Evidence for Climate Change: Global Temperature Data Reading Comprehension **Answers**

1. Describe what is meant by 'global temperature data'.
   Global temperature data is based on satellite readings and thousands of ground weather stations.
2. How many degrees do scientists believe the average Earth temperature has risen since 1880?
   0.85ºC
3. How many degrees do scientists believe the average temperature on Earth has risen since 1950?
   0.6ºC
4. Using data from Figure 1, describe the trend of global temperatures on Earth between 1880 and 1936.
   All readings between the years 1880 and 1936 were rising and falling but always remained under 0ºC. The lowest temperature readings recorded were in 1902, 1908 and 1916. The highest temperature readings were in 1880, 1885 and 1899.
5. Using data from Figure 1, describe the trend of global temperatures on Earth between 1936 and 2016.
   The temperature generally shows an increase of 1ºC between 1936 and 2016. There was a cooling period between 1940 and 1980 when temperature increase dropped to under 0ºC. After 1980 temperatures were steadily increasing before rapidly increasing from 2009 to 2016.
6. Describe the Central England Temperature (CET).
   The Central England Temperature (CET) is a succession of average temperatures typical of a central area of the United Kingdom.
7. State which two years are tied for the hottest years on record since record-keeping began.
   2020 and 2016
8. How many of the hottest years recorded have occurred since 2000?
   19
9. Describe how global temperature data has improved over time.
   Using thermometers when calculating data readings has improved the reliability of the data collected.
10. Explain the main issue regarding the reliability of using global temperature data as evidence for climate change.
    Measurements (particularly early ones) may not be as consistent or widespread as data from more recent years.