



Solution: Name that Friend

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Solution: The “plain” sentence changing to the “not plain” sentence indicates a cipher. This, paired with the later reference to four-square, indicates that the four-square cipher is being used. Along with the plaintext, the four-square cipher requires two keywords to generate the ciphertext. Since the ciphertext is given, one should deduce that Charlotte is the first keyword and the second keyword is going to be the answer to the puzzle.

The four-square cipher uses four 5 by 5 tables. Since a table of this size only has 25 cells, and the alphabet has 26 letters, we have to be able to make this fit. The greyed out letter in “four-square” is indicating that the letter q should be omitted.

Working backwards through the encryption, we end up with the following four tables.

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	R	S	T	U
V	W	X	Y	Z

c	h	a	r	l
o	t	e	b	d
f	g	i	j	k
m	n	p	s	u
v	w	x	y	z

r	o		a	l
		c	e	f
g				k
m	p	s		u
				z

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	R	S	T	U
V	W	X	Y	Z

Since there is no space for the letter d between the letter c and e (where it would be as part of the alphabetical order), the letter d must be in the keyword. Similarly, the letter n must also be in the keyword. The keyword, and thus the answer to the puzzle, is **ronald**.

Author’s Comments: This was my first time creating a puzzle of this kind and I learned a lot along the way. The original version of this puzzle put a greater emphasis on connecting the four-square name with a cipher. It became clear, through testing, that this was not a well known cipher and some adjustments were made. It was interesting when some testers also noted that they had first thought of the four-square playground game and so it seemed fitting to talk about playing four-square as if it were a game, and make a nod to an old schoolyard past time.