

**TSI NIHOTIIO'TENHSERÓ:TEN NE
RATINONIÓN:NIS**



PARENTS AND TEACHERS,

All children love to play and explore the world in different ways. They invent bulldozers with their boots in the snow, or create bubbles by splashing through puddles. They also design solutions to problems by finding a way to climb up on a counter to nab a cookie! Children can be very imaginative and innovative when presented with a challenge!



**aboriginal access
to engineering**

These qualities – imagination, creativity, inventiveness, problem-solving and design skills – are all hallmarks of budding engineers.

Canada's engineering profession needs more young people to build solutions for the future, and Aboriginal communities have the youngest population in the country. Canada's Aboriginal communities also need the skills that an engineering education can provide. Whether the need is for a cleaner environment, new homes, better communications infrastructure or more efficient heating systems, Aboriginal engineers will make important contributions to community development.

We invite you to use this book as a first step in introducing children to What Engineers Do. The Engineering and You, Design Challenge and Experiment sections are intended to let you explore engineering concepts in an immediate, hands-on way in order to bring this book to life and have children recognize their relationship to engineering.

Many of the pages feature activities that can also be found as interactive games on our website, aboriginalaccess.ca. Other resources are also available on our website, such as curriculum guides, learning modules and role model profiles of practicing Aboriginal engineers. You may also keep up to date on developments in science, technology, engineering and math education for Aboriginal peoples through our mailing list and the social media networks that are linked on the site.

We hope you enjoy discovering along with your children what engineers do!

TSI NIHOTIIO'TENHSERÓ:TEN NE RATINONIÓN:NIS



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aboriginalaccess.ca

Ne kwah tiotierenhtáhkwen 2002 siihserá:tehkwe wahati'nikonhraièn:tahte Tsi Nihotii'tenhseró:ten ne Ratinonión:nis ne thé:non ahatinonión:ni. Ki tsi Kanien'kéha kahiá:ton, ne ne Faculty of Engineering tánon Applied Science, Queen's University thonatká:wen.

Tsi kahiá:ton: Dawn Wiseman, Jerilyn Horn, Corrine Mount Pleasant-Jette, Melanie Howard.

Tsi iotia'tó:ron karáhston ne ísi' nón karáhston Peggy Collins ne 'eh.

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Saterièn:tare' kenh oh nihotiió'tenhseró:ten ne Ratinonión:nis?

Ki ne Ratinonión:nis ionkhihnekahseronnién:nis ne tewahnekihrhá:tha. Tsi ionterihwaienhstahkhwaniónhkhwa ratinonión:nis tánon ratinónhstats nonkwá:wen kahrhakonhkowá:shon. Ok ó:ni shatiwerahserón:nis ne teiowerá'tson, ratihahonniánions tánon ronnó'kwats tsi nahó:ten iónion nohóntsakon. Nia'té:kon tsi nihontiéhrrha nahonwatirí:wa'se nonkwehó:kon tánon tsi kanataké:ron.

Entá:'on tsi enhsatatia'takéhnha nasahkwíson nahsatéweienhste ne Ratinonión:nis ahsá:ton. Karí:wes ó:ni enhsaterí:waienhste. Ok sanonhtonnión:ko, to niion'wé:sen ne muskox ahsheiatéweienhste, taní' ahsenonhkwa'tsherón:ni, taní' tsi ioròn:röte áhserahste. E'tho ki' nihotiió'tenhseró:ten ne Ratinonión:nis.

Iáh se' wáhi tesaterièn:tarahkwe!

Nia'té:kon se' ne ón:kwe iáh teiakoterièn:tare tsi nonkwá ne Ratinonión:nis. Ne aorí:wa tsi wa'akwathiatonhserísa ki kahiatónhsera. Aiá:wen's aetson'wéskwen naesewató:kenhse
Tsi Nihotiió'tenhseró:ten ne Ratinonión:ni.

Ki ne kahrhaké:ron ratinonión:nis ne ronwatihshnié:nons ne kahrhakonhkó:wa tsi iorontó:ton tánon ne Kahrhakón:ha kontírio.

Enhskwé:ni' kenh ahshehshnié:non ki ratinonión:ni s aontesewáhshete to nikón:ti ne kahrhakón:ha kontírio.



**Wa'kheiahshete ____
nikón:ti kontírio**



Ki ratinonión:nis ratinonhsón:nis tsi non ne ón:kwe tsi ie'terón:ton,
tsi non nihotií'otens, tánon tsi nonnihontswá:tha.

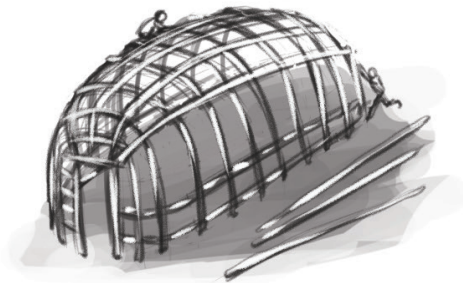
Skahkwèn:taren tsi níká:ien Nonkwehón:we rotinonwíson ne
raotinonhsa'shón:'a



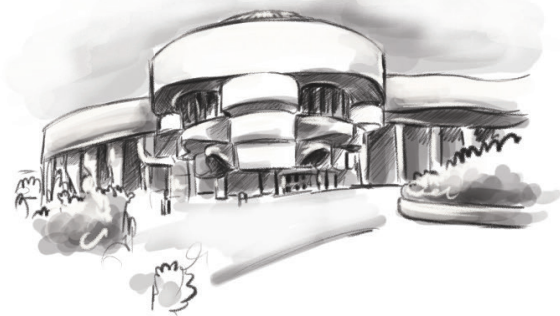
Kaneniaríhton Pueblo



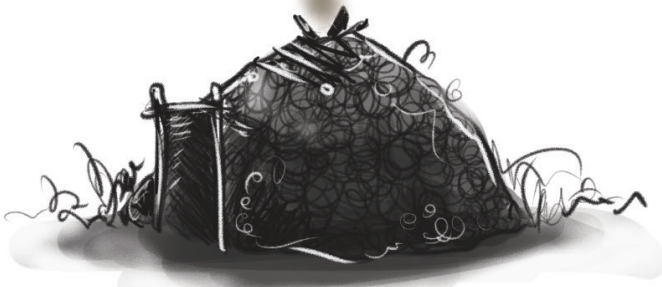
A'tóhsera



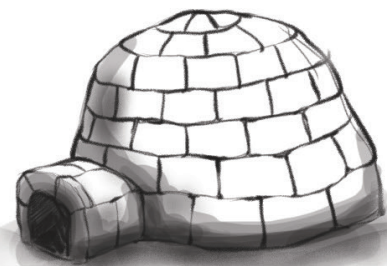
Kanónhses



Canadian Museum of History



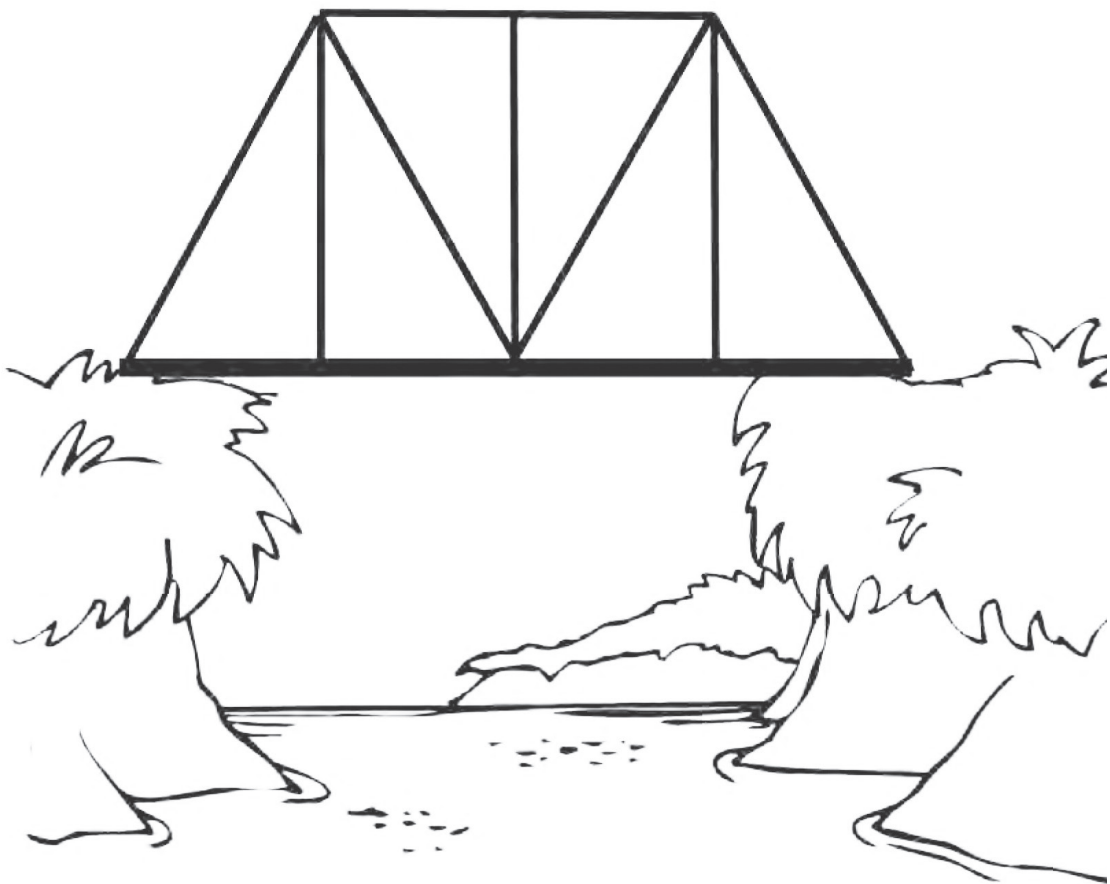
Tewa'kèn:raton Kanónhsa



Kawisonniá:ton kanónhsa

Kaieron'ta'shátste ne áhsen nikaióhsake. Áhsen niió:ien ne aktóntie. Ki ne Civil ratiónió:nis áhsen nikahióhsake róntstha nahonhskón:ni. 9 ne áhsen nikahióhsake niió:ien ki áhskwa. Enhskwé:ni kenh ne akwé:kon ahsetshén:ri?

Nia'tewahsóhkwake í:satst tsi seieron'táhsehr ne skátshon ne áhsen nikahióhsake.



Ó:nen ki' saterièn:tare tsi áhsen nikahióhsake
rónststha nahonhskón:ni ne Civil ratinonión:nis.

Enhskwé:ni' kenh ahsahskón:ni ne ne aón:ton ki ká:sere
tahanientarí:ia'ke?



Naval ratinonió:n:nis ratihonió:n:ni. Ne ne kén:'en Sithatinakere'ón:we
 Nonkwehón:we Thonatierénhton nahatihonió:n:ni ne oná:ke.
 Tsi non nikahiatonhkwarónnion sáhsohwh ne tahsheiatén:rohst ne
 ohiatónhkwa ohsóhkwa ne ahsetshèn:ri ne oná:ke .



- 1 = arihwa'konhnéha
- 2 = oròn:ia
- 3 = kahòn:tsi
- 4 = athèhsa
- 5 = otiarèn:ta
- 6 = onekwèn:tara
- 7 = óhonte
- 8 = otsí:nekwahr

Mechanical ratió:nis ne' ne ka'sere'shón:'a. Tóka sí:ken
mechanical ratió:nis ni nahshia'to'ténhake, oh nika'serehtó:ten
ahsenión:ni?

Entà:ke íserahst



Ne ratinonió:n:nis rontenonhsón:ni ne teionaktanetarion
akakétskwenke.

Sáhsowh tsi nahó:ten róntstha ne ratinonhsakétskwas.



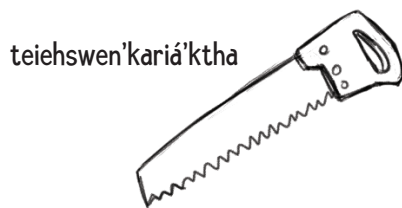
o'no:wa



kanón:ware



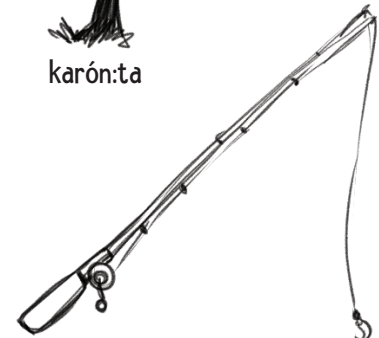
karón:ta



teihswen'kariá'ktha



teietarákhwa



lonhrio'kawinehstákhwa



skawí:sa ohiákeri



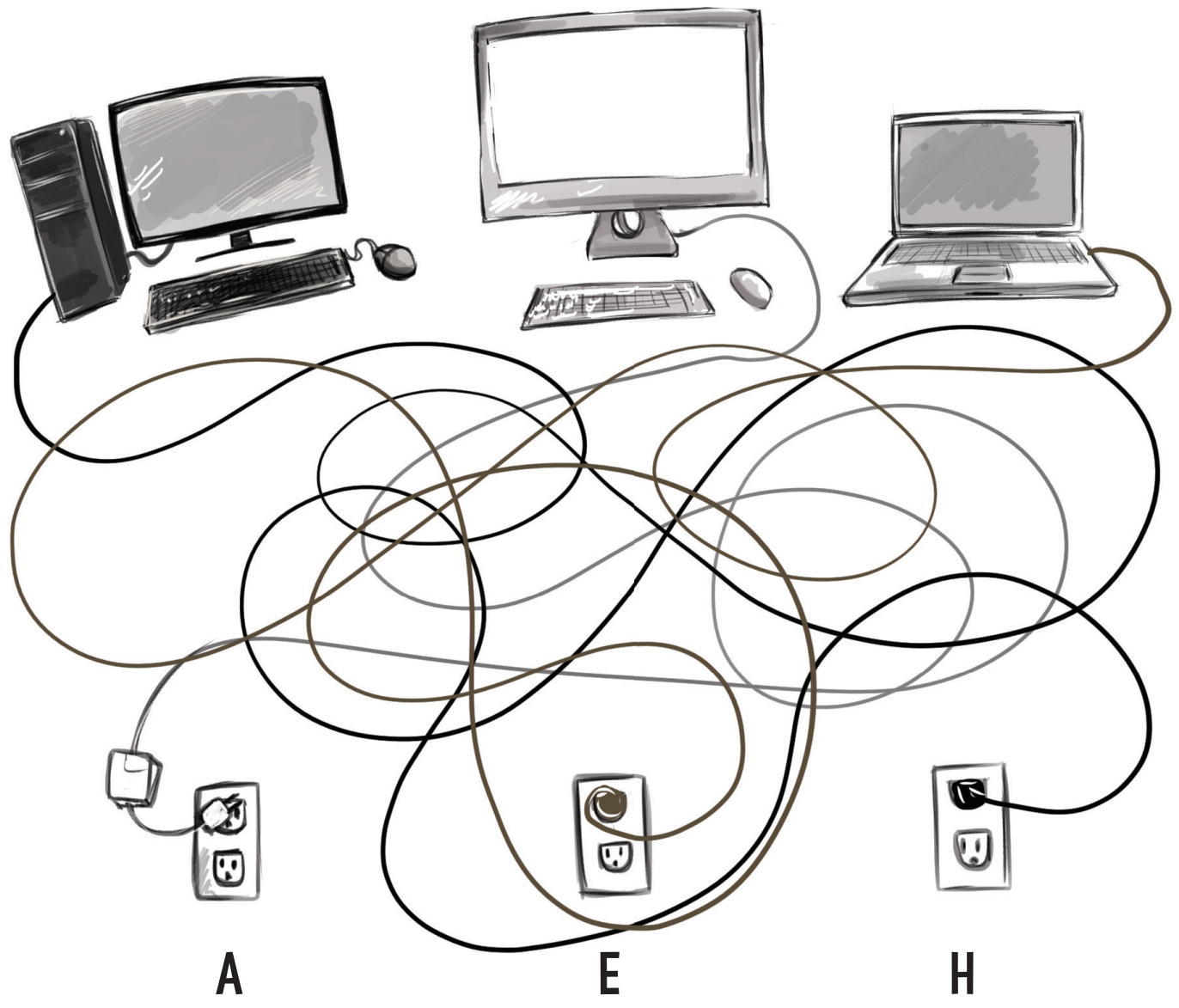
lene'konhréhsta



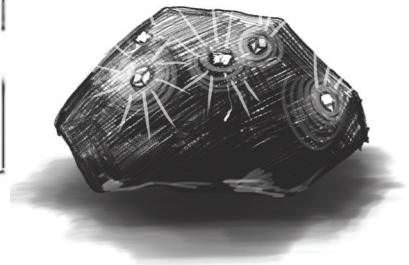
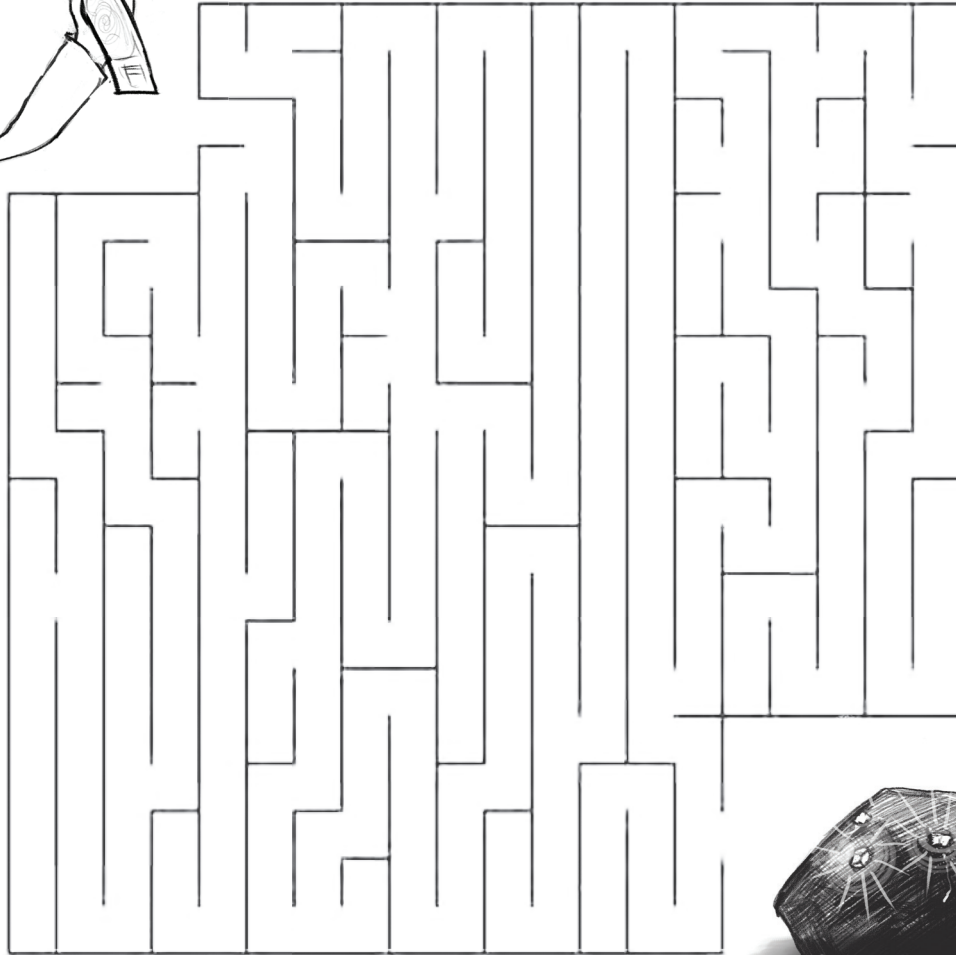
sewahió:wane

Ne waterihwaterweien:tons ratinonion:nis ronnonha
konionnién:nis naioio'ten ne waterihwaterweien:tons. Enhskwé:ni'
kenh nahsheio'ténhste ki waterihwaterweien:tons karónnion?

Ki skátshon tsi karonwaraténion íhtshehr naesató:kenhse
ka'niká:ien ne waterihwatrewewien:tons aó:wen. Tsi non tkaráhstha
ne waterihwaterweien:tons nón:we shiá:ton ne kawennón:nis.

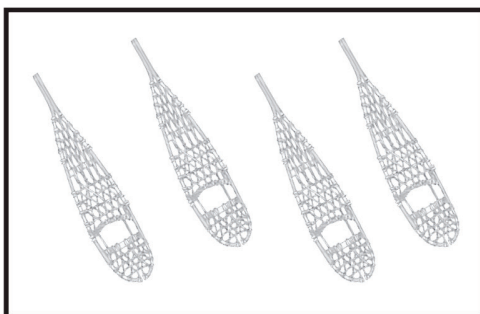
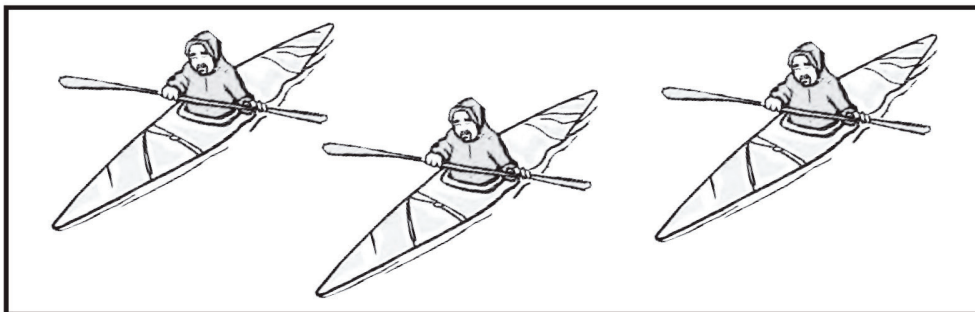
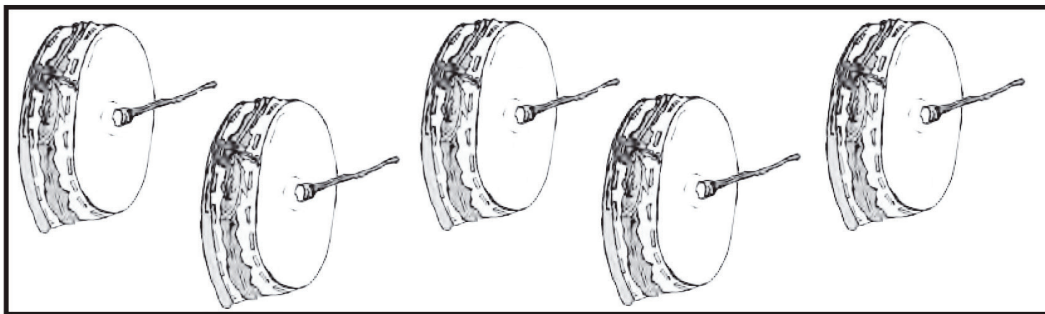
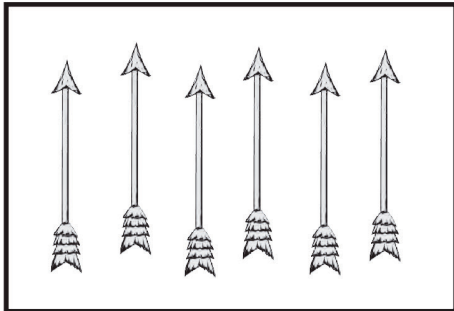


Ki ne ronnonhontsó'kwats ratinonión:nis ne ronnéhsaks ne karistatsi'shón:'a tánon ne nia'teioticsistóhkwake. Enhskwén:ni' kenh ahtshnié:non ki ronhontsó'kwats ranonión:nis ne iowí:sakenht otsístóhkwa ahatshén:ri?



Akwé:kon ki nahó:ten karónnion ne ne tsi nonkwá ne
ratinonión:nis aorihwá:ke.

Ki ne ska'nerohkwátshon tsi ní:kon watárion shá:tenhst
tsi tahsheiatén:rohst naotihiatónhkwa.



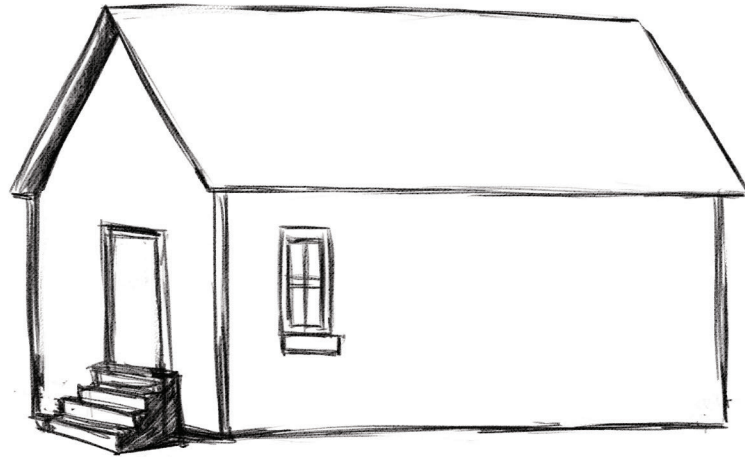
3

6

4

5

Ki wakenhnhá:te tsi non nihsaterihwaiénhstha wahotiió'ten ne
ratinonión:nis. Enhswké:ni kenh nahsetshén:ri 6 niiorí:wake tsi ní:kon
teshotiténion tánon skahkwén:taren?



Tsi niohtón:ne



Tsi nón:wa ní:ioht

Tsi tiehiatónhkwa ne sa'nisténha tsi ratinonión:is iakonatahrón:ne ne
 tsatate'kén:a 7 niiorí:wake e'tho saiako'nikónhrhen.
 Ehtà:ke karónnion tsi naho'tén:shon wa'ako'nikónhrhen.
 Enhské:ni' kenh tsi tiehiatónhkwa ne sa'nisténha
 nón:we ahsetshennrión:ko?



Anon:warore



Akonhsaiehshon



Ohiakeri o'nerohkwa



Katsikhe'tohare



Wate'nientenhstha



Kanennio'kohare

Ohkwa:ri Kaia'ton:ni



Ki ne ratinonión:nis tsi nonkwá ne katshenen'ó:kon tánon ne sa'oié:ra thatíhahs ne raotiweientehtáhtshera.

Ónhka ki wa'akón:ni?

Saterièn:tare kenh nahó:ten ki iena'tonhkhwa?



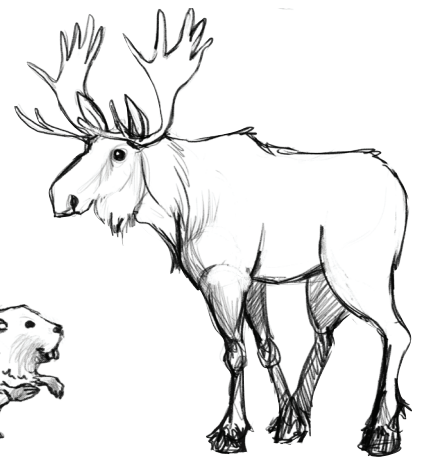
Tawí:ne



Ohá:kwaron't



Tsaní:to



Ska'niónhsa

Tsi ki' ní:ioht ne tsań:to ki ratinión:nis ratinià:tonhs.
Ronatiohkwá:nen ne ratinión:nis rotiió'tens ne ahatinià:ton.



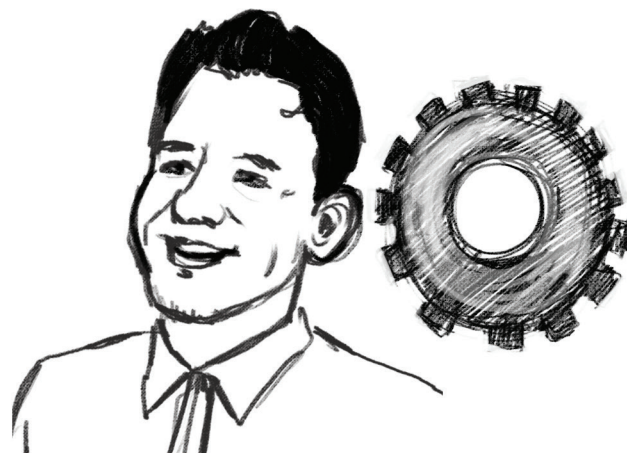
AONKWE'TÀ:KE ROTIIÓ'TENS



RONTENENIATKÈN:SE



KEN'TONHKWARÀ:KEN



WATENONTSISTAHTENTIÁ:THA

Tsi Kanià:ton ión:nis ne ken'tonhkwarà:ken

Ka'niká:ien ne ranonión:nis raienawá:se naioió'ten?

Ákta tsi non thotiió'tens shehsèn:naren



Enwá:ton tsi non nihsenákere enhotiíó'ten ne
ratinonión:nis. Oh nikaio'tenhseró:ten tóka'
ranonión:nis enhsá:ton? Kenh non satatià:tatrahst



Ne ki ietshiihohetstén:ni tsi kahiatonhseríson ne
“Tsi Nihotiió'tenhseró:ten ne Ratinonión:nis”:
Ne ki ne wa'onkhiié:nawa'se:

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