

Question A: **Sakata**

- A1.** ...woman / munkar / bankar.....
- A2.** (a) The dogs saw the bad goat
 (b) The children wanted to buy a big cow
 (c) The little man read the good books
 (d) Who killed the woman's snakes?
- A3.** (a) Ngombe ijo mva inini
 (b) Munde nejao ola mape.....
 (c) Nə achunga kena kekikə ke bang?
 (d) Beto be kebil betang mekan menini.....
- A4.** (a) nchungə nemo (b) mote momo
 (c) kefwə kemo (d) mapyaoi mapə
 (e) ndze isa.....

EXPLANATION

Syntax: Sentence word-order is S V [Inf] O.

Verbs take **o-** in the infinitive, or an agreement prefix for their subject (see below).

Noun phrase word order is [o = to] N Adj [LNK Possessum].

Adjectives take an agreeing prefix.

In possessive constructions, LNK = agreement prefix for the possessing noun, as a freestanding linking word.

Noun class: All nouns begin with a noun class prefix.

	Singular		Plural	
	Noun prefix	Agreement prefix	Noun prefix	Agreement prefix
woman, man, child,...	mu-	ne-	ba-	ba-
book, tree, ...	mo-	mo-	me-	me-
duck, wing, shoulder, ...	i-	le-	ma-	ma-
field, thing, snake, bone, ...	ke-	ke-	be-	be-
goat, dog, chicken, cow, pig,...	n-	ne-	n-	i-
peanut, finger,...	le-	le-		
nə = <i>who</i>		a-		

Note that here, all noun classes are either singular classes or plural classes. This is not true in general, although these represent the most common singular-plural pairs.

nv > mv

Question B: **Egyptian hieroglyphs**

B1.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	c	b	d	m	l	n	h	k	i	f	j	a	o	g	e

B2. (1) **r'** :nb -k'(2) **r'** -s (3) **s**..... (4) **w**.....(5) **dsr -r**.....(6) **n**..... (7) **t :t -j**.....

B3.

B4. (16) Trans **r' -x' -nfr** E Pron **Kha nefer Ra**.....(17) Trans **t :t -j**..... E Pron **Teti**.....(18) Trans **p :p -j -j**

B5. A Nefer..... B ka

EXPLANATION

The direction of writing is toward the vertical line at the end of the oval (which together with the line is known as a cartouche) and top to bottom. Hieroglyphs face away from the vertical line. Scribes moved the names of gods like Ra to the beginning of phrases in inscriptions (to show reverence).

Hieroglyphs can stand for words or consonant combinations. Sometimes they clarify the reading of previous hieroglyphs. In the transliteration, the mark - indicates separate hieroglyphs horizontally, and the mark : indicates separate hieroglyphs vertically.

Egyptological pronunciation: ' → a, ʒ → a, j, y → i, w → u, jj → y, d → dj, h → h, x → kh; otherwise X → X. Usually, CC → CeC, (C = consonant), although this is more irregular.

References and further reading:

- <https://pharaoh.se/ancient-egypt/kinglist/saqqara-canon/>
- <https://www.egyptianhieroglyphs.net/gardiners-sign-list/>

Question C: **SENĆOFEN**

- (a) **ǂÁǂEL**,..... (b) **ǂLEQ**..... (c) **ǂEL,EN**, or **ǂELEN**,.....
 (d) **XLEN**..... (e) **hurt**..... (f) **ǂEQ**.....
 (g) **KPEN**..... (h) **KEPEN**..... (i) **JEN,T**.....
 (j) **ǂETEN**,..... (k) **ǂELET**..... (l) **ǂEL,T**.....
 (m) **TǂET**.....

EXPLANATION

The data show two methods by which the actual is formed from the non-actual. SENĆOFEN verbs can form the actual through many other strategies, but these are two common and fairly regular ones.

- Some verb stems form pairs ending in **-T** and **-ǂ**. **-T** denotes transitive verbs (translated here as ‘V it’), while **-ǂ** denotes intransitive ‘middle’ verbs (implying an action relating to or benefiting oneself; translated here as just a bare verb).
- Each non-actual verb stem has an underlying structure of CVC or CCEC (C = consonant, V = vowel). The actual is derived as follows:

Shape of non-actual	Shape of actual
C ₁ V C ₂	C ₁ V C ₁ E C ₂
C ₁ C ₂ E C ₃	C ₁ E C ₂ C ₃

- Additionally, all non-glottalised resonants (**L M N ǂ U**) which are not the first consonant in the word become glottalised in the actual form. Another rule which is also consistent with the given data is that only the last non-initial resonant in the vowel becomes glottalised, which is why **ǂELEN**, is also accepted for (c).
- In all verb forms, CR > CER (R = resonant).

References and further reading:

Montler, T. R. An outline of the morphology and phonology of Saanich, North Straits Salish. University of Montana Occasional Papers in Linguistics No. 4, 1986.

Montler, T. R. Infixation, reduplication and metathesis in the Saanich actual aspect. *Southwest Journal of Linguistics*, 9, 92–107, 1989.

Montler, T. *SENĆOFEN A Dictionary of the Saanich Language*, Electronic edition, 2018; <http://saanich.montler.net/SaanichDictionary-Eedition.pdf>

Question D: **Nganasan**

D1.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	I	K	Q	N	L	G	H	C	J	D	E	O	B	A	E	R	P	M

D2. (a) **bags**..... (b) **idol** (c) **ears**

D3. (a) **ǂantu?**..... (b) **basa**.....

D4. ... huaaʔtuj**EXPLANATION**

Compound order is MODIFIER – HEAD.

Each noun has three possible root forms, S1, S2, S3, which often coincide, or may differ by consonant gradation (here, only between **s>d'**, **t>ð**, **nd>nt** and **j>Ø**) or vowel mutation/lengthening. Note that it is not really possible from the data given to conclude that the MODIFIER-PLURAL form is also S3, but it is also not required for the tasks.

	SINGULAR	PLURAL
HEAD	S1	S2-ʔ
MODIFIER	S3	S3-ʔ

In reality, some modifiers are in forms S1/S3, but in this problem this only occurs in words where the forms are indistinguishable

The following words appear in multiple forms.

	S1	S2	S3
<i>ear</i>	kou		
<i>idol</i>	kojkə		kojkü
<i>metal</i>	basa	bad'a	
<i>hand</i>	d'ütü	d'üðü	
<i>tooth</i>	čimi		
<i>boat</i>	ɲənd uj	ɲəntu	
<i>fire</i>	tuj	tuu	

Sources:

Wagner-Nagy, B. (2018). *A grammar of Nganasan* (Vol. 6). Brill. [Main source]

Vaysman, O. (2002, August). Against richness of the base: evidence from Nganasan. In *Annual Meeting of the Berkeley Linguistics Society* (pp. 327-338). [branch]

Brykina, Maria - Valentin Gusev - Sándor Szevényi - Beáta Wagner-Nagy 2018: "Nganasan Spoken Language Corpus (NSLC)." Archived in Hamburger Zentrum für Sprachkorpora. Version 0.2. Publication date 2018-06-12. <http://hdl.handle.net/11022/0000-0007-C6F2-8>. [For certain plural forms]

Question E: Kavalan

E1. (a) His monkey is sleeping

(b) Does the girl like Taipei?

(c) He buys my chicken with our money

(d) We cut the small sour orange in that village

E2. (a) kitutiku ni.....

(b) taquz ya tiapzangawta ta tarrebciaan ni.....

(c) tiqalta ta rasung ya sarriqku.....

(d) temayta tu rrutungcia ya sumisna ta rasungan.....

E3. Explain the rules of Kavalan grammar as illustrated here. Continue on the back page if necessary.

EXPLANATION

UnF = Unfocused. Note that instrumental clauses (*with X*) only appear focused in this problem, and locatives only appear unfocused.

Word order is VSO

Question is indicated by final **ni**

Intransitive verbs focus the only argument

Transitive verbs mark the focus as follows:

Subject focus: insert **-em-** after first consonant

Object focus: suffix **-an**

Instrument focus: prefix **ti-**

The particle **ya** precedes the focused noun (focused pronouns are not marked other than in the verb)

Unfocused elements are preceded by the following particles:

Subject **na**

Object **tu**

Locative **ta**

Adjective precedes the noun

Verbs and adjectives form a single class: adjectival use indicated by the suffix **-ay**

Noun suffix **-cia** indicates 'that'

Noun suffix **-an** indicates locative

Pronoun suffixes indicate both subject (on verb) or possessor (on noun):

-ku 'I', **-su** 'you', **-na** 'he', **-ta** 'we'. If the subject is focused, these are preceded by **-i-**.

Vocabulary:

Nouns: **asu** 'dog'

damu 'village'

Kalinku 'Hualien'

krisiw 'money'

manay 'sand'

mata 'eye'

qamasim 'sour orange'
rasung 'well'
rrutung 'monkey'
sarriq 'knife'
sumis 'child'
taquq 'chicken'
tarreb 'box'
Taypak 'Taipei'
tazungan 'girl'
tipazangaw 'crab'
tunun 'stick'

Adjective/verbs:

busarr '(be) white'
ipir 'hear'
kiskis 'cut'
kitut '(be) small'
liuq '(be) rotten'
mngil 'like'
pukun 'hit'
qal 'dig'
qan 'eat'
qasirr '(be) fast'
rrasa 'buy'
taquz 'sleep(ing)'
tayta 'see'

qasirr ya tiapzangaw-cia *That crab is fast.*
fast foc crab-that

t[em]ayta-iku tu rrutung *I see the monkey.*
see-[subjfoc]-I obj monkey

qan-an na sumis-ku ya liuq-ay qamasim-na *My child eats his rotten sour orange.*
eats-objfoc_subj child-my foc rotten-adj sourorange-his

ipir-isu ni *Do you hear?*
hear-you Q

ipir-an-su ya taquz-ay damu-ku *You hear my sleeping village.*

hear-objfoc-you foc sleep-adj village-my

ti-kiskis-ku tu tarreb ya sarriq-su *I cut the box with your knife.*

Instfoc-cut-I obj box foc knife-your

q[em]al-ina tu rasung ta many-ku-an *He digs the well in my sand*

dig-[subjfoc]-he obj well loc sand-my-loc

q[em]an tu kitut-ay taquq ya asu-cia ta Kalinku-an *That dog eats the small chicken in Hualien.*

Eat[subjfoc]-he obj small-adj chicken foc dog-that loc Hualien-loc

liuq ya qamasim *The sour orange is rotten.*

rotten foc sourorange

ti-pukun na sumis-cia tu taquq ya tunun *That child hits the chicken with a stick.*

Instfoc-Hit subj child-that obj chicken foc stick

qal-an na asu-ku ya rasung *My dog digs the well.*

Dig-objfoc subj dog-my foc well

Mng[em]il tu krisiw-cia ya tazungan ni *Does the girl like that money?*

Like[subjfoc] obj money-that foc girl Q

Rrasa-an-su ya rrutung-cia ni *Do you buy that monkey?*

Buy-objfoc-yo foc monkey-that Q

Tayta-an-na ya busarr-ay asu-ta *He sees our white dog.*

See-objfoc-he foc white-adj dog-our

busarr ya manay ta Taypak-an ni *Is the sand white in Taipei?*

White foc sand loc Taipei-loc Q

Ti-tayta-su tu kitut-ay damu ya mata-su *You see the small village with your eyes.*

Instfoc-see-you obj small-adj village foc eyes-your

Solutions

Am I small
kitut-iku ni
 small-I Q

Does our crab sleep in that box?
taquz ya tiapzangaw-ta ta tarreb-cia-an ni
 sleep foc crab-our loc box-that-loc Q

We dig the well with my knife
ti-qal-ta ta rasung ya sarriq-ku
 instfoc-dig-we obj well foc knife-my

His child sees that monkey in the well
t[em]ay-ta tu rrutung-cia ya sumis-na ta rasung-an
 sees[subjfoc]-he obj monkeyl-that foc child-his loc well-loc