

Solutions

Thank you once again for your participating in the LOM 2023 – Launch Edition. Solutions, with explanations, to the Puzzles are provided below as feedback.

Average scores suggest that the puzzle you found most challenging was the Shizouka Japanese puzzle, with the Gilbertese puzzle coming next, and then the Mohawk. Well done on guessing the R-to-L direction of the Meriotic script: you didn't do too badly on this puzzle in spite of the rather complicated way in which vowels are encoded (see below) and also given it was the final puzzle when you may have been conscious about time running out. The puzzle which was answered least correctly was that involving Permyak.

Puzzle A: Gilbertese fruit and flowers

A1. Translate the following into English:

- | | |
|---|---|
| (a) <i>E na noorii taian uaa te aine.</i> | <i>The <u>woman</u> will see the <u>flowers</u> (3)</i> |
| (b) <i>A kunea te uaa taian aomata.</i> | <i>The <u>men</u> found the <u>fruit</u> (3)</i> |
| (c) <i>E na nooria te uee te aine</i> | <i>The <u>woman</u> will see the <u>flower</u> (3)</i> |
| (d) <i>E kunea taian uee te aine</i> | <i>The <u>woman</u> found the <u>flowers</u> (3)</i> |

A2. Translate the following into Gilbertese:

- | | |
|-------------------------------------|---|
| (a) The woman found the fruits. | <i>E kunei taian uaa te aine (6)</i> |
| (b) The women will see the flowers. | <i>A na noorii taian uee taian aine (7)</i> |
| (c) The man found the fruit. | <i>E kunea te uaa te aomata (6)</i> |
| (d) The women will see the flower. | <i>A na nooria te uee taian aine (7)</i> |

Endings and word order had to be exactly right.

Explanation:

Word order is marker [tense] verb object subject

Marker is *A* if the subject is plural, *E* if singular

Optionally *na* marks future tense; if omitted, it is past tense

Verbs *noori-* 'see' and *kune-* 'find' take endings *-a* if the object is singular, *-i* if plural

Definite article is *te* (singular), *taian* (plural)

Vocabulary: *uee* 'flower', *uaa* 'fruit', *aine* 'woman', *aomata* 'man'

Puzzle B: Shizuoka Japanese

B1. How would the following adjectives be emphasized in Shizuoka Japanese? You do not need to give the English translation.

- | | | |
|---------------------|------------------------|----------------------|
| (a) <i>kittanai</i> | (b) <i>mingamashii</i> | (c) <i>ookkanai</i> |
| (d) <i>ikkai</i> | (e) <i>kimbishii</i> | (f) <i>yassashii</i> |
| (g) <i>sammui</i> | (h) <i>munzukashii</i> | (i) <i>hindoi</i> |

B2. What are the plain forms of the following emphasized adjectives?

- (a) *atarashii* (b) *shibui* (c) *kodomoppoi*
 (d) *hisashii* (e) *anzenna* * (f) *tanoshii*
 (g) *dogitsui* (h) *rippana* * (i) *nikui*

Answers had to be exactly as shown (though see * below).

Explanation:

Emphasis affects just the first syllable and depends on the second syllable:

If the second syllable starts with a voiced sound (b,d,g,m,z) insert a nasal with the same place of articulation (i.e. if labial b or m, insert m; if dental d or z, insert n; if velar g insert ŋ).

If the second syllable starts with a voiceless consonant (t, s, k) double it.

If there is already a nasal after the first vowel, or if the second syllable already begins with a double consonant, then double the first vowel.

* The above rules permit parasitic solutions *aazenna* and *riipana*, which we have therefore credited.

Puzzle C: To and from Perm

C1. Translate the following Permyak words into English.

- (a) *pizaniʃlis'* *from his desk*
 (b) *vərrezlən* *of the forests*
 (c) *kəinnit* *your (pl.) wolf NB no credit if just "your"*
 (d) *jus'la* *for the swan*

Points were given for case (including no case marker in c), for possessive (or 'the' in b and d), for noun and for correct sing/plur.

C2. Translate the following English phrases into Permyak.

- (a) his hands *k'i ez is*
 (b) my knives *purt tez ə*
 (c) of your (pl.) feet *kok kez nit lən*
 (d) towards their house *k'erku nis lan'*

Answers needed to be written as one word, but marks were awarded for morphemes as shown (for correct noun, for plural (or omission in d), for possessive and for case marker (or omission in a and b). We were also strict about spelling (not allowing i for ɨ, and penalising omission of ').

Explanation:

The morpheme order is root-plural-possessive-case. The dictionary is as follows:

Roots	Plural	Possessive	Case
<i>k'erku</i> 'house'	-ez *	-ə 'my'	-lən 'of'
<i>pizan</i> 'desk'		-it 'your (sg.)'	-lan' 'towards'
<i>pon</i> 'dog'		-is 'his'	-la 'for'
<i>purt</i> 'knife'		-nə 'our'	-lis' 'from'
<i>tɨ</i> 'lake'		-nis 'their'	
<i>vər</i> 'forest'			

Roots	Plural	Possessive	Case
<i>kain</i>			'wolf'
<i>jus'</i>			'swan'
<i>kok</i>			'foot'
<i>k'i</i>			'hand'

* The plural is *-ez* after vowels; when attached to stems ending in a consonant, it doubles the stem-final consonant.

You have to infer that 'your (pl.)' is *-nit* in 1c and 2c, i.e. 'your (sg.)' with an initial *n-*, on the model of *my~our (-ə ~-nə)* and *his~their (-is~-nis)*.

Puzzle D: This is Mohawk

- | | | |
|--|---|-----|
| D1. What is the Mohawk word for 'fish'? | <i>itsi</i> | (1) |
| D2. Translate into English <i>hatsi'ktarakvt</i> | <i>the white louse</i> | (2) |
| D3. Translate into Mohawk 'The flower is red' | <i>Ka ji:jia onekwenhtara hikvt</i>
<i>Ha-</i> also allowed | (4) |
| D4. Translate into English <i>wahatitsi'ktaienta'ne</i> | <i>They caught a louse</i> | (3) |
| D5. If you know that <i>ien:'a</i> is 'son', give the Mohawk for 'my' <i>ri</i> | | (1) |
| D6. If you know that <i>e:rhar</i> is 'dog', translate into English <i>harie:rhararakvthikvt</i> | <i>My dog is white</i> | (3) |
| D7. Translate into Mohawk 'The dog crawls' | <i>Ha te'sene'o e:rha</i>
<i>Ka-</i> also allowed | (3) |
| D8. Translate into Mohawk 'The beans are red' | <i>Ha hsahe'taonekwenhtara hikvt</i>
<i>Ka-</i> also allowed | (3) |

Note that for D8 you didn't actually have to figure out the words for 'red' and 'beans' but just needed to add ha- and -hikvt to the translation of 'red beans' already given.

Explanation:

Definiteness is shown by the prefix *Ha-*, or *Ka-* ... you do not need to know how the choice is made, just copy what is given. The verb appears at the end of the sentence, except in the case of 'crawls'. Looking at the two sentences with 'crawls', how do you know where the verb ends and the subject begins? We have *Hate'sene'otsi'kta* and *Hate'sene'orijen:'a* ... is the verb *te'sene'* or *te'sene'o*? The clue is in one of the other questions: you can see in D4 that 'louse' is *tsi'kta* not *otsi'kta*, so the *-o* must be part of the verb. This in turn guides you to the answer for D5, which must be *ri*, not *ori*. The verb 'to be' appears as *-hikvt* appended to the colour name.

Vocabulary:

<i>itsi</i>	fish	<i>aienta'ne</i>	(they) caught
<i>kwiskwis</i>	pig	<i>te'sene'o</i>	crawls
<i>tsi'kta</i>	louse	<i>hihwi</i>	spilled
<i>ien:'a</i>	son	<i>onekwenhtara</i>	red
<i>hsahe'ta</i>	beans	<i>rakvt</i>	white
<i>ji:jia</i>	flower	<i>hikvt</i>	is (colour)

Puzzle E: Reading Meroitic

E1. Match up the Meroitic words with their corresponding transcriptions.

1	2	3	4	5	6	7	8	9	10
E	A	I	J	B	D	C	G	F	H

E2. Transcribe the following Meroitic words.

- (a) *perite* (b) *Atari* (c) *pileqe* (d) *medewi*

Points were given for each correct syllable of the answers to E2 e.g. *parite* would score 2 out of 3 possible points

E3. How would you write (a) *Mal(a)ta* and (b) *Waleta* (Valletta) in Meroitic?

𐎎𐎎𐎎
𐎎𐎎𐎎𐎎

Explanation

Meroitic is written right-to-left.

Symbols represent consonants or vowels, but if there is no vowel following, an implicit vowel 'a' is assumed: However, two symbols imply a different vowel: 𐎎𐎎 (se) and 𐎎𐎎 (te) (there are two other cases not used in this problem).

The consonant symbols seen are as follows (the symbols in the greyed-out cells were not used in this problem):

𐎎𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎	𐎎
y	w	b	p	m	n	ne	r	l	ch	kh	s	se	sh	k	q	t	te	to	d

The vowel symbols are as follows:

𐎎𐎎	𐎎	𐎎	𐎎
a	e	i	o