On the Subject of Elder Futhark

"Fehu, Uruz, Teiwaz, Hagalaz, Ansuz, Raido, Kenaz"

Elder Futhark consists of 23 different runes. Three runes are shown on the top of the module. The goal is to encode their names and input the result back in Elder Futhark.



- First, identify the names of the runes in the sequence (see Appendix RAIDO).
- If one name is longer than the others, pad the shorter ones with repetitions of themselves. For example, if the runes are <u>EHWAZ</u>, <u>THURISAZ</u> and <u>ISA</u>, the result for the former and the latter would be <u>EHWAZEHW</u> and <u>ISAISAIS</u>.
- Interweave the three names, beginning with the first letter of the rune shown first, followed by the first letter of the rune shown second and then the first letter of the remaining rune. Continue in that fashion for the second letter, the third letter, etc. till all letters are interweaved. For example, GEBOGEB + JERAJER + NAUTHIZ = GJNEEABRUOATGJHEIEBRZ.
- Cycle the result to the right by the sum of the digits in the serial number, modulo 6.
- Truncate the result to the total length of the original runes' names. This is your encryption key.
- Transliterate the original names and the encryption key into Elder Futhark (see Appendix RAIDO).
- Use the table in Appendix FEHU to encrypt the runes' names using the encryption key.
 - Use the columns in the table for the runes' names.
 - Use the rows in the table for the encryption key.
 - The rune at the intersection of that row/column is your result.
- Enter the result into the module by pressing each rune in order.
- When a mistake is made, the module resets to the beginning of the current rune. This means that if the first rune's encrypted name was already entered correctly, only the second rune's name needs to be re-entered.

Appendix RAIDO: Runes, their names and their corresponding letters

Rune	Letters	Name
F	a	"Ansuz"
B	Ъ	"Berkana"
<	c, k, q	"Kenaz"
M	d	"Dagaz"
M	е	"Ehwaz"
F	f	"Fehu"
X	g	"Gebo"
H	h	"Hagalaz"
	ä	."Isa"
⋄	j	"Jera"
1	У	"Eihwaz"
1	1	"Laguz"

4.		
Rune	Letters	Name
M	m	"Mannaz"
+	n	"Nauthiz"
\$	0 7.	"Othila"
7	р	"Perthro"
+	Z	"Algiz"
R	r	"Raido"
4	5 3	"Sowulo"
1	t	"Teiwaz"
D	u	"Uruz"
P	v, w	"Wunjo"
Þ	x	"Thurisaz"

Appendix FEHU: Futhark Cipher

	1	8	<	M	M	F	X	H		~	1	1	M	1	×		4	R	4	1	h	P	Þ
F	X	11	7	1	⟨ >	۲		J	۲	1	X	Δ	<	M	H	4	×	+	7	4	X	1	R
B	\$	\	کے	P	1	8	7	 	Z	1	11	Μ	\sum	X	◇	<u> </u>	+	4	X			X	1
<	+	Δ	\$		7	>	◇	4	X	X	\sum	11	X	\		4	کے	K	11		H	_	4
M	کے	X	+	A	X	4	_	71		×	X	\	11	•		Δ	K	1	Z	^	♦	1	D
M	>	Σ	8	11	1	←	Χ÷	W	~	7		X		11	1	\	4			Δ	1	\$	P
F	~		4	4	X	\mathbf{X}_{-}	11	R	\		<u> </u>	1	Δ	Δ_	M	4	_	7	ܣ	کـر	M	Z	X
X	X	×		1	F	X	>			<	R		+		P	\mathbf{X}	۲	H	4	◇	h	8	
H	۲	4	X	M	<		8	1	P	M	1	7	4	R	F	×		♦		1	>	M	1
	M		۲	1	B	H	F	M		M	4	\$	R	4	Þ	7	X		1	1	P	<	⋄
⟨ ⟩	μ	1	M	H	D	X	1		+	Þ	×	4		\mathbf{X}	4	₹	<	M	۲	X	R	P	۲
1	D		P	M	R	F	4	۲	1	1	1	Z	1	⟨ >	L	X	Þ	8	X	X	夂	4	<
1		1	?		۴	1	M	4	M	H	>	4	P	•	M	R	1	M	μ	Ŷ	<u> </u>	X	1
M	8	Y	く		P	M	D	♦	R	F	کے	_	×	1	1	4	X	F	+	7	4	Þ	X
*	1	Þ	X	4		×	H	1		1	<	P	8	μ	X		1		X	_	F	♦	4
\$	X	R	7	1	M	♦	<	Ŷ	A	۴	D	+	1	4	8	7		1	P	\mathbf{X}	F	M	1
	>	1	μ	X	1	<	4	H	7	P	1	◇	X	1	R		lack	M	×	۲	<u> </u>	D	M
4	<	1	X	〈 〉	Þ	11	P	1	4	8	4	\mathbf{X}_{-}		夂	D	1	M	X	R		1	F	H
R	1	H		M	4	>		M	X	4	1	X	♦		Ŷ	۲	P	F	_	<	<u> </u>	R	8
4	H	4		夂	M	1	M		μ	X	P	R	D	1	<	4	♦	1	Þ	1	8	۴	M
1	4	X	1	<		P	Ŷ	M	1	R	◇	۲		H	1	M	D	Þ	1	lack	<u>M</u>	4	F
D	1	P	1	R	H	1	X	4	X	⟨ >	8	D	F	Þ	۲	1	M	Ŷ	<	4	M		
P	R	۴	4	8	×	D	1	<	1	4		M	H	X	M	X	1	P	◇	μ	1		Þ
 	P	◇	>	۴	4	lack	R	X	Ŷ	D	M		1	1	4	H	#	<	1	M		1	X