

SOME USEFUL TERMS FOR MATH AND SCIENCE

Some Useful Terms for Math and Science		
Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
'aa'shú' "over there" "toward over there" "on the other side"	'Aa'shú' dasidá. ['aa'.shú' da.si.dá] "He/she is sitting over there." "He/she is sitting on the other side."	['aa'.shú']  'aa' - "that, there" (demonstrative stem) -shí "from a place, at a place" (postposition enclitic) -gu "while, when, toward, instead" (subordinate enclitic) (-shí + -gu = -shú') dasidá [da.si.dá] "he/she is sitting up on" (3 <sup>rd</sup> person, si-perfective, neuter, intransitive verb) (da-...-dá "one animate being sits on") da- "on, up on" (verb prefix)
'áshánee' "at the front"		['á.shá.nee']  'ásháō- "at the first, at the front" - 'ee' "at a specific place where, there at a specific place" (postposition enclitic)
bì' iādī' ee' "at the middle of it"		[bi.'iā.dī.'ee']

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		bi- "him/her/it/them" (3 <sup>rd</sup> person pronoun object prefix) 'iādī- "in the center, in the middle" (postposition) (?) 'iā- "each other" (reciprocal pronoun object prefix) -'ee' "at a specific place where, there at a specific place" (postposition enclitic) Note: -nee' is an alternate pronunciation of -'ee' that some people use when this enclitic follows a nasal vowel.
biké'ee' (or) bikéee' "after him/her/it" "at the place after him/her/it"	Biké'ee' hnnin't'aa'sh. [bi.ké.'ee' hn.nin'.t'aa'sh] Note: [n'] is a low tone glottalized nasal consonant. Note: The verb stem vowel [aa] is "creaky" prior to [sh]. We mark "creakiness" by inserting a glottal stop ['] immediately following the vowel. "Let's <sup>2</sup> stand after him/her/it." (1 <sup>st</sup> person dual)	[bi.ké.'ee'] (or) [bi.kéee'] Note: In bikéee, the final [ee] is slightly stressed as though it were a separate syllable. bi- "him/her/it/them" (3 <sup>rd</sup> person pronoun object prefix) -kéé' (or) -ké "behind, after" (postposition stem) -'ee' "at a specific place where, there at a specific place" (postposition enclitic)

Some Useful Terms for Math and Science		
Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		<p>hnnin't'aa'sh</p> <p>[hn.nin'.t'aa'sh] "let's<sup>2</sup> stand up, we<sup>2</sup> are going to stand up" (1<sup>st</sup> person dual, imperfective mode, intransitive verb)</p>
<p>bikéyá</p> <p>(or)</p> <p>bikéshí</p> <p>"there behind him/her/it"</p> <p>"at the place after him/her/it"</p>	<p>Bikéyá dzút'i.</p> <p>[bi.ké.yá dzú.t'i]</p> <p>"You walk after him/her/it/them."</p> <p>Bikéyá nuu'āda.</p> <p>[bi.ké.yá nuu'ā.da]</p> <p>"We<sup>&gt;2</sup> are walking behind him/her/it/them."</p> <p>Bikéyá 'iāaaādiā.</p> <p>[bi.ké.yá 'iā.āaaā.diā]</p> <p>"You<sup>2</sup> walk behind him/her/it/them."</p>	<p>[bi.ké.yá]</p> <p>(or)</p> <p>[bi.ké.shí]</p> <p>bi- "him/her/it/them" (3<sup>rd</sup> person pronoun object prefix)</p> <p>-kéyá (or) -késhí "there after, there behind, in the place behind" (postposition stem plus enclitic)</p> <p>Note: *-kee'yá is unacceptable.</p> <p>-yá "at a place, at the place where, at that place" (postposition enclitic)</p>
<p>dáāeshíná</p> <p>"just at that one place"</p>	<p>Dáāeshíná dahit'ee'.</p> <p>[dá.āe.shí.ná da.hi.t'ee']</p> <p>"He/she is dancing in just that one place."</p>	<p>[dá.āe.shí.né]</p> <p>dá-...-ná "only that" (clitic; a combination of a proclitic and an enclitic)</p> <p>dá- "only, just" (proclitic)</p> <p>-ná "only, emphatically, especially" (enclitic)</p>

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		<p>āé- "one" is a combining form of āee' or āe'.</p>
<p>dāāeshú'</p> <p>"just from that one side"</p>	<p>dāāeshú' níkee' yé'édì</p> <p>[dā.āé.shú' ní.kee' yé.'é.dì]</p> <p>"You do not have a shoe on one side."</p>	<p>[dā.āé.shú']</p> <p>dá-...-ná "only that" (clitic; a combination of a proclitic and an enclitic)</p> <p>dá- "only, just" (proclitic)</p> <p>-ná "only, emphatically, especially" (enclitic)</p> <p>āé- "one" is a combining form of āee' or āe'.</p> <p>-shí "from a place, at a place" (postposition enclitic)</p> <p>-gu "while, when, toward, instead" (subordinate enclitic)</p>
<p>dá'íátsé</p> <p>"just the first"</p> <p>"at the first"</p>		<p>[dā.'íá.tsé]</p> <p>dá- "only, just" (proclitic)</p> <p>'íátsé ['íá.tsé] "first" (particle)</p>
<p>dá'íátsé'ee'</p> <p>"at the first place"</p> <p>"just at the first place"</p>		<p>[dā.'íá.tsé.'ee']</p> <p>dá- "only, just" (proclitic)</p> <p>'íátsé ['íá.tsé] "first" (particle)</p> <p>-'ee' "at a specific place where, there at a specific place" (postposition enclitic)</p>

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
<p>dá'íátsé-shí</p> <p>"from the beginning"</p> <p>"from the first"</p>	<p>Dá'íátsé-shí 'át'é.</p> <p>[dá.'íá.tsé.shí 'á.t'é]</p> <p>"He/she/it was so from the beginning."</p>	<p>[dá.'íá.tsé.shí]</p> <p>dá- "only, just" (proclitic)</p> <p>'íátsé ['íá.tsé] "first" (particle)</p> <p>-shí "from a place, at a place" (postposition enclitic)</p> <p>'át'é ['á.t'é] "he/she/it is so" (3<sup>rd</sup> person, imperfective mode, neuter, intransitive verb) ('á-ni-...-t'é "to be so, thus")</p> <p>'á- "thus, so"</p>
<p>dák'asá</p> <p>"almost"</p> <p>"very close"</p> <p>"so close"</p>	<p>Dák'asá dee'táish.</p> <p>[dá.k'a.sá dee'.táish]</p> <p>"He/she almost fell."</p> <p>Dák'asá daidúúái.</p> <p>[dá.k'a.sá dai.dúú.ái]</p> <p>"He/she almost burned it."</p>	<p>[dá.k'a.sá]</p> <p>(particle)</p> <p>dee'táish [dee'.táish] "he/she fell" (3<sup>rd</sup> person, si-perfective mode, intransitive verb)</p> <p>Note: Compare to:</p> <p>détáish [dé.táish] "I fell" (1<sup>st</sup> person singular, si-perfective mode, intransitive verb)</p> <p>daidúúái [dai.dúú.ái] "he/she burned all of it" (3<sup>rd</sup> person, hi-perfective mode, transitive verb)</p>
<p>dásí</p>		<p>[dá.sí]</p>

Some Useful Terms for Math and Science		
Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
"exactly" "very" "extremely" "just"		(particle or proclitic)
dásí 'ásháō-'ee' "in the very first place"	Dásí 'ásháō-'ee' hnníōdá. [dá.sí 'á.sháō.'ee' hn.níō.dá] "You stand at the very front place."	[dá.sí 'á.sháō.'ee']  dásí "exactly, very, extremely, just" (particle or proclitic) 'ásháō- "at the first, at the front" -'ee' "at a specific place where, there at a specific place" (postposition enclitic) hnníōdá [hn.níō.dá] "you stand up" (2nd person singular, imperfective mode, intransitive verb) Note: People also say nníōdá [n.níō.dá]. Note: -dá is a verb stem that refers to the movement of one animate being.
dásí 'iké'ee' (or) dásí 'ikéee' "the very last place" "at the very last place"	Dásí 'iké'ee' naahee'ghá. ['i.ké.'ee' naa.hee'.ghá] Note: The long vowel [ee] is "creaky" during the last half of its pronunciation.	[dá.sí 'i.ké.'ee'] (or) [dá.sí 'i.kéee']  dásí "exactly, very, extremely, just" (particle or proclitic)

Some Useful Terms for Math and Science		
Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
	"He/she/it is standing at the last place."	'i- (indefinite pronoun object prefix) -kéé' (or) -ké "behind, after" (postposition stem) - 'ee' "at a specific place where, there at a specific place" (postposition enclitic) naahee'ghá [naa.hee'.ghá] "he/she is standing" (3 <sup>rd</sup> person, si-perfective mode, intransitive verb) Note: The long vowel [ee] is "creaky" during the last half of its pronunciation.
dásí 'ikéyá "the very last place" "at the very last place"	Dásí 'ikéyá naahee'ghá. [dá.sí 'i.ké.yá naa.hee'.ghá] "He/she/it is standing at the last place."	[dá.sí 'i.ké.yá] dásí "exactly, very, extremely, just" (particle or proclitic) 'i- (indefinite pronoun object prefix) -kéé' (or) -ké "behind, after" (postposition stem) -yá "at a place, at the place where, at that place" (postposition enclitic) naahee'ghá [naa.hee'.ghá] "he/she is standing" (3 <sup>rd</sup> person,

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		si-perfective mode, intransitive verb) Note: The long vowel [ee] is "creaky" during the last half of its pronunciation.
'iādī'ee' (or) 'iādīnee' "middle" "at the middle" "at the center"	Shá-'í 'iādī'ee' dasi'â. [shá.'í 'iā.dī.'ee' da.si.'â] "The sun is in the middle." "noon" "midday" 'iādī'ee' dasidá. ['iā.dī.'ee' da.si.dá] "He/she is sitting in the middle."	['iā.dī.'ee'] (or) ['iā.dī.nee'] 'iādī- "in the center, in the middle" (postposition) (?) 'iā- "each other" (reciprocal pronoun object prefix) -'ee' "at a specific place where, there at a specific place" (postposition enclitic) Note: -nee' is an alternate pronunciation of -'ee' used when this enclitic follows a nasal vowel. dasi'â [da.si.'â] "a solid or round object lies up on" (a three-dimensional object) (3 <sup>rd</sup> person, si-perfective, neuter, intransitive verb) dasidá [da.si.dá] "he/she is sitting up on" (3 <sup>rd</sup> person, si-perfective, neuter, intransitive

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		verb) (da-...-dá "one animate being sits on") da- "on, up on" (verb prefix)
'iādīshí "half" "middle" "in the middle"	'iādīshí 'iāá'ìì'. ['iā.dī.shí 'i.āá.'ìì'] "You tear it in half."	['iā.dī.shí] 'iādī- "in the center, in the middle" (postposition) (?) 'iā- "each other" (reciprocal pronoun object prefix) -shí "from a place, at a place" (postposition enclitic)
'íātsé'ee' "first" "at the first place"	'íātsé'ee' hnhaagāā. ['íā.tsé.'ee' hn.haa.gāā] "He/she usually stands in the first place." "He/she is standing in the first place."	['íā.tsé.'ee'] 'íātsé ['íā.tsé] "first" (particle) -'ee' "at a specific place where, there at a specific place" (postposition enclitic) hnhaagāā [hn.haa.gāā] "he/she usually stands, he/she stands" (3 <sup>rd</sup> person, progressive or usitative mode, intransitive verb) Note: Compare to: 'aká hnhaagāā ['a.ká hn.haa.gāā] "he/she usually

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		stands over there, he/she stands over there"
<p>'íátsé-shí</p> <p>"at the beginning"</p>	<p>'Íátsé-shí hnníōdá.</p> <p>[ 'íá.tsé.shí hn.níō.dá]</p> <p>"You stand up at the beginning place."</p>	<p>[ 'íá.tsé.shí]</p> <p>'íátsé [ 'íá.tsé] "the first, the beginning, first" (particle)</p> <p>-shí "from a place, at a place" (postposition enclitic)</p> <p>hnníōdá [hn.níō.dá] "you stand up" (2nd person singular, imperfective mode, intransitive verb)</p> <p>Note: People also say nníōdá [n.níō.dá].</p> <p>Note: -dá is a verb stem that refers to the movement of one animate being.</p>
<p>'ibàà'ee'</p> <p>"at the edge"</p> <p>"at a place on the edge"</p>	<p>'Ibàà'ee' dasidá.</p> <p>[ 'i.bàà.'ee' da.si.dá]</p> <p>"He/she is sitting at the edge."</p>	<p>[ 'i.bàà.'ee']</p> <p>'í- (3i indefinite pronoun object prefix)</p> <p>-bàà' "at the edge of" (postposition stem)</p> <p>-'ee' "at a specific place where, there at a specific place" (postposition enclitic)</p>

Some Useful Terms for Math and Science		
Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		<p>dasidá [da.si.dá] "he/she is sitting up on" (3<sup>rd</sup> person, si-perfective, neuter, intransitive verb) (da-...-dá "one animate being sits on")</p> <p>da- "on, up on" (verb prefix)</p>
<p>dánáábikéshí</p> <p>"the one after that one"</p> <p>"the next one"</p>	<p>Dánáábikéshí hutas.</p> <p>[dá.náá.bi.ké.shí hu.tas]</p> <p>"He/she/it is running behind him/her/it.</p>	<p>[dá.náá.bi.ké.shí]</p> <p>dá- "just"</p> <p>náá- "again" (prefix)</p> <p>bi- "him/her/it/them" (3<sup>rd</sup> person pronoun object prefix)</p> <p>-ké- "behind, after" (postposition stem)</p> <p>-shí "from a place, at a place" (postposition enclitic)</p> <p>hutas [hu.tas] "he/she/it is running" (3<sup>rd</sup> person, imperfective mode, intransitive verb)</p>
<p>nú'wushú'</p> <p>"on the other side"</p> <p>"on that side"</p>	<p>Nú'wushú' dasidá.</p> <p>[nú'.wu.shú' da.si.dá]</p> <p>"He/she is standing on the other side."</p> <p>"He/she is sitting on that side."</p> <p>"He/she is sitting over there on that side."</p>	<p>[nú'.wu.shú']</p> <p>nú'wushú' [nú'.wu.shú'] "on that side, over there on that side, away on that side"</p> <p>(demonstrative)</p>

Some Useful Terms for Math and Science		
Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		<p>nú'wu- "away, over there" (demonstrative stem)</p> <p>shí- "from a place, at a place" (postposition enclitic)</p> <p>-gu "while, when, toward, instead" (subordinate enclitic)</p> <p>dasidá [da.si.dá] "he/she sits up on" (3<sup>rd</sup> person, si-perfective mode, neuter, intransitive verb) (da-...-dá "one animate being sits on")</p> <p>da- "on, up on" (verb prefix)</p>
<p>Xaa'dí-ná 'an'da?</p> <p>"Which one is farther?"</p> <p>Note: A person might say this when looking at a map with someone. A person might also say this when two known or identified places are the topic of a conversation.</p>		<p>[xaa'.dí.ná 'an'.da]</p> <p>Note: [n'] is a low tone glottalized nasal consonant.</p> <p>xaa'dí-ná [xaa'.dí.ná] "which one only" (interrogative or indefinite pronoun)</p> <p>xaa'dí [xaa'.dí] "which one" (interrogative or indefinite pronoun)</p> <p>xaa'd- "which" (demonstrative stem)</p> <p>-í (or) -'í "the, the one that" (definite, topic, or relative enclitic) (This enclitic can change a verb into a noun.)</p>

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		<p>Note: Using words such as xaa'dí normally requires that the speaker and hearer both can identify the objects, people, or places being discussed.</p> <p>-ná "only, emphatically, especially" (emphatic enclitic)</p> <p>'an'da ['an'.da] "he/she/it is distant, far" (3<sup>rd</sup> person, imperfective mode, neuter, intransitive verb) (See Hoijer 'aanda "it is distant, far" (3<sup>rd</sup> person of 'aa-ni-...-nda "to be far away")</p>
<p>Xaa'dí-ná 'éguu'xáiné?</p> <p>"Which one is closer?"</p> <p>Note: A person might say this when looking at a map with someone. A person might also say this when two known or identified places are the topic of a conversation.</p>		<p>[xaa'.dí.ná 'é.guu'.xáí.né]</p> <p>Note: The long vowel [uu] is "creaky" during the last half of its pronunciation.</p> <p>Note: Some people seem to pronounce the verb stem as [háiné].</p> <p>xaa'dí [xaa'dí] "which one" (interrogative or indefinite pronoun)</p> <p>xaa'd- "which" (demonstrative stem)</p>

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		<p>-í (or) -'í "the, the one that" (definite, topic, or relative enclitic) (This enclitic can change a verb into a noun.)                      Note: Using words such as xaa'dí-ná normally requires that the speaker and hearer both can identify the objects, people, or places being discussed.</p> <p>-ná "only, emphatically, especially" (emphatic enclitic)                      'éguu'xáiné ['é.guu'.xáí.né] "a space or place is close, nearby, in the vicinity" (3s person, imperfective mode, intransitive verb)                      gu- (3s person pronoun deictic subject prefix)                      Note: 'éguu'xáiné seems to be one of the few verb with a two-syllable verb stem [xáí.né].</p>
<p>Xa'yá-ná 'an'da?                      "Which place is farther?"</p> <p>Note: A person might say this when looking at a map with someone. A person might also say this when two known or</p>		<p>[xa'.yá.ná 'an'.da]</p> <p>Note: [n'] is a low tone glottalized nasal consonant.</p> <p>xa' - "where" (interrogative stem)</p>

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
<p>identified places are the topic of a conversation.</p>		<p>-yá "at a place, at the place where, at that place" (postposition enclitic) Note: Using words such as xaa'yá-ná normally requires that the speaker and hearer both can identify the objects, people, or places being discussed. -ná "only, emphatically, especially" (emphatic enclitic) 'an'da ['an'.da] "he/she/it is distant, far" (3<sup>rd</sup> person, imperfective mode, neuter, intransitive verb) (See Hoijer 'aanda "it is distant, far" (3<sup>rd</sup> person of 'aa-ni-...-nda "to be far away")</p>
<p>Xa'yá-ná du 'an'da-da? "Which place is not far away?" "Which place is not that far away?"  Note: A person might say this when looking at a map with someone. A person might also say this when two known or identified places are the topic of a conversation.</p>		<p>[xa'.yá.ná du.'an'.da.da]  xa'- "where" (interrogative stem) -yá "at a place, at the place where, at that place" (postposition enclitic) Note: Using words such as xaa'yá-ná normally requires that the speaker and hearer both</p>

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		<p>can identify the objects, people, or places being discussed.</p> <p>-ná "only, emphatically, especially" (emphatic enclitic)</p> <p>du-...-da (or) duu-...-da "no, not, negative" (clitic)</p> <p>'an'da ['an'.da] "he/she/it is distant, far" (3<sup>rd</sup> person, imperfective mode, neuter, intransitive verb) (See Hoijer 'aanda "it is distant, far" (3<sup>rd</sup> person of 'aa-ni-...-ndah "to be far away")</p>
<p>Xa'yá-ná 'éguu'xáíné?</p> <p>"Which place is closer?"</p> <p>Note: A person might say this when looking at a map with someone. A person might also say this when two known or identified places are the topic of a conversation.</p>		<p>[xa'.yá.ná 'é.guu'.xáí.né]</p> <p>Note: The long vowel [uu] is "creaky" during the last half of its pronunciation.</p> <p>xa' - "where" (interrogative stem)</p> <p>-yá "at a place, at the place where, at that place" (postposition enclitic)</p> <p>Note: Using words such as xaa'yá-ná normally requires that the speaker and hearer both can identify the objects, people, or places being discussed.</p>

Some Useful Terms for Math and Science

Words or Phrases	Example Sentences	Pronunciations, Analyses, and Notes
		<p>-ná "only, emphatically, especially" (emphatic enclitic)</p> <p>'éguu'xáíné ['é.guu'.xái.né] "a space or place is close, nearby, in the vicinity" (3s person, imperfective mode, intransitive verb)</p> <p>gu- (3s person pronoun deictic subject prefix)</p> <p>Note: 'éguu'xáíné ['é.guu'.xái.né] seems to be one of the few verbs with a two-syllable verb stem [xái.né].</p>