

EZHCHIGEWAAD BOOTAAGANIGEWININIWAG



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!

EZHCHIGEWAAAD BOOTAAGANIGEWINIWAG



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Ezhchigewaad Bootaaganigewininwag gii-mzinchigaade miinwaa gii-zhichigaade 2002 gii-nsa-bboongak. Maanda dash Ojibwebiigaadeg mzinigan Faculty of Engineering and Applied Science, Queen's University dashtoonawaa.

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Kii-gkendaanaawaa na ezhchigewaad ge'ek Bootaaganigewininwag?

Bootaaganigewininwag zhichigewag nibi wii-nishing
wii-mnakweying naanh. Gkinoomaagegamgoon
dashtonaawaa waa-zhinaagwak, miinwaa
daangwaamnaanaa'aa mtigwaakiin. Waanag ge
biitonaawaa, miiknan dashtonaawaan miinwaa
biiwaabkokaanan nindowaankaadaanaawaan. Nonj gegoo
waa-zhi-naadmowaawaad bemaadzinjin miinwaa oodenaan
zhichigewag Bootaaganigewininwag.

Wii-aawing bootaaganigewinini, aabdeg kwii-gchinokii
kinoomaagegamgoong. Aabdeg gbeyiing kwiikinoomaagwaz.
Mkwendan ge-piichi nishingiba wiindagkenmind
ow mshkode-bzhike gchi-giiwednong eyaad,
wii-mshkikiikeng, maa ge wii-kinwaajbiimong waasnooden.

Zhichigewag go ge'ii wi Bootaaganigewininwag. Gaawiin
megwaach kii-gkendziinaawaadig wil!
Baatiinad gegoo gegkendzigwaa bemaadzijig enakiiwaad
ge'ek Bootaaganigewininwag. Mii maanda mzinigan
gaanji-zhibiimaang. Begish naa bshigendmeg ndagkendmeg
ezhchigewaad ge'ek Bootaaganigewininwag.

Waakaa'igani-Bootaagnigewininiwag mzinbii'aanaawaan
bemaadzijig waa-daawaad, waa-nji-nokiiwaad miinwaa
waa-njidamnowaad.

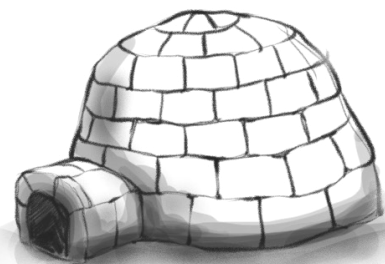
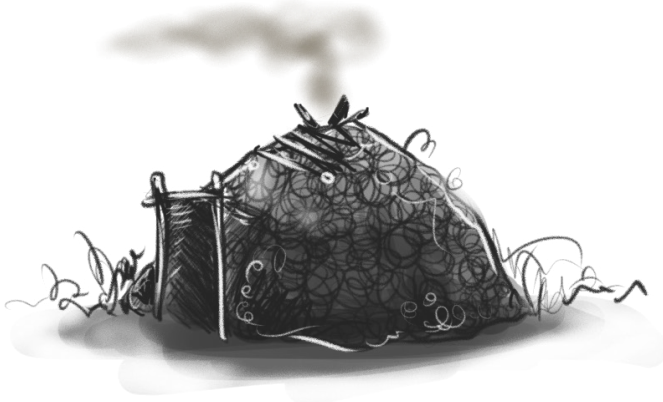
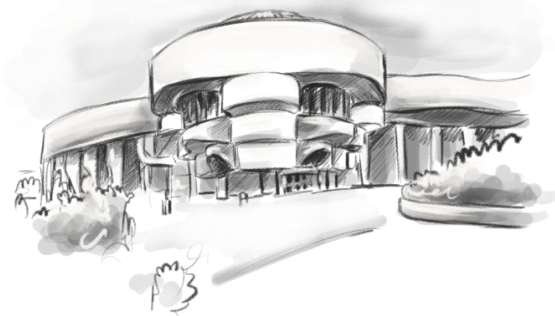
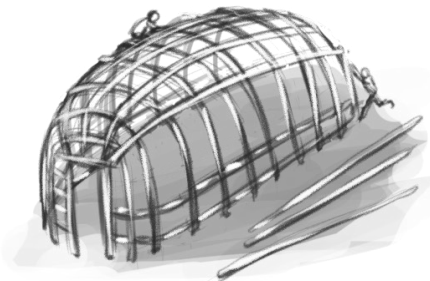
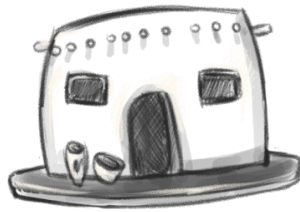
Gaawtaabiiyan waakaa'iganan Anishnaabeg gaamzinbiingig.



_____ wesiinyig
ngii-gimaak.

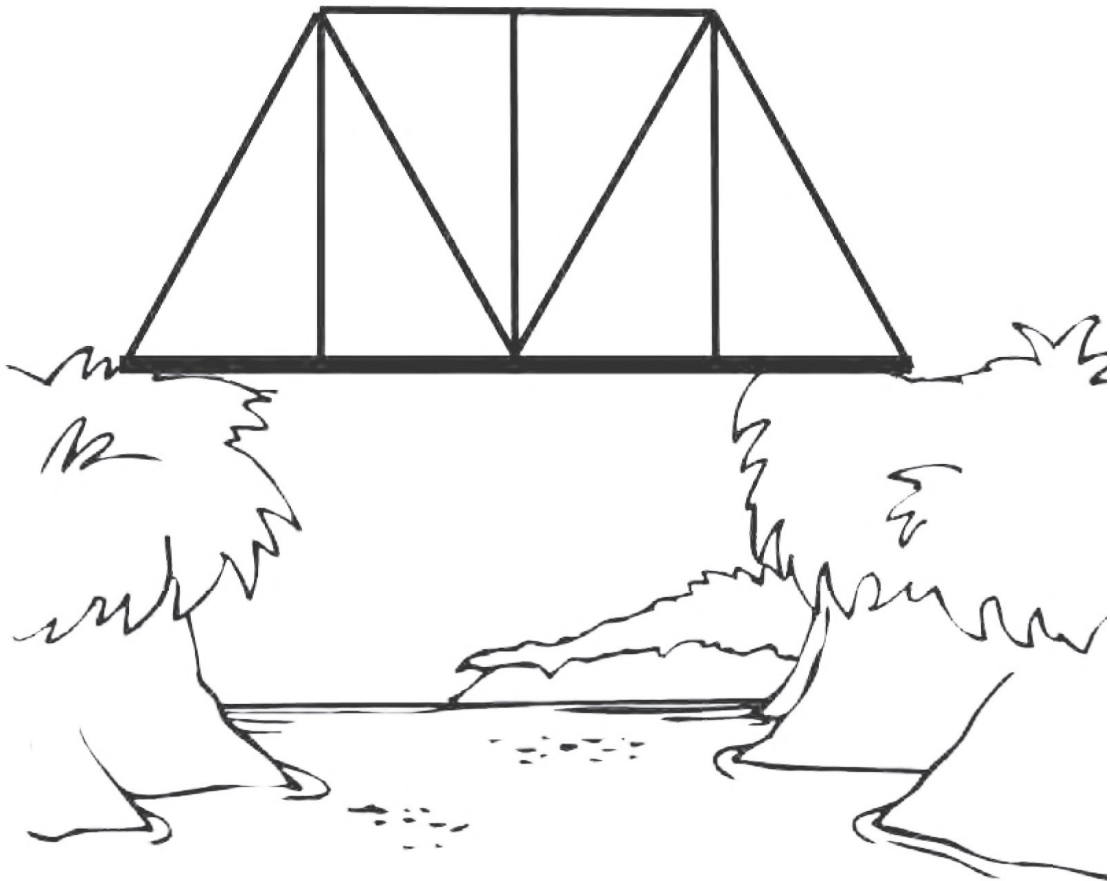
Waakaa'igani-Bootaagnigewininiwag mzinbii'aanaawaan
bemaadzijig waa-daawaad, waa-nji-nokiiwaad miinwaa
waa-nji-damnowaad.

Gaawtaabiiyan waakaa'iganan Anishnaabeg gaa-mzinbiingig.



Nesoojii'aag aapji zoongan ezhjii'aag. Nsing zhi shawe'iinon.
Naakmichige-Bootaaganigewininiwag dashtoonawaan aazhiganan
nesoojii'aagin tegin. Zhaangswi nesoojii'aagin tenoon manpii
aazhiganing. Gdaa-mkaanan na kina?

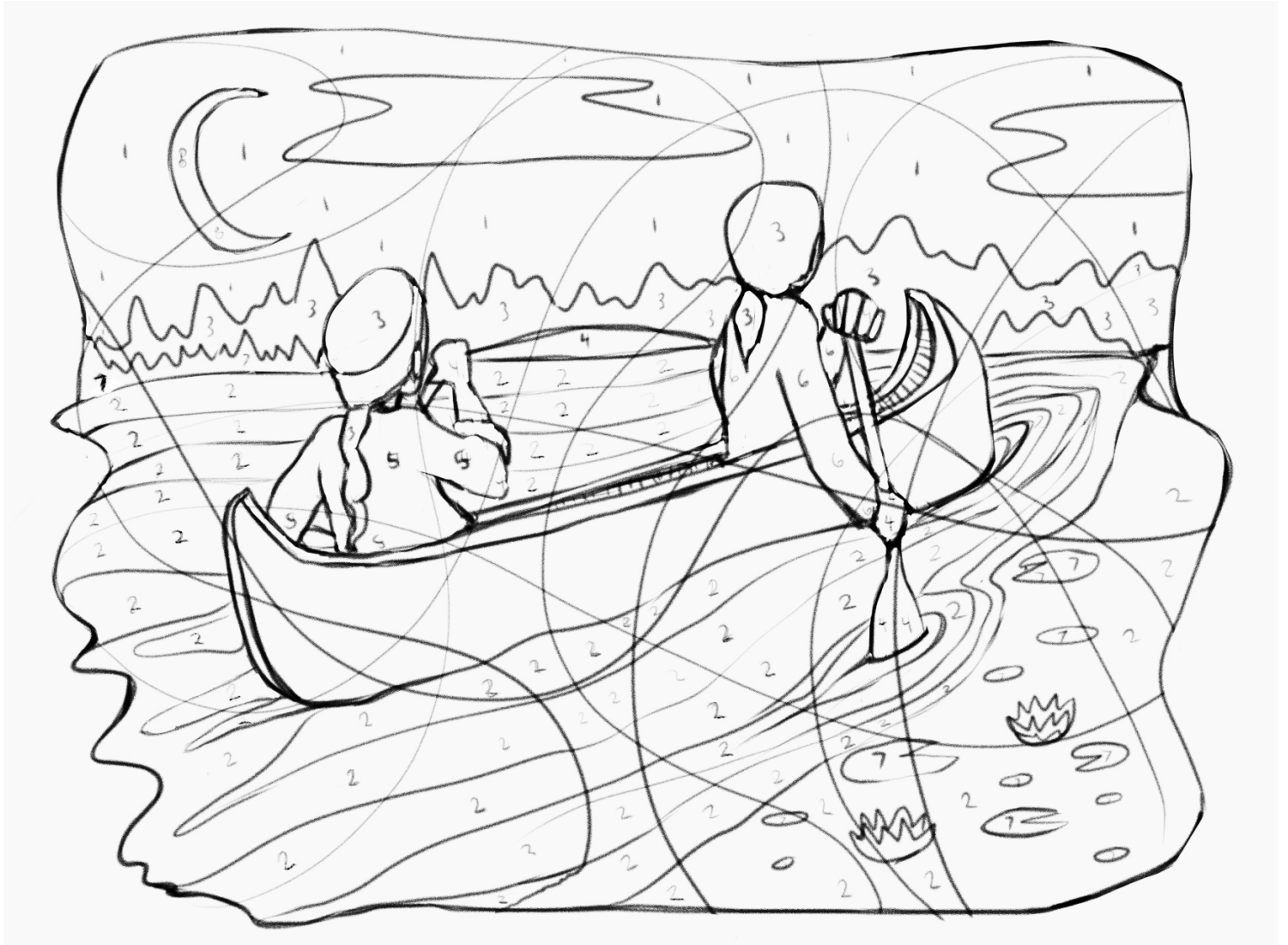
Gaawtaabiiyan nesoojii'aag, bebemkaan enaandeg tiskan
ka-nakaazan.



Gi-gii-gkenaan sa Naakmichige- Bootaaganigewiniwag
nakaazwaad nesoojii'aag wii-zhitoowaad aazhiganan.
Gdaa-zhitoon na aazhigan daabaan wii-tkambizad aazhiganing?



Jiimaani-Bootaaganigewiniwag dashtonaawaan jiimaan.
Anishnaabeg ntam gii-zhitoonaawaan jiimaan.
Bashaakbii'an e-gindaasoobiigaadeg, naasaab enaandeg,
wii-mkaman jiimaan.



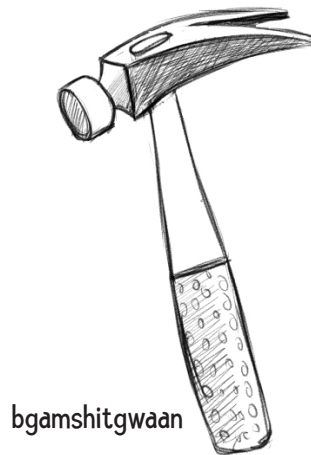
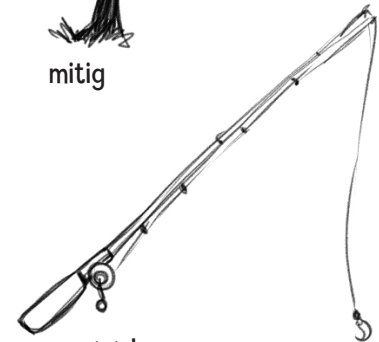
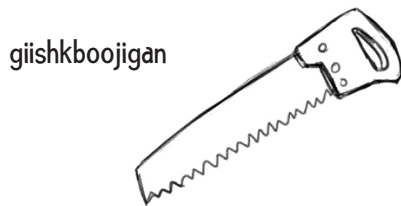
- 1 = miinaande
- 2 = zhaawshkwaa
- 3 = makidewaa
- 4 = akii'aande
- 5 = kwasmaanaande
- 6 = mishkwa
- 7 = zhaawshkwaa
- 8 = ozaawaa

Biiwaabko-Bootaaganigewininiwag dashtoonawaan nonj gegoo
biiwaabkoon, waa'aach go daabaanan. Giishpin aawyamba Biiwaab-
ko-Bootaaganigewinini, wenesh danoowa daabaan ge-zhiwdaba?

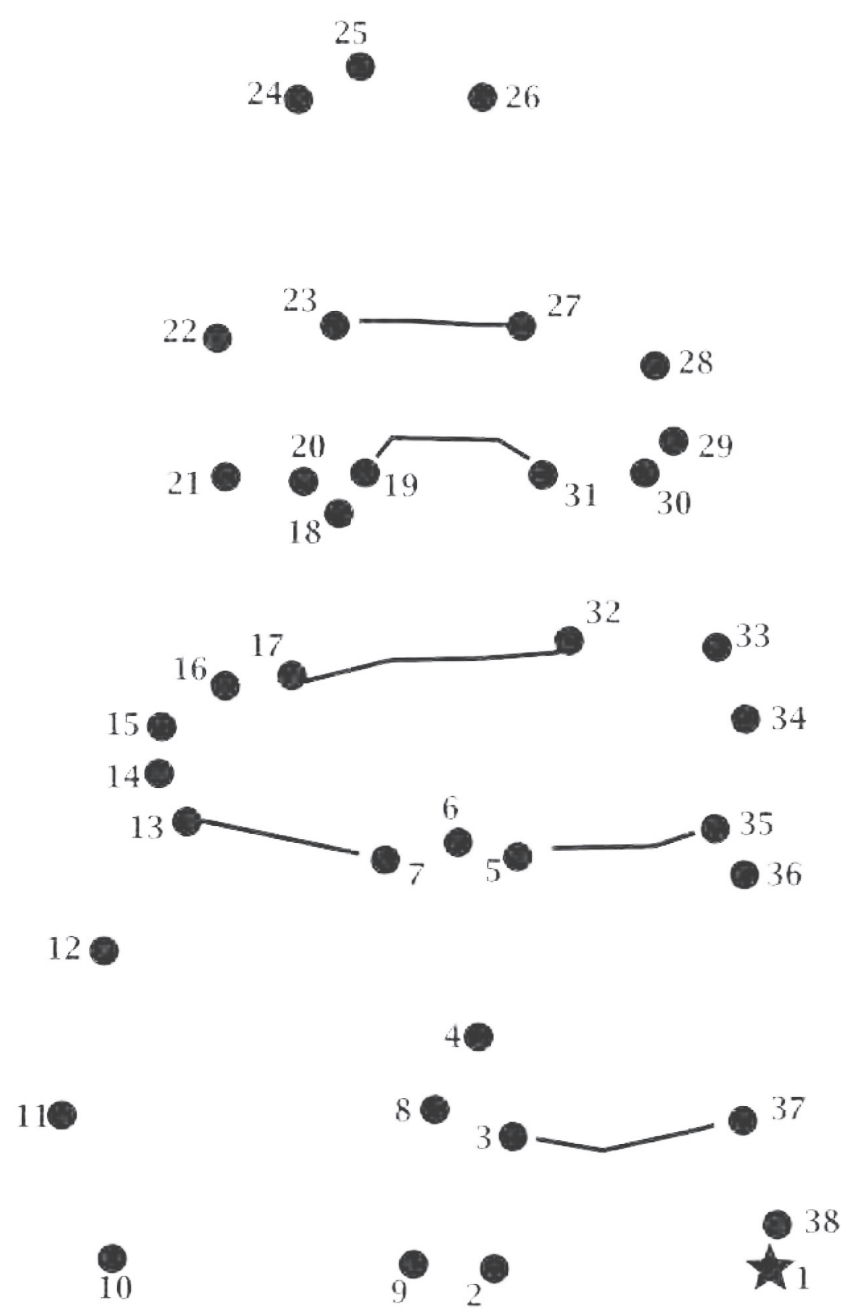
Mzinbii'aw dbazhiish.



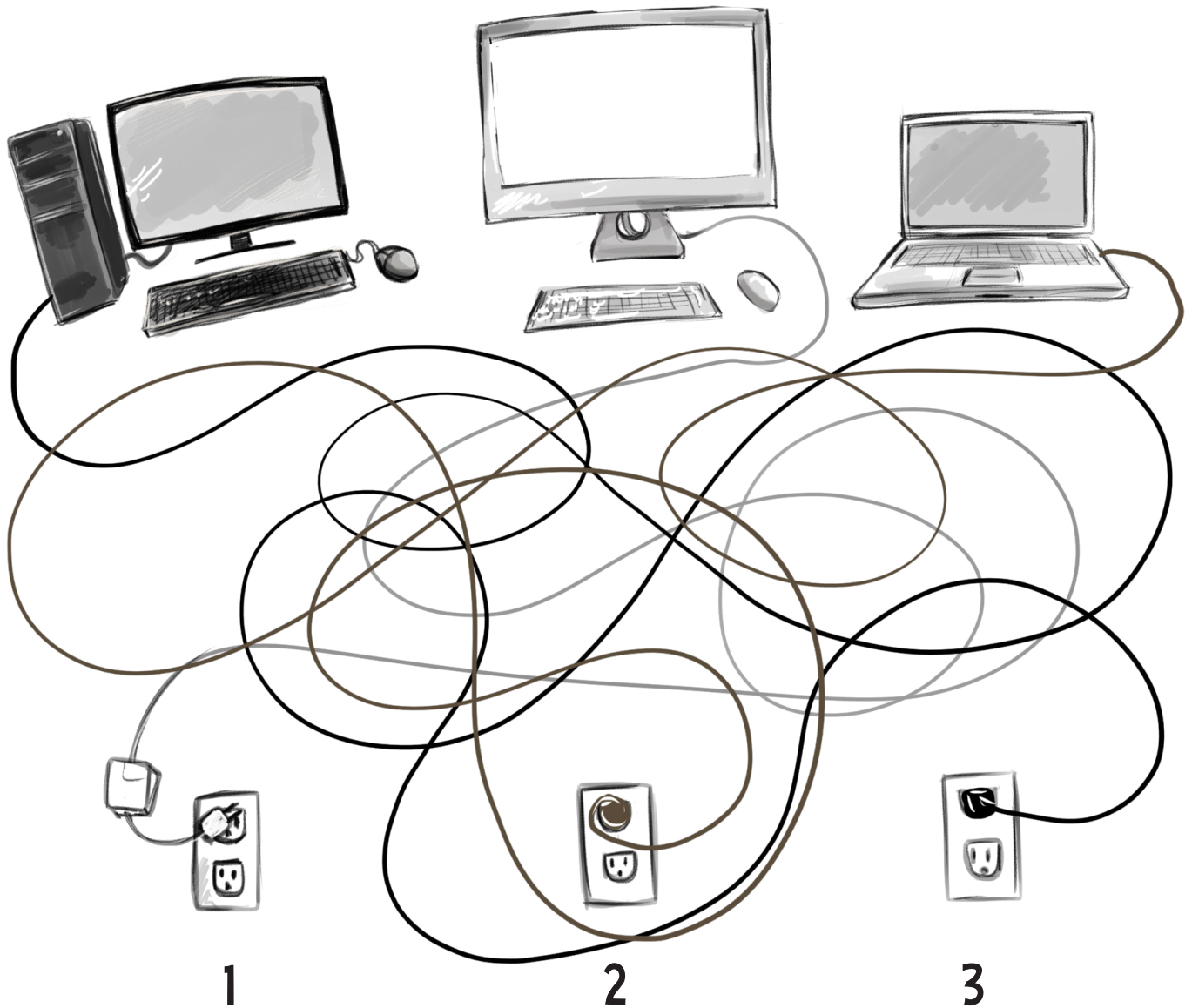
Naakmichige-Bootaaganigewininiwag dashtoonawaan waakaa'ig-anan. Tisan ne'en enkaazang wii-zhitoong naakmichgan.



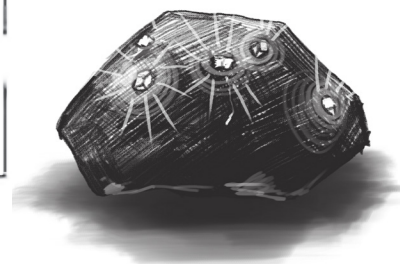
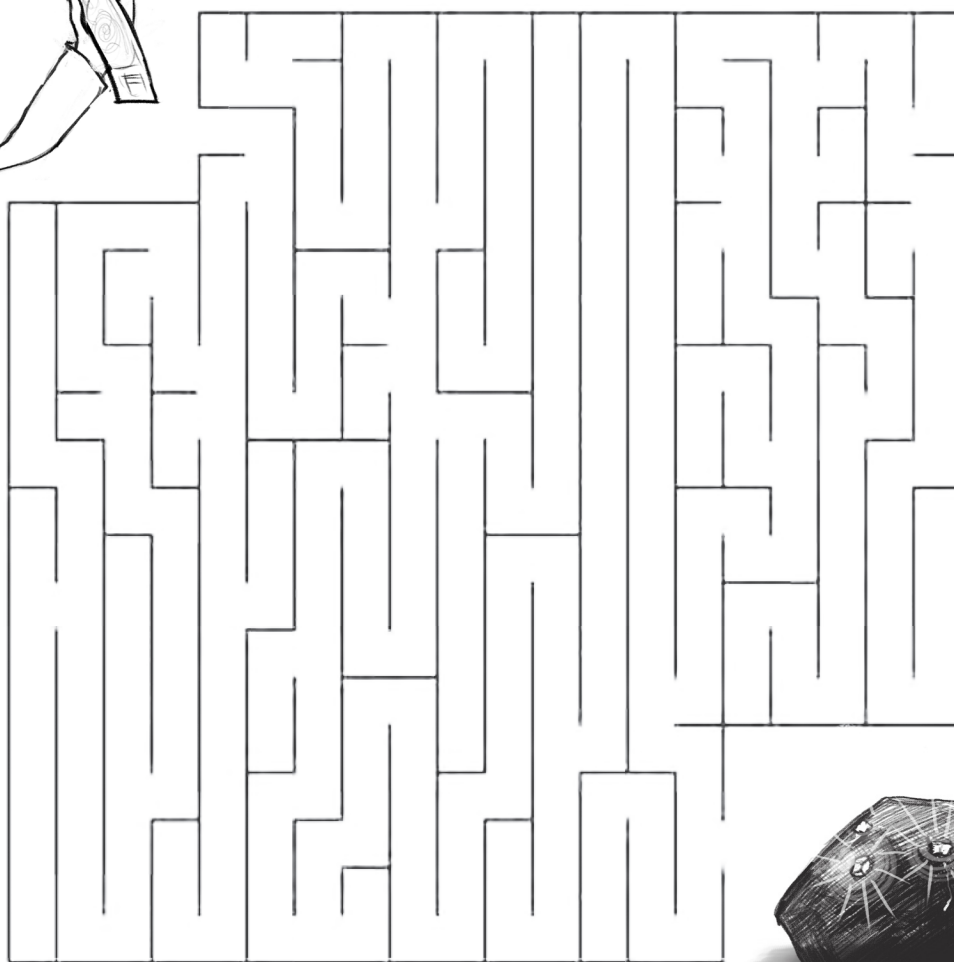
Aazhoodaabii-Bootaaganigewiniwag bemaadzinjin naadmowaa'aaan wii-dgoshnanid nonj ngoji. Giiwedining, inukshuk-ezhnikaangazjig naadgondoong nakaazam wii-kinwaajchigaadeg miiknan. Kinwaachtoonaawaa dedewaapii. Zgibibiiw waawyebiigaansag wii-waabmad inukshuk ezhnikaazad.



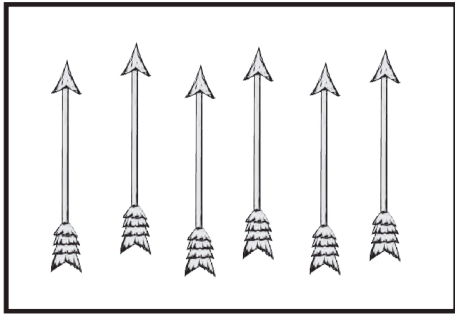
Waasmowni-mkakoonsi-Bootaaganigewiniwag gagishkitoonaawaan
wii-nokiimgak waasmowni-mkakoon. Gdaa-naadmaage na
wii-nokiimgak nonda waasmowni-mkakoon? Kinwaajbii'an
biiwaabkoons wii-mkaman waa-nji-skaabiignaman
waasmowni-mkakoons. Zhibiiw gindaasobiigan kinwaajbiigaadeg
waasmowni-mkakoons.



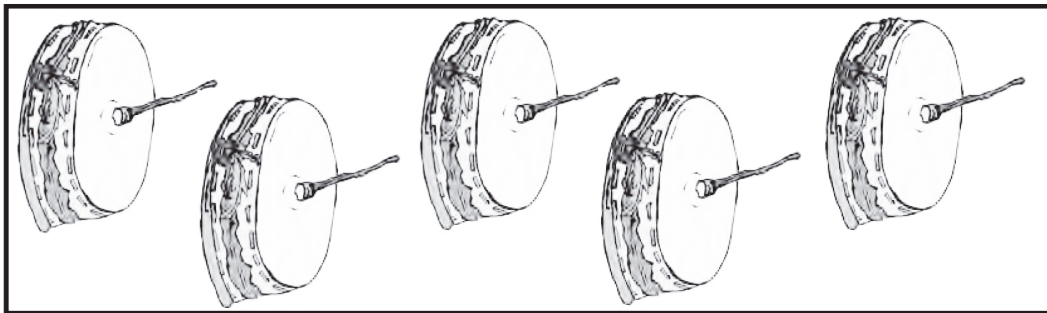
Moonyaani- Bootaaganigewiniwag nindowaamdaanaawaan
nbagaapkoonsan miinwaa gzhiiwaaskomensan. Gdaa-naadmowaa
na Moonyaani-Bootaagnigenini wii-mkowaad gechi-piitangiznid
gzhiiwaaskomnensan?



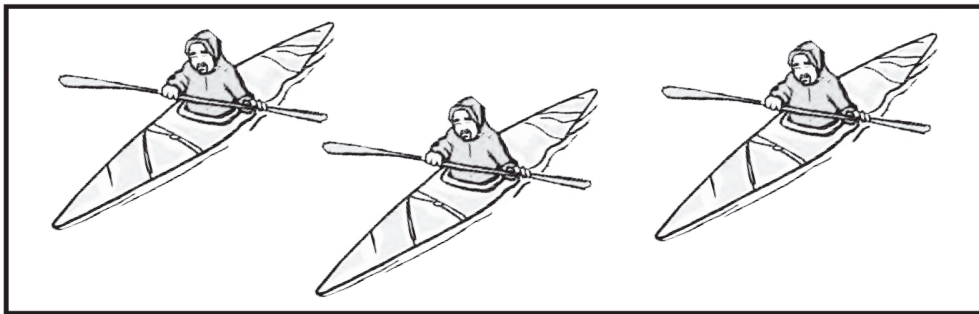
Kina go nonda zhinoomaagemgadoon Bootaaganige-nokiiwin.
Mzinbiiyan gwe'ekbiigaans mkakoonsing piish mnik etegin maamwi.



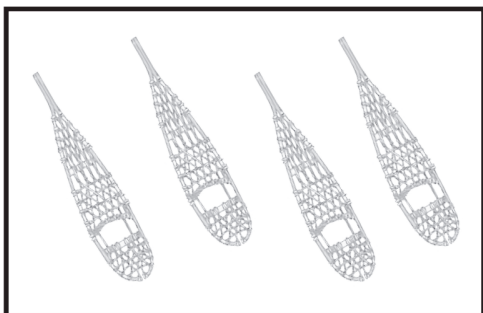
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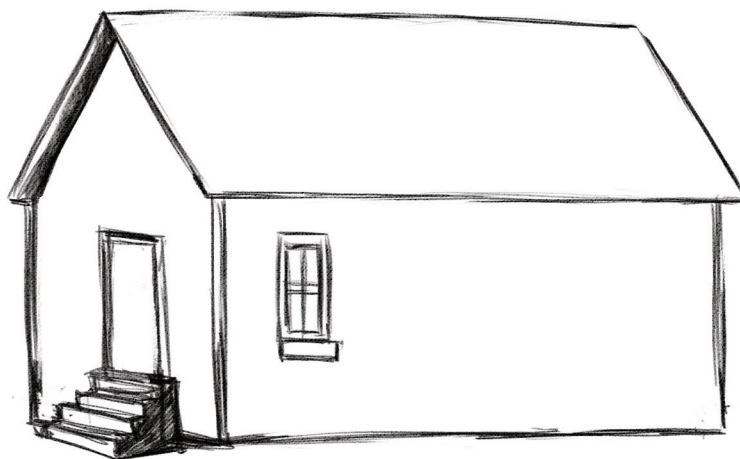
4



5

E-piichi-niibing, Bootaaganigewininiwag gii-nokiitaanaawaa en-
ji-kiinomaagziyin.

Gdaa-mkaanan na ngodwaaswi mnik gaa-aanjchigaadegin?
Waawyebiiyan.



JIBWAA



ISHKWAA

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?



- | | | | |
|---|---|---|---|
|  |  |  |  |
| Wiikwaan | Gchi-nendmowdengwe | Zhiawaaboomkakoons | Nooskwaadiziisbaakdoons |
|  |  |  | |
| Dibizhiganaatig | Mkomii-zhiwaaboo | Damnowaagni-mkoons | |

Bootaaganigewiniwag daknoomaagowaan wesiinyan miinwaa inaadiziwining.

Wenesh gaa-zhitood maanda naakmichgan?
Kigii-gkendaan na ezhnikaadeg?



Nigig



ashagi



amik



mooz

Bootaaganigewiniwag naakmisdoonaawaan gibaakwa`iganan,
naasaab amik.

Niibna Bootaaganigewiniwag nokiiwag gibaakwa`iganing.



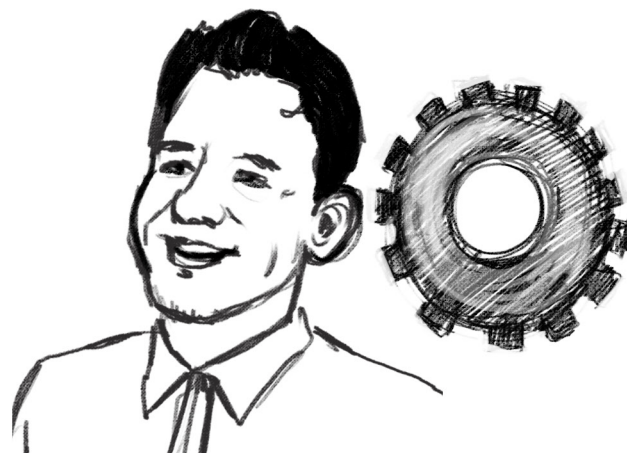
NAAKMICHIGE



ENKAMIGAAG



WAASMOWNI

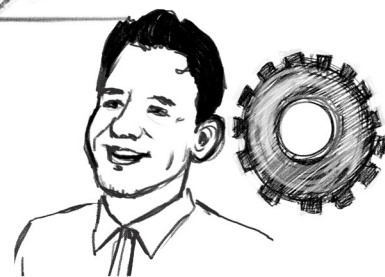
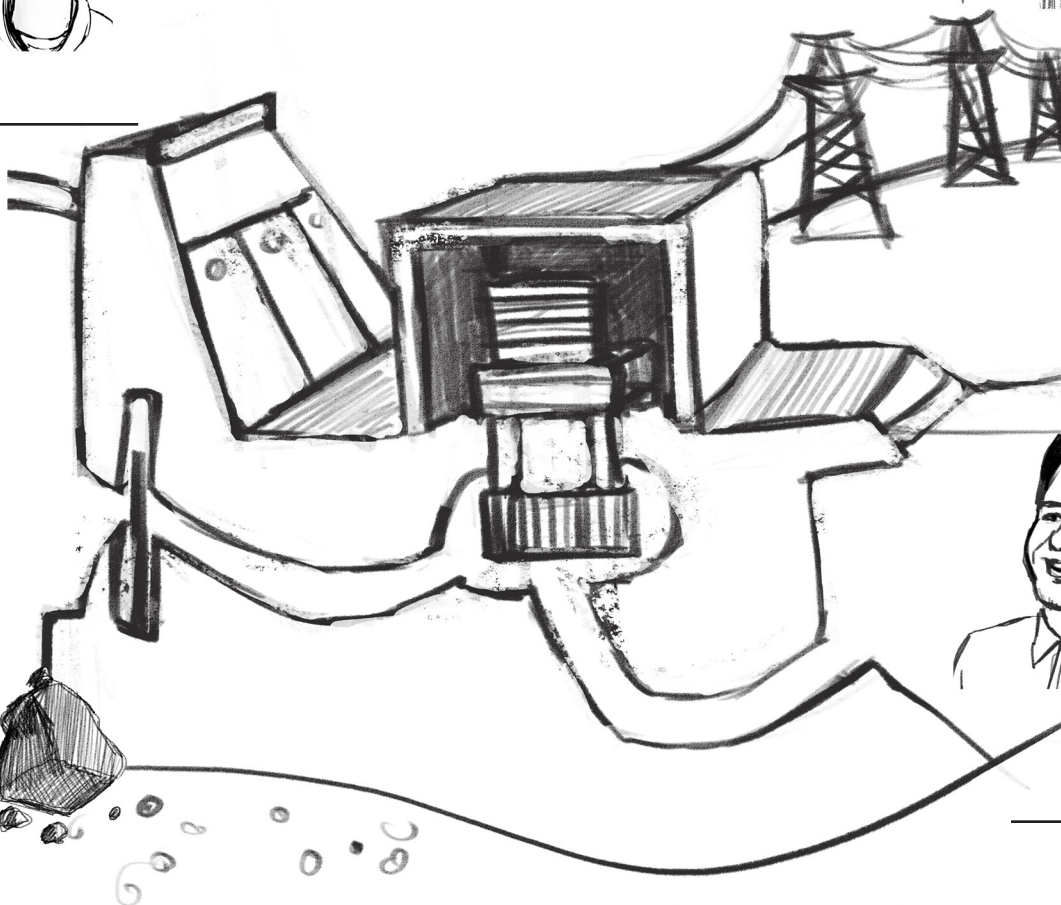


BIIWAABKO

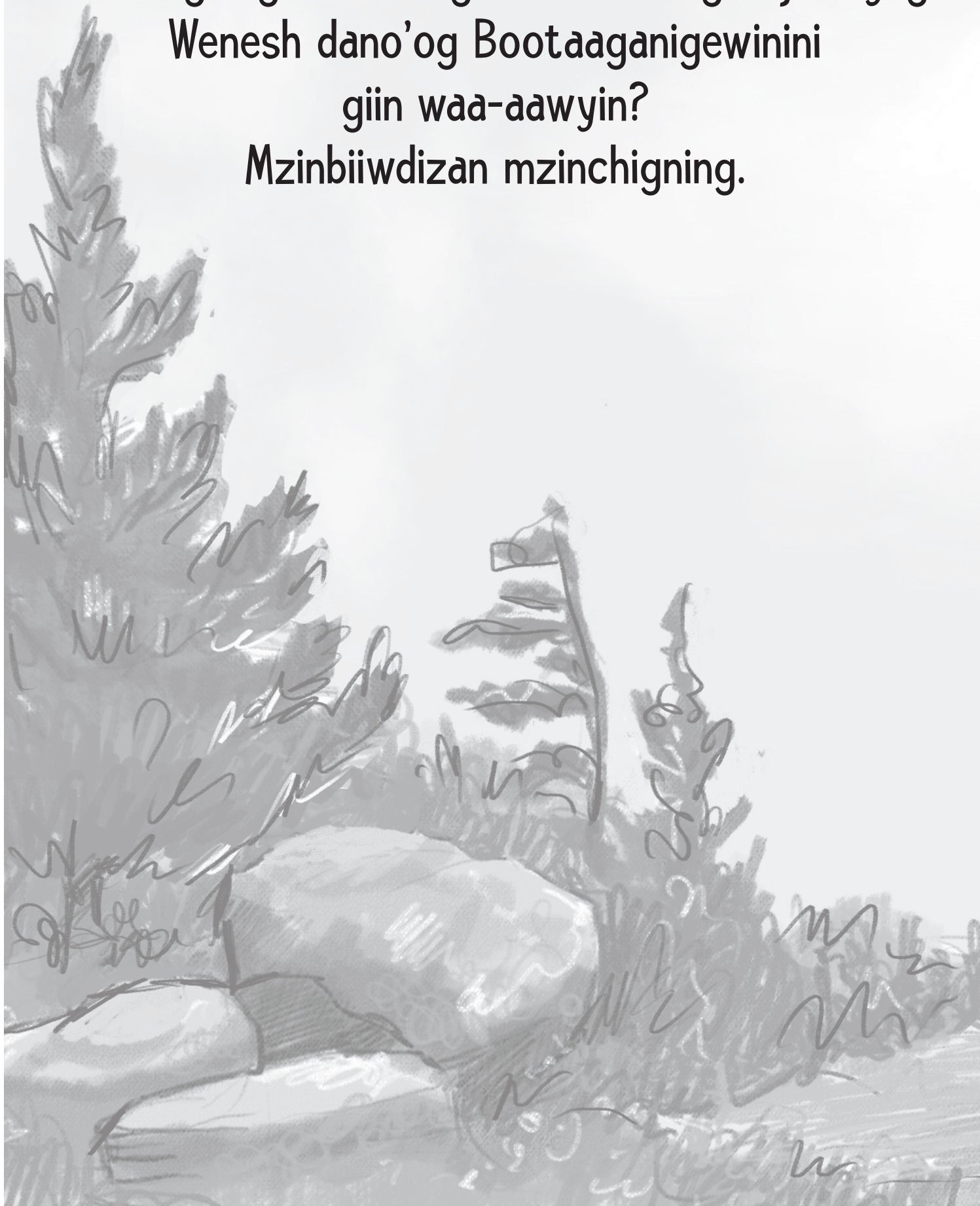
Waasmowin dashtoon gibaakwa`igan.

Wenesh Bootaaganigewinini nyaadmaaged manpii enso bebezhik?

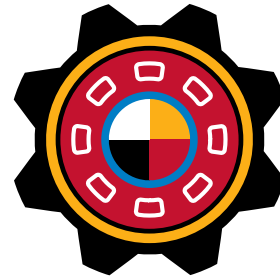
Zhibii'an ezhnikaangaazwaad enji-nokiiwaad.



Bootaaganigewiniwag daa-nokiiwag enjibaayag.
Wenesh dano'og Bootaaganigewinini
giin waa-aawyin?
Mzinbiiwdizan mzinchigning.



**This edition of *What Engineers Do*
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