Carbon Dioxide Levels in Biosphere 2

Biosphere 2 is a research and education center in Arizona that can house people, plants, and animals. It was built to find out whether people could get the food and breathable air needed to survive in a small sealed environment over a two-year period.

Example
Data on carbon dioxide levels in the air of Biosphere 2 were collected at 15-minute intervals for several weeks. The graph below shows the amounts of carbon dioxide $\left(\mathrm{CO}_{2}\right)$ in the air on January 20, 1996.


Answer the following questions.

1. What intervals are shown on the $x$-axis? What is shown on the $y$-axis?
2. At what time of day does the carbon dioxide concentration reach its highest point? About how many parts per million of $\mathrm{CO}_{2}$ are in the air at that time?
3. Between what hours is the $\mathrm{CO}_{2}$ level decreasing?

CHALLENGE The data in the graph were collected on a sunny day. How might the graph look different if the day had been overcast?

