

Problem #3. Rules:

1. *x* [?].
 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 [?] is lost.
xisitai xagai [?isitai/ ?agai] → [?isitaagai]
 3. 1 syllable = CVV, CV or VV (C = consonant, V = vowel). The syllabification starts from the end of the word.

xiiiaapisi → [?iiapisi] → [?iiapi.si] → [?iiaa.pi.si] → [?ii.aa.pi.si]
hixi xitaixi [hi?i ?itai?i] → [hi?iitai?i] → ... → [hi.?ii.tai.?i]

4. Syllable weight hierarchy: TVV > DVV > VV > TV > DV (T = voiceless consonant ([h, k, p, s, t, ?]), 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 [giopai] $\underset{\text{TV}=\text{TV}>\text{DV}}{\text{sabi}}$ → [gio...pa.sa.bi] → [gio.pa.¹sa.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 [giopai] \backslash [sabi] \rightarrow [gio. . . pa . sa.bi] \rightarrow [gio.pa.¹sa.bi]
giopai xaibogi [giopai] \backslash [xaibogi] \rightarrow [gio.pa. . . ai.bo.gi] \rightarrow [2gio.pa.¹ai.bo.gi]

Answers:

<i>xaabi</i>	?a. ¹ ai.bi	thin
<i>xaapisi</i>	¹ ?aa.pi.si	arm
<i>xitiixisi</i>	?i. ¹ tii.?i.si	fish
<i>bigi</i>	bi. ¹ gi	ground
<i>kagahoaoogii</i>	ka.ga.ho.ao. ¹ gii	papaya
<i>kaibai</i>	¹ kai.bai	monkey
<i>kapiigaiitoii</i>	ka.pii.ga.ii.to. ¹ ii	pencil
<i>poogaihiai toio</i>	poo.gai. ¹ hia.to.io	old banana
<i>xabagi kapioxio</i>	² ?a.ba.gi.ka.pio. ¹ ?io	another toucan
<i>xabagi xogiai</i>	?a.ba. ¹ gio.gi.ai	big toucan