

7th Science
Unit 3 Video Organizer
NOVA: "Ice Age Death Trap"

Name_____

Date_____

Period_____

➤ As the video plays, list other animals found in this dig site besides mastodons.

1. A mastodon is an ancient _____.
2. How many years ago did mastodons once inhabit this area by the lake depicted in this video?
3. What town in Colorado does this center around?
4. When did this mystery start to become known (month & year)?
5. Why were bulldozers operating in this area to begin with?
6. How deep was this site dug out, and how many years back did fossils go?
7. What originally created this basin area?
8. One type of animal uncovered was an ancient bison. How wide was the span of the horns on this animal?

9. Briefly describe one leading theory on what causes the ice ages.
10. How much did a mastodon weigh?
11. How did the giant bison compare in size to today's bison in weight?
12. What was one of the top predators of the bison and mastodon?
13. How tall, and how large were the tusks were the Colombian mammoths?
14. The short-faced bear probably targeted what for prey?
15. What type of canine probably hunted the mammoths and camels of this time period?
16. What was unique about some of the plant findings at Snowmass?
17. How many scientists signed on to assist in the spring dig?
18. Due to construction time restraints, how many days did scientists have to complete the excavation of this site?
19. How large was a Jefferson's ground sloth (compare it to an animal of today)?
20. What two types of elephant-like animals once inhabited Colorado?
21. Which were the more aggressive type of elephant-like animal?

22. The fossils of trees at this site suggest what about the climate 100,000 years ago?
23. Liquefaction occurs when an earthquake happens in an area with a very high water table. The result is similar to *what*, which might explain the large number of mastodon deaths at this location?
24. Kirk Johnson, the lead scientist on this project, gave a hypothesis of what might have happened if an earthquake and liquefaction actually occurred, thus causing the deaths of the mastodons. What did he call this hypothesis?
25. Seismic records support that earthquakes of the magnitude to cause liquefaction and landslides in this area might occur how often?
26. What part of the tusks were scientists able to analyze which could help give clues to the end of the mastodons' lives?
27. One thing that is unique about the findings of this site is that the fossil remains show no signs of predators or _____, which feed off dead animals.
28. How long might it have taken these animals to starve to death?
29. Scientists have thought for a long time that the Clovis people were the first to cross a land bridge from Siberia, thus becoming the first human inhabitants of North America. How long ago do scientists estimate their arrival to North America?
30. Meat caching in cold lakes was an effective way for early man to preserve meat (since they didn't have refrigeration back then) as well as keeping it from other animals. How much meat could a mammoth provide, and for how long could that feed a band of hunters if it didn't spoil?
31. "Extraordinary _____ require extraordinary _____."

32. The parallel marks on the rib bone did not appear to be from gnawing of a predator or scavenger. What do the scientists believe they may have been caused by?

33. In order to preserve this important fossil, how do they get it ready for transport for more thorough analysis in Denver?

34. How many bones were recovered from this site?

35. Though the scientists couldn't get a definitive "guess" of the age of the mammoth bone, what were they able to get a good guess on which helps them think this mammoth was around 45,000 years old?