living regions.
- Give the climate range, then ask what else could move the boundary: soil, fire, or elevation.
- Describe a biome with a range of temperatures and rainfall totals.



Pair temperature and precipitation curves to classify biomes

Climatographs

- Read the temperature line and the precipitation bars before you name a biome.
- A yearly total can hide a dry summer or a harsh winter.
- Compare the coldest month and the wettest months across the whole graph.
- The same biome name can show up where the climate pattern matches, even at another latitude.



Evidence-based biome match

- Compare two climatographs and justify a biome match with temperature and precipitation evidence.
- A complete answer uses values from both axes, describes the seasonal pattern, and rests on more than one measurement.

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