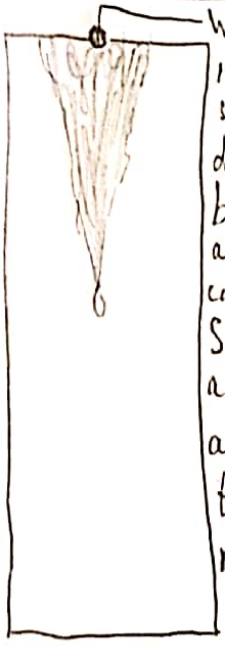
Topic: Carlsbad Caverns; the rock units in which the cave developed, the origin of the cave, and the processes that formed each main type of cave formation (e.g. stalactites)

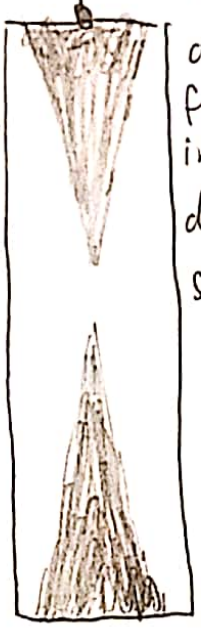
1. The Carlsbad Caverns are a cave system formed in a limestone bed within the Guadalupe Mountains in New Mexico.

2. The caverns are famous for its large caves, which were likely to have formed due to the presence of sulfuric acid as opposed to the relatively weaker carbonic acid.

3. The caves likely formed due to the presence of a water table, hydrogen sulfide from nearby oil deposits, and oxygen. As the oxygen and hydrogen sulfide dissolve in the ground water, sulfuric acid forms, which aggressively dissolves the surrounding limestone, forming large chambers.



Within the caves, rainwater and snowmelt percolate down the caves, becoming acidic as it picks up carbon dioxide. Stalactites form as calcium deposits are left when the acidic rainwater drips from the cave ceiling.



Water can also drip to the floor, resulting in rising calcite deposits called stalagmites.

Stalactites and stalagmites can eventually meet, forming columns.

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