

SCENARIO CONCLUSION

INSTRUCTIONS

1. Compare the base pair lengths of the restriction fragments from your first three samples (those from the National Parks) to those of Dr. Comstock to determine if there are any matches. What did you use as the basis for determining your matches? What conclusions can you draw from these two individual elephants?
2. If there are banding patterns (or fragment lengths) that don't match one of Dr. Comstock's samples, what conclusions can you make concerning these individual elephants?
3. Now examine your data from the ivory sample. What is the most likely location this ivory was obtained?
4. Can you be certain that the elephant from which the ivory was taken was from the location you identified? Why or why not?
5. Now that you have determined the countries of origin of each of the samples that you ran on your gel, what laws are in place concerning the trade of ivory in those countries? What are the laws in the United States regarding the importation of ivory?
6. Is your grandfather in trouble legally? Explain.
7. Summarize how biotechnology is used to establish a database and how this information (database) is used to help conserve a species.

