

**Problem #3.** Rules:

1.  $x$  [ʔ].
2. A noun and a following modifier are pronounced as one word, but at the end of the first word of the phrase [i] after a vowel is lost and in the beginning of the second word [ʔ] is lost.

*xisitai xagai* [ʔisitaɪ ʔagai] → [ʔisitaagai]

3. 1 syllable = CVV, CV or VV (C = consonant, V = vowel). The syllabification starts from the end of the word.

*xiaapisi* → [ʔiaapisi] → [ʔiaapi.si] → [ʔiaa.pi.si] → [ʔii.aa.pi.si]  
*hixi xitaixi* [hiʔi ʔitaiʔi] → [hiʔiitaiʔi] → ... → [hi.ʔii.tai.ʔi]

4. Syllable weight hierarchy: TVV > DVV > VV > TV > DV (T = voiceless consonant ([h, k, p, s, t, ʔ]), D = voiced consonant ([b, g])). The rightmost syllable of the heaviest type among the last three syllables of the word receives primary stress.

*giopai sabi* [giopaɪ ʔsabi] → [gio...pa.sa.bi] <sup>TV=TV>DV</sup> → [gio.pa.<sup>1</sup>sa.bi]

5. A phrase has a secondary stress if the last three syllables of the phrase don't contain any part of the first word. It is placed according to the same rules as the primary stress, but disregarding the last three syllables.

*giopai sabi* [giopaɪ ʔsabi] →  $\overbrace{[gio...pa.sa.bi]}^1 \overbrace{[sa.bi]}^2$  → [gio.pa.<sup>1</sup>sa.bi]  
*giopai xaibogi* [giopaɪ ʔaibogi] →  $\overbrace{[gio.pa...ai.bo.gi]}^1 \overbrace{[ai.bo.gi]}^2$  → [<sub>2</sub>gio.pa.<sup>1</sup>ai.bo.gi]

Answers:

<i>xaaibi</i>	ʔa. <sup>1</sup> ai.bi	thin
<i>xaapisi</i>	<sup>1</sup> ʔaa.pi.si	arm
<i>xitiixisi</i>	ʔi. <sup>1</sup> tii.ʔi.si	fish
<i>bigi</i>	bi. <sup>1</sup> gi	ground
<i>kagahoaogii</i>	ka.ga.ho.ao. <sup>1</sup> gii	papaya
<i>kaibai</i>	<sup>1</sup> kai.bai	monkey
<i>kapiigaiitoii</i>	ka.pii.ga.ii.to. <sup>1</sup> ii	pencil
<i>poogaihiaio toio</i>	poo.gai. <sup>1</sup> hia.to.io	old banana
<i>xabagi kapiorio</i>	<sub>2</sub> ʔa.ba.gi.ka.pio. <sup>1</sup> ʔio	another toucan
<i>xabagi xogiai</i>	ʔa.ba. <sup>1</sup> gio.gi.ai	big toucan