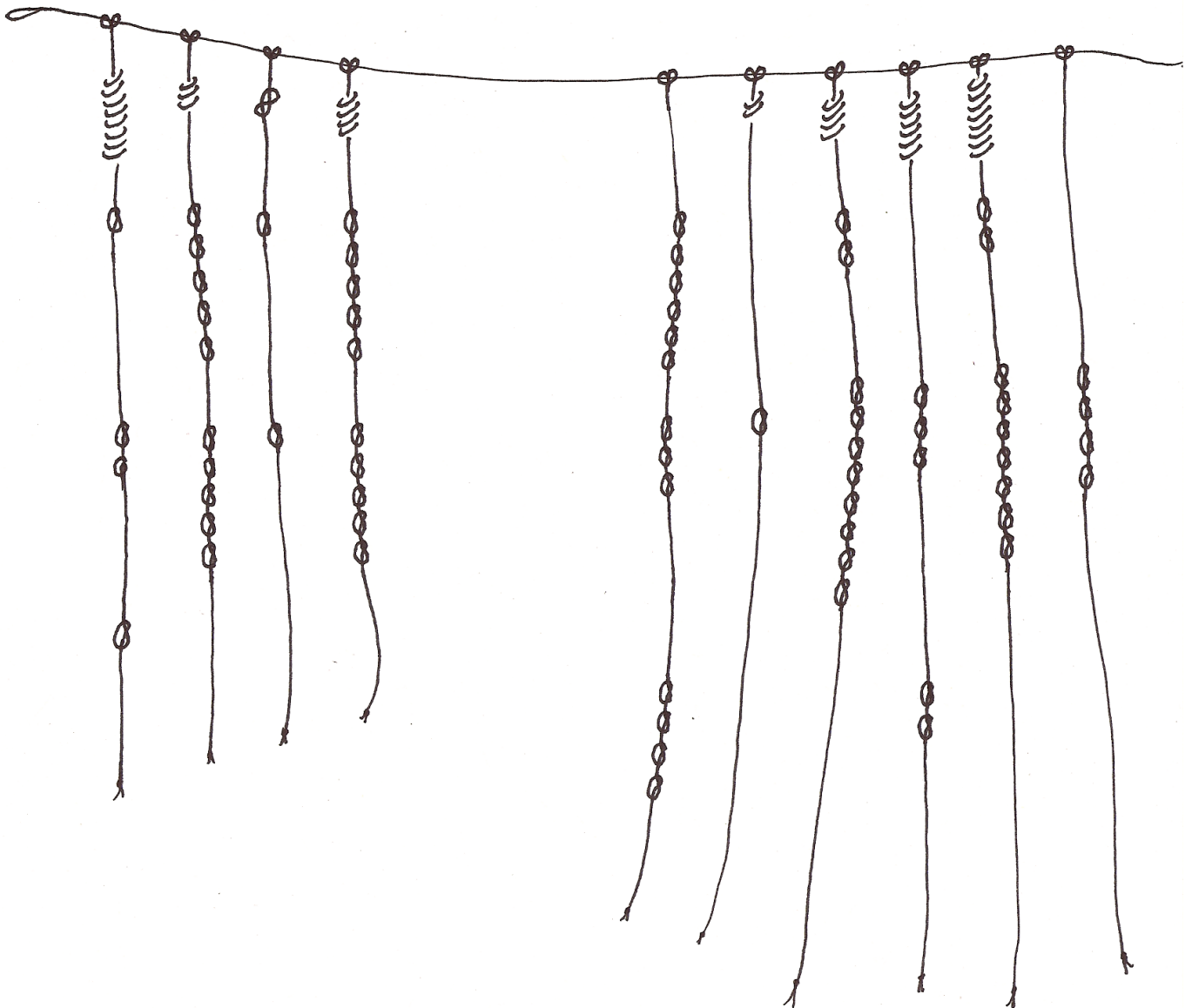


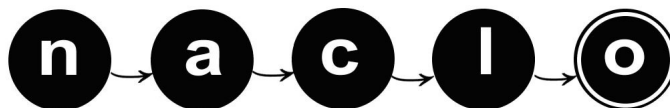
(10 points)

(P) Khipu (1/3)

Of all the major Bronze Age civilizations, there is only one for which we cannot (yet) find evidence of writing: the Inca Empire. Instead, a scribe-like class called the *kipukamayuc* kept records on collections of intricate knotted strings called *khipu*.



These knots are not random: there is a meaningful pattern that you can discover if you examine them closely. Each of these three groups of strings (two on this page, one on the next) is independent, but the same pattern is used in each. Patterns similar to this are frequent on real khipu, but only about 2/3 of the "khipu code" has been deciphered. The rest remains mysterious, and linguists, mathematicians, and computer scientists are still trying to uncover their secrets.

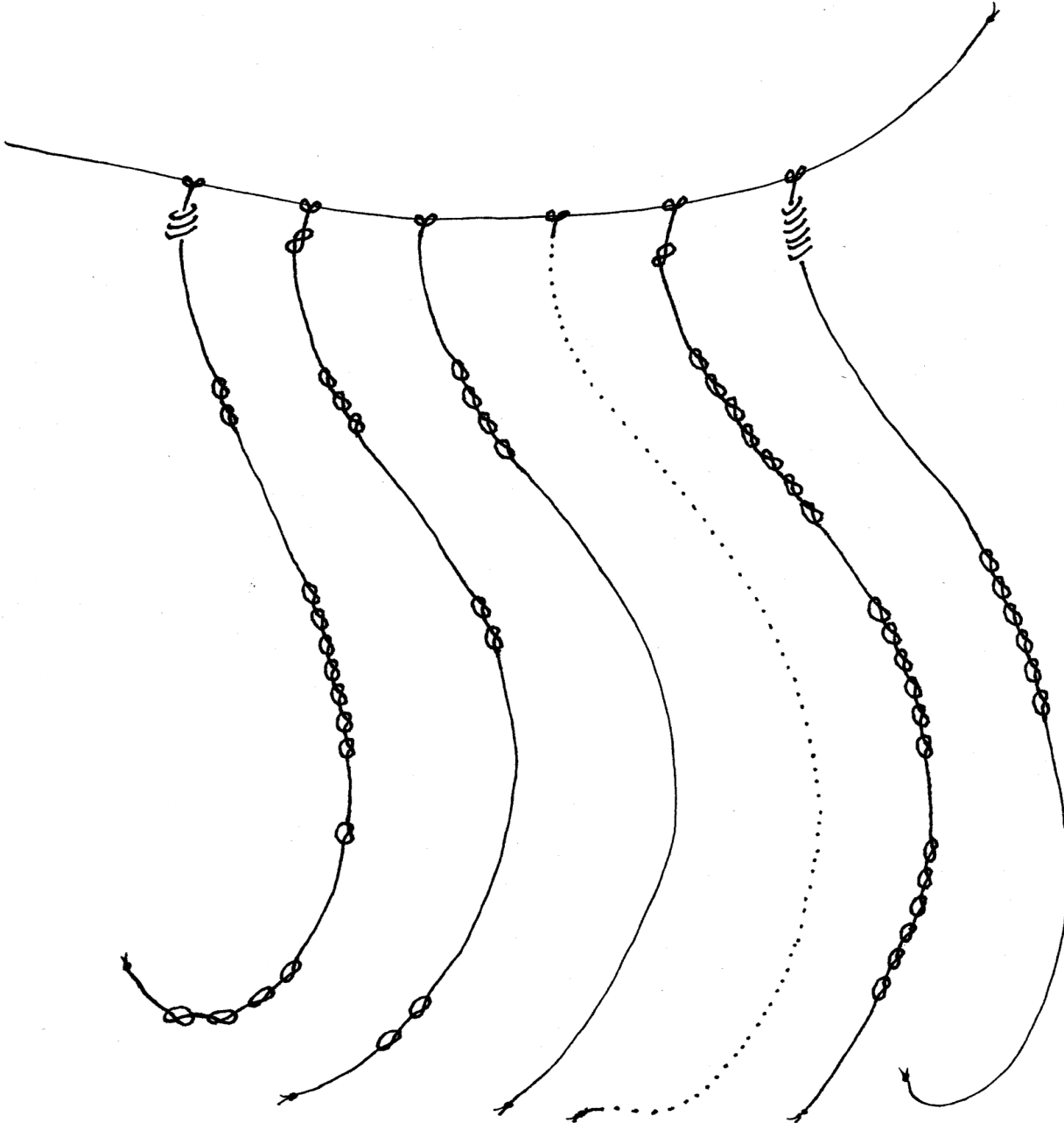


YOUR NAME:

REGISTRATION #:

(P) Khipu (2/3)

P1 (6 points). This khipu has lost one of its strings. Can you figure out what was on it? Draw the missing string where the dotted line is.



n → a → c → l → o

YOUR NAME:

REGISTRATION #:

(P) Khipu (3/3)

P2 (4 points). Explain your answer.

