

(A) The Way We Were (1/2) [Solution]

A1.

	Old English	Present Day English
16.	a. arcebisceop	archbishop
17.	b. Eadweard cyning	King Edward
18.	menn	c. men
19.	weras	d. men
20.	Ne hierde ge hi.	e. You did not hear them.
21.	Ne gesawon hi þe.	f. They did not see you.
22.	Hi hit fremedon.	g. They performed it.
23.	Ne neredede we þe.	h. We did not save you.

A2.

	Old English	Present Day English
24.	a. Ne grette ge _____ hi _____ .	You did not greet them.
25.	b. Seo lar hi _____ nereþ _____ .	The teaching saves them.
26.	c. þu _____ hit hierdest _____ .	You heard it.
27.	d. þa _____ hierdon hi us/unc _____ .	Then they heard us.

A3.

i. F ii. D iii. A iv. E v. C vi. B

A4.

a. þu b. git c. inc d. ge e. þe f. eow



(A) The Way We Were (2/2) [Solution]

Additional notes about the language:

- Word order (S stands for *subject*, V stands for *verb*, O stands for *object*, Adv stands for *adverb* (such as *then*), Wh stands for *wh-word* (such as *who*), and PP stands for *prepositional phrase* (such as *to the town*)
 - S V O: when the object is a noun or noun phrase
 - S O V: when the object is a pronoun
 - Adv V S O: When the sentence has an adverb, which in the examples is always either *pa* (“then”) or *ne* (“not”)
 - Wh V S O: Wh questions
 - S V PP: In sentences with a prepositional phrase
- Verb formation:
 - Verbs have 4 forms for each tense:
 - 1st person singular
 - 2nd person singular
 - 3rd person singular
 - Plural (that is, the same inflection is used for any plural form, regardless of whether it is 1st, 2nd, or 3rd person. The plural verb inflection is also used for dual cases).
 - When a 1st or 2nd person plural pronoun comes immediately after a verb, the verb’s ending is reduced to *-e*. For example, this is why the second sentence in example (13) uses *gesawe*, not *gesawon*.
 - There is not enough information in the problem to figure out how to take a verb and inflect it in a particular way; the verb inflection is relatively complicated because there are several verb classes with idiosyncratic endings.



(B) Don't Stress (1/1) [Solution]

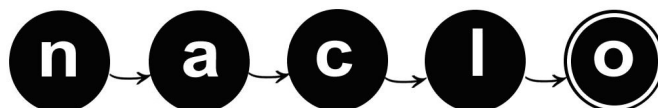
B1.

Answers:

- hipirak: NNP
- xorojike: NNPN
- waiperesga: NPNS
- waaporoporo: NPNSN
- hirakorohonira: NNPNSNS

Explanation:

- We will say that a syllable is “light” if it contains 1 vowel or “heavy” if it contains 2 vowels.
- In words with all light syllables, stress is on the third syllable and alternating thereafter.
- In words beginning with a heavy syllable, stress is on the second syllable and alternating thereafter.



(C) Vloxes (1/2) [Solution]

C1.

- A. the two mellivu vloxes: B,F
- B. the two mellovu vloxes: A,I
- C. the two kibb vloxes: A,H
- D. the two azeltorf vloxes: A,G
- E. the qliqli vlox: D
- F. the imxo vlox: I
- G. the three ravv vloxes: E,F,G
- H. the kibbish-zuff vlox: I
- I. the zuffish-kibb vlox: C

C2. wommish-tezz

Solution path:

There are many potential ways to figure out the solution. Here is one way that it could be figured out.

From looking at the pictures, you can see that the vloxes vary along these 4 dimensions:

- Their size
- Whether or not they have a horn
- The direction of the stripe on their bodies
- How shaded their legs are

Therefore , we can assume that the adjectives in the descriptions refer to these properties.

In the encyclopedia, we see the phrases *completely qliqli* and *nearly azeltorf*. To use *completely* or *nearly*, the adjective must refer to something that is a scale with a definite end (e.g., you can say “completely full” but not “completely large” or “completely four-legged.”) The only attribute that has this property is leg-shadedness. The descriptions say “the two azeltorf vloxes” and “the qliqli vlox.” There is only one completely unshaded vlox, and two completely shaded vloxes, so we can conclude that *azeltorf* = “shaded” and *qliqli* = “unshaded.” (Note that, when a word like *full* or *empty* is used in isolation, it refers to the most extreme version of the word—completely full or completely empty). Thus the two azeltorf vloxes are A and G, and the qliqli vlox is D.

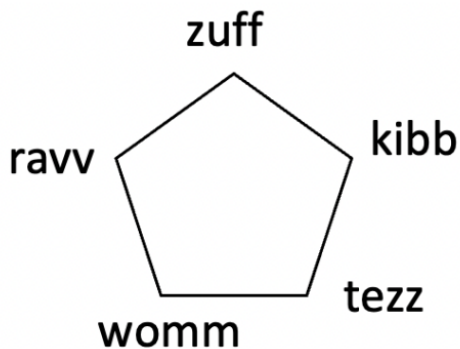
In the encyclopedia, the words that take the form WORDish-WORD are made of 5 basic pieces: *zuff*, *kibb*, *tezz*, *ravv*, *womm*. This fits with the fact that there are 5 points on the vloxes’ bodies. In the encyclopedia, we also see certain patterns regarding which parts occur together within a word: *womm* and *ravv* occur together in *ravvish-womm*, *zuff* and *ravv* occur together in *zuffish-ravv*, etc. if we hypothesize that each word corresponds to one point in the pentagon, then perhaps these *ish* words correspond to in-between points (something like *greenish-yellow*). If this is so, we can figure out which points are neighbors by looking at the *ish* words. This gives us the following chain of neighbors (but we don’t know yet which corresponds to which point): *womm*—*ravv*—*zuff*—*kibb*—*tezz*.



(C) Vloxes (2/2) [Solution]

Solution path (continued)

Looking at the descriptions, there are three ravv vloxes and two kibb vloxes. The only stripe direction represented three times is pointing toward the tail, so the three ravv vloxes must be E,F,G; and the only direction represented twice is pointed toward the head, so the two kibb vloxes must be A and H. With *ravv* and *kibb* sorted out, we can then identify the other points on the pentagon based on the chain we figured out from the text:



We are also asked for the kibbish-zuff vlox and the zuffish-kibb vlox. Based on what we've figured out about the pentagon, these should be between the top point (zuff) and the point to its right (kibb). We can infer that zuffish-kibb is closer to kibb, and that kibbish-zuff is closer to zuff. Therefore, the zuffish-kibb one is C, and the kibbish-zuff one is I. (We can figure out that zuffish-kibb is closer to kibb than zuff based on analogy to *greenish-yellow*). Note that participants in the contest did not lose any points for mixing up zuffish-kibb and kibbish-zuff.

The encyclopedia says "*more mellovu* makes no sense." The only attribute that cannot be compared is whether or not a horn is present. *Mellovu* could mean "having a horn" or "not having a horn", but since 2 vloxes have a horn while 7 do not, it must mean "having a horn." Therefore, the two mellovu vloxes are A and I.

This leaves *imxo* and *mellivu* to refer to size. There are two mellivu vloxes and two definitively small vloxes, so we can infer that *mellivu* = "small" (B and F). There is one imxo vlox, so we can infer that *imxo* = "large", such that the imxo vlox is I.

A2. The encyclopedia article says that vloxes are born completely qliqli and become less qliqli as they age. *Qliqli* means "having the legs completely unshaded," so the youngest vlox would be the one with the least-shaded legs—i.e., D. Its stripe points toward tezz but is slightly skewed toward womm, so it would be described as *wommish-tezz* (but note that participants in the contest were not penalized if they answered *tezzish-womm* instead of *wommish-tezz*).



(D) For the Sake of Their House (1/2) [Solution]

D1.

- pizanışlıç: from his desk
- vərrezlən: of the forests
- ponnıt: your (pl.) dog
- juçla: for the sake of the swan

D2. Write the Permyak translation for each English phrase.

- his hands: ciezis
- my dogs: ponnezə
- of your (pl.) feet: kokkeznitlən
- for the sake of their house: cerkunıla

Comments:

The morpheme order is root-plural-possessive-case. The vocabulary used is:

- Roots:
 - cerku “house”
 - pizan “desk”
 - pon “dog”
 - purt “knife”
 - tı “lake”
 - vər “forest”
 - kəin “wolf”
 - juç: “swan”
 - kok: “foot”
 - ci: “hand”
- Plural: -ez
- Possessive:
 - ə “my”
 - ıt “your (sg.)”
 - is “his”
 - nıs “their”
- Case:
 - lən “of”
 - ləŋ “towards”
 - la “for the sake of”
 - liç “from”
 - kət “with”



(D) For the Sake of Their House (2/2) [Solution]

Grammar points:

- The plural is *-ez* after vowels. When attached to consonants, it doubles the consonant at the end of the stem.
- We are asked to produce “your (pl.)”. The pattern that must be observed to produce this is that *-is* is to *-nis* as *-it* is to *-nit*. This is confirmed if we look at translation 3, *ponnit*: *pon* is “dog”, *-it* is 2nd person possessive, but the extra *n* is unexpected—it cannot be a doubling of the stem-final *n* because there’s no plural suffix, so it has to be *-nit* “your (pl.)”.



(E) Bengalese Finch Song (1/1) [Solution]

E1.

- a. 1
- b. 12
- c. 1/12
- d. 7
- e. 12
- f. 7/12

E2. a

E3. You should circle "Sequence B" and "Sequence C."

E4. RESTLESS LETTERS



(F) A Calabash Calculation (1/1) [Solution]

F1.

1. B
2. D
3. E
4. L
5. I
6. G
7. K
8. S
9. A
10. N
11. P
12. O
13. C
14. H
15. J
16. T
17. Q
18. M
19. U
20. F
21. R

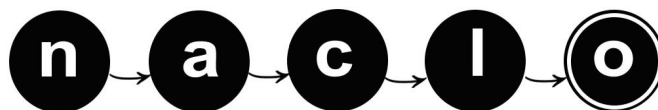
F2.

a. bush: kwéεŋ

b. hut: sɪ̀

c. to read: jangidē

d. to shave: gírčí



(G) Feathers of the Roseate Spoonbill (1/4) [Solution]

G1.

- a. *ye nihualla*: /je niwa:llaʔ/
- b. *antocnihuan in*: /antokni:wa:n in/
- c. *quin icuac*: /kin iʔk^wa:k/

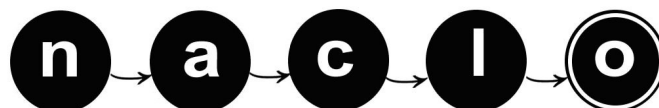
G2.

- a. /we:weʔ/: huēhuē
- b. /tʃokola:tʃ/: chocolātl
- c. /miktʃa:nte:k^wtʃi/: Mictlāntēuctli

G3. 20th-century and IPA

Correspondences between the three writing systems are as follows (continued on the next page):

<u>16th-century</u>	<u>20th-century</u>	<u>IPA</u>
a	a	a
a	ā	a:
e	e	e
e	ē	e:
i	i	i
i	ī	i:
o	o	o
o	ō	o:
m	m	m
n	n	n
p	p	p
t	t	t
tz	tz	ts
tl	tl	tʃ
ch	ch	tʃ



(G) Feathers of the Roseate Spoonbill (2/4) [Solution]

Writing system correspondences (continued). Note that C stands for any consonant, V stands for any vowel, and # stands for the end of a word.

<u>16th-century</u>	<u>20th-century</u>	<u>IPA</u>
c (before a, o, C, #)	c (before a, o, C, #)	k
qu (before i, e)	qu (before i, e)	k
cu (before V)	cu (before V)	k ^w
uc (before C, #)	uc (before C, #)	k ^w
[nothing]	' (diacritic) (before C, V)	ʔ
[nothing]	^ (diacritic) (before #)	ʔ
c (before i, e)	c (before i, e)	s
z (before a, o, C, #)	z (before a, o, C, #)	s
x	x	ʃ
l	l	l
y	y	j
hu (before V)	hu (before V)	w
uh (before C, #)	uh (before C, #)	w

Notes (Some of this information is not tested in the problem and has been included here solely for completeness):

- V indicates a vowel, C indicates a consonant, and # indicates a word break.
- Long vowels and glottal stops are not marked in the 16th-century orthography, which is why there is not a bijection between the 16th-century orthography and the 20th-century orthography or between the 16th-century orthography and IPA.
- The glottal stop /ʔ/ does not occur word-initially or after a long vowel.
- In both 16th-century and 20th-century orthographies, ll represents /ll/, not /l/ as in Spanish.
- The text does not include any instances of /s/ before a front vowel (i, e), written c in both manuscript and standard orthographies.



(G) Feathers of the Roseate Spoonbill (3/4) [Solution]

Here is a line-by-line gloss of the text:

Ye nihuāllā, antocnīhuān in:
ye ni-huāl-yā anto-(i)cnīuh-huān in
already 1s.SUBJ-here-go.PERF 1PL.POSS-friend-POSS.PL DEF
'I have already come, my friends'

noconcōzcazōya,
ni-c-on-cōzca-zō-ya
1s.SUBJ-3s.OBJ-there-necklace-gird-IMPF
'I have girded (it) with necklaces'

nictzinitzcamana,
ni-c-tzinitzca(n)-mana
1s.SUBJ-3s.OBJ-mountain.trogon-lay.out
'I lay (it) out on (feathers of) the mountain trogon'

nictlāuhquechōlihuimolohua,
ni-c-tlāuhquechōl-ihui-molohua
1s.SUBJ-3s.OBJ-roseate.spoonbill-thus-adorn
'I adorn (it) with (feathers of) the roseate spoonbill'

nicteōcuitlaicuiya,
ni-c-teō-cuitla-icuiya
1s.SUBJ-3s.OBJ-god-metal-coil
'I coil (it) with gold'

nicquetzalhuixtoilpīz
ni-c-quetzal-huixto-ilpīz
1s.SUBJ-3s.OBJ-quetzal-bind.PERF
'I have bound (it) with (feathers of) the quetzal'

in icnīuhyōtl.
in icnīuh-yō-tl
DEF friend-NZ-ABS
'(our) friendship'

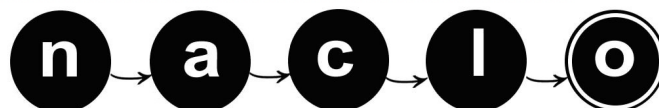
Niccuīcailacatzoa cōhuayōtl.
ni-c-cuīca-ilacatzoa cōhua-yō-tl
1s.SUBJ-3s.OBJ-song-entwine common-NZ-ABS
'I entwine (the) community with songs'

In tēucpan nicquixtīz,
in tēuc-pan ni-c-quix-tīz
DEF lord-LOC 1s.SUBJ-3s.OBJ-emerge-CAUS.PERF
'I will make (it) enter the palace'

an ya tonmochīn,
an ya ton-moch(i)-īn
there already 1PL-all-PL
'we will all be there'

quin ìcuāc tonmochīn in òtiyàquē ye Mictlān.
quin.ìcuāc ton-moch(i)-īn ò-ti-yàquē ye Mictlān
until 1PL-all-PL DEF PERF-1PL.SUBJ-go.PL.PERF already Mictlān
'until we will have all gone to Mictlan (the land of the dead)'

In iuh ca zan tictlānehuīcō.
in iuh ca zan ti-c-tlānehuī-cō
DEF thus indeed only 1PL.SUBJ-3s.OBJ-borrow-PERF.PL
'thus we will only have borrowed (it)'



(G) Feathers of the Roseate Spoonbill (4/4) [Solution]

Notes on the poem glossing:

- Verbs inflect primarily for aspect rather than tense: cf. nihuāllā ‘I have come,’ ōtiyàquê ‘we will have gone,’ both marked for perfective aspect.
- Names of birds (tzinitzcan ‘mountain trogon,’ tlāuhquechōlli ‘roseate spoonbill,’ quetzalli ‘quetzal’) often refer to their feathers, which are used for decoration. The word for ‘gold’ is teōcuitlatl, literally ‘god-metal’ or ‘metal of the gods.’

Sources:

Launey, Michel (2011). *An Introduction to Classical Nahuatl*, trans. Christopher Mackay. Cambridge University Press.

León-Portilla, Miguel (1994). *Quince poetas del mundo náhuatl*. Editorial Planeta Mexicana.

Lockhart, James (2001). *Nahuatl as Written*. Stanford University Press.

Wood, Stephanie (ed.), (2000–present). *Online Nahuatl Dictionary*, Wired Humanities Projects.



(H) My Grandmother and I (1/1) [Solution]

The Lardil pronoun system is based on the concept of *moiety*—individuals being groups on the lines of alternate generations. A person would be considered in the same generation (or moiety) as a grandmother or grandson, but in a different moiety from a parent or child (or great-grandchild, etc.)

Answers:

H1.

a. 3 b. 5 c. 4 d. 2 e. 6 f. 1

H2.

a. nyaanki b. kirri c. nyalmu d. bilmu e. niinki f. kirri

H3. Only “she and her sister” should be circled.

H4.

- a. ngakuli
- b. ngakulmu

H5. ngakurri

