

## Question A: Tidore word formation

- A1. (a) cold ..... (b) soguchi .....  
 (c) sogoliho ..... (d) to return / send back .....  
 (e) soakal ..... (f) sodorine .....  
 (g) sokai ..... (h) paka **or** baka .....  
 (i) to rise **or** an ascent/high ..... (j) joko .....

A2. Explain the word-formation rules seen here. Continue on the back page if necessary.

Prefix *so-* = causative

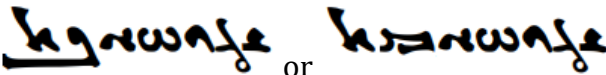

Change in initial letter of root depends on part of speech


root begins with	if noun/adjective	if verb
k	no change (1)	k → g (7)
g	no change (2)	
c		c → j (3)
d		no change (4)
p		p → b (5)
a		insert g (6)
t	no change (8)	

Or generalisation: initial consonant is voiced (or, if a vowel, a *g* is inserted) if the root is a verb; otherwise no change.

## Question B: Sogdian script

B1. (a) wēδpātī  .....

(b) nəγōšākt  or  .....

(c) əšya  .....

B2. Give the NUMBER of the correct word (do not copy the script)

(a) ..... 7 ..... (b) ..... 9 ..... (c) ..... 4 .....


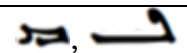
















B3. (a) tambār  .....

(b) xēpəθ  .....

**Explanation:**

The writing system is right to left

Symbols are as follows:

p	t	k	b	d	m	n	θ	δ	s	č
										
š	ž	x	γ	j	l	r		ā, ē, i, ī	a	w, o, u
										

Where no vowel is written, ə is implied

**Question C: Vloxes**

C1.

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

C2. ....womm.....-ish .....tezz.....

**Explanation**

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-in their legs are

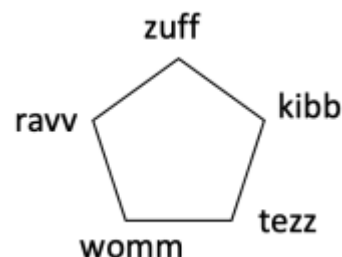
So, we can assume that the adjectives in the descriptions refer to these attributes

The unknown words in the puzzle with their meanings are as follows (with an explanation of how you know)

azeltorf	with shaded legs [1]
imxo	small [4]
kibb(ish)	stripe pointing towards head [2]
mellivu	large [4]
mellovu	having a horn [3]
qliqli	with white (unshaded) legs [1]
ravv	stripe pointing to tail [2]
tezz	stripe pointing to front leg [2]
womm	stripe pointing to back leg [2]
zuff(ish)	stripe pointing upwards [2]

[1] 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”, i.e. there’s just one of them.

[2] 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 neighbours by looking at the "ish" words. This gives us the following chain of neighbours (but we don't yet know which corresponds to which point): *womm – ravv – zuff – kibb – tezz*. Now, looking at the descriptions, there are three *ravv* vloxes, and two *kibb* vloxes. The only stripe direction represented 3 times is pointing toward the tail; and the only direction represented twice is pointing toward the head. 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 (as shown). What about the difference between (6) *kibbish-zuff* and (9) *zuffish-kibb*? Both mean 'pointing somewhere between the top and the head': based on the analogy of *greenish-yellow*, which is more yellow than green, (6) must be more *zuff* than *kibb*, and (9) vice versa.



[3] The encyclopedia entry footnote 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'.

[4] This leaves *imxo* and *mellivu* to refer to size. There are 2 small vloxes and 1 large vlox.

C2. The encyclopedia says that vloxes are born with completely unshaded legs (*qliqli*) and become less so (i.e. more shaded) as they age. So the youngest vlox is the one with the least-shaded legs. Its strip points towards its front foot (*tezz*), but slightly skewed towards its back foot (*womm*), so it would be described as *wommish-tezz*.

### Question D: Shapes and colours

**D1.**

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

D2. ... škayiw?a .....

**D3.**

- (a) slightly sour ..... (b) very sour ..... (c) reddish/pink .....

**D4.**

- (a) shape/texture ..... (b) colour ..... (c) taste.....  
 allow: (a) soft/yielding ..... (b) deep yellow..... (c) sweet.....

**Explanation:**

There are three consonant series: S = {s, š, ʃ}, T = {ts, tš, tʃ}, K = {k, q}.

There are also three vowel sets: A = {a}, I = {i, e}, U = {u, o}.

Ideophones fall into four categories:

- "Colours" have the form **C<sub>1</sub>(C) V<sub>1</sub>C<sub>1/2</sub>V<sub>2</sub>C<sub>2</sub>V<sub>2</sub>**.
  - Note C<sub>1</sub> must be in S or T, while C<sub>2</sub> must be in K.
  - V<sub>1</sub> and V<sub>2</sub> must be from the same vowel set.

- Moving C<sub>1</sub> up the series makes the colour paler.
- “Shapes” have the form C<sub>1</sub>(C) V<sub>1</sub>C<sub>2</sub>V<sub>1</sub> C<sub>1</sub> V<sub>1</sub>.
- “Sounds/motions” are one word repeated, which must contain at least one consonant from S, T or K.  
“Odours/flavours” can have any form, but must contain at least one consonant from S, T or K.
  - Words that differ only by consonants in the same series, and vowels in the same set have related meanings.
  - Typically, moving up the consonant series creates a “heavier” or “stronger” sensation.

## Question E: K’iche’

E1. (a) The cat isn’t in his house / There isn’t a cat in his house.....[2]

(b) He isn’t looking for their book..... [1]

(c) Your friend is very tall..... [1]

(d) Is my tree very pretty? ..... [1]

(e) I am making my food..... [1]

E1. (a) k’o utz rajtij..... [2]

(b) xatuwiye’j..... [2]

(c) la k’o le kaqnuwujpakiche’..... [2]

(d) naxinattijoj ta pa le atijob’al..... [2]

E3.

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

E4. Explain the rules of K’iche’ grammar as seen here. Continue on the back page if necessary.

Verb morphology: Tense – Object – Subject – Stem

Tense = Present *k-*, Past *x-*

	Subject/object marker	Possessive marker
1 sing. I	<i>-in-</i>	<i>nu-</i>
2 sing. you	<i>-at-</i>	<i>a(w)-</i>
3 sing. he	<i>-u-</i> (object $\emptyset$ )	<i>r-</i>
3 pl. they	<i>-ki-</i>	<i>k(i)-</i>

Negative sentences: *na...ta(j)* (*-j* added if sentence-final)

*k'o* (negative *maj*) can express position, existence or availability to the possessor (who is shown by the marker on the object possessed).

Vocabulary list:

<i>ajtij</i>	teacher	<i>tijoj</i>	teach
<i>aqan</i>	leg	<i>tzukuj</i>	look for
<i>awuj</i>	book	<i>wiye'j</i>	wait
<i>b'e</i>	road		
<i>che'</i>	tree	<i>je'l</i>	pretty
<i>kaqal</i>	rash	<i>kaq</i>	red
<i>me's</i>	cat	<i>nim</i>	big
<i>o'ch</i>	house	<i>nimaqan</i>	tall
<i>tijob'al</i>	school	<i>utz</i>	good
<i>wa</i>	food		
		<i>sib'alaj</i>	very
<i>achi'il</i>	have	<i>pa le</i>	there is
<i>b'an</i>	make	<i>le</i>	affirmative marker
<i>loq'</i>	buy	<i>la</i>	question marker

E3 explanation:

*q'aaq'al* = fever (fire + *al*; cf *kaqal* 'rash' = red + *al*)

*nimbe'* = highway (big + road)

*wa'ib'al* = cafeteria (food + place, cf *tijob'al* 'school' and *tijoj* 'teach')

*banob'al* = workshop (make + place)

*tijonem* = lesson (teach + ???)

*tzukunel* = hunter (look for + ???)