

# K3 Columnar Transposition (NSA Method)

*Typographic cues indicate fixed transposition pattern*

## 1. Write ciphertext in grid (by rows):

0	1	2	3	4	5	6	7
E	N	D	Y	A	H	R	O
H	N	L	S	R	H	E	O
C	P	T	E	O	I	B	I
D	Y	S	H	N	A	I	A
C	H	T	N	R	E	Y	U

...

## 2. Read columns in keyword order:



Columns read in order determined by keyword

## Co-prime Principle:

- Grid dimensions chosen to ensure full coverage
- Column count and row count are co-prime
- This prevents collisions and ensures unique mapping
- Similar principle applies to K4 wheel periods

**NSA Insight: Fixed transposition patterns from typographic cues**

*K3 precedent → K4 uses fixed periods with co-prime properties*