Name:

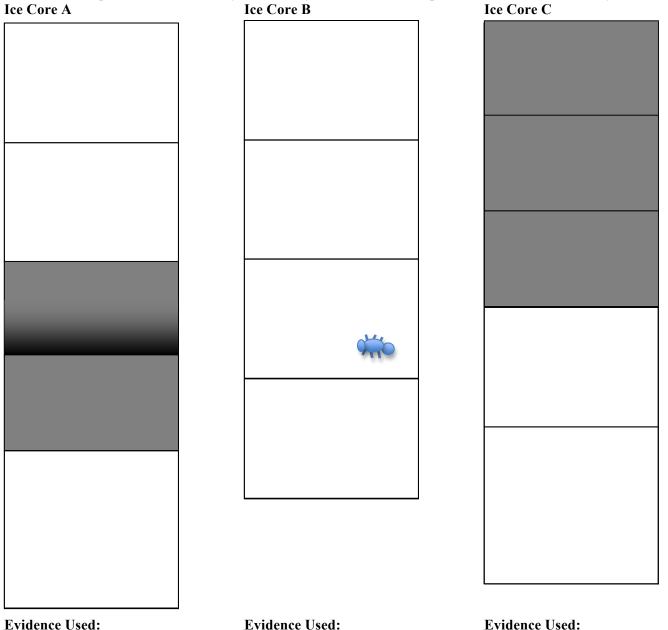
List and *briefly* explain three ways that today's scientists learn about conditions in the Earth's atmosphere long ago (before humans kept written records).

I.

II.

III.

While examining three ice cores from the freezer at the same time, you made the mistake of separating the ice cores from their labeled bags. Fortunately, all three cores have been well studied and there are written descriptions of the conditions of the atmosphere that each recorded. Using your knowledge of Earth science, determine which core goes with each description and label each layer with the year the snow was deposited. Provide evidence for your claims.



Description 1: This ice core records four years of conditions in the atmosphere from 1899 to 1902. All four years had average snowfall. An insect was found in the layer from 1900.

Description 2: This ice core records five years of conditions in the atmosphere. In 1856, 1857, and 1858 there was below average snowfall. In 1859 there was average snowfall and in 1860 there was heavy snow.

Description 3: This ice core records five years of conditions in the atmosphere. In 1801, there was above average snowfall followed by two years of below average snowfall and then two years of average snowfall. A volcanic eruption occurred in the third year, 1803.