

MOPHATO

2

BUKA YA
MORUTABANA

Platinum

Dikhoutu le Diroboto

Maskew Miller Learning
10 Freedom Way, Milnerton, Cape Town, 7441

© Maskew Miller Learning (Pty) Ltd 2025

Ditokelo tsotlhe di sireleditswe. Ga go karolo ya kgatiso e, e e ka boelediawang, ya bolokwa mo mofuteng o o ka tlagiswang gape ka ona, kgotsa ya gaswa mo sebopegong sengwe le sengwe kgotsa ka mokgwa o o rileng (eleketeroniki, ka motšhine, ka kgatiso kgotsa ka mokgwa o mongwe o o sa dumeletsegeng) ntle le gore go bonwe tumelano e e kwadilweng fa fatshe ya mong wa ditshiamelo tse di sireleditsweng tsa bokwadi pele.

Fa o batla go rebolelwa tetla ya go ka gatisa lekgetlo le lengwe gape kgotsa go dirisa karolo nngwe le nngwe ya buka eno, o kopiwa gore o ikgolaganye le Setlhophla se se reboleanang ka Ditshwanelo le Tetla mo go 021 532 6000 kgotsa ka go romela imeile mo go rightsgranting@mml.co.za. Go begela tshenyo ya ditshwanelo tsa mokwadi, tsweetswee romela imeili go copyright@mml.co.za.

Kgatiso ya 1 ka 2025

ISBN 978-1-834-95051-8
ePDF Perpetual ISBN 978-1-834-98709-5

Mophasalatsi :Whitley Makhari
Morulaganyimogolo: Georgia Mehl
E rulagantswe ke Christina de Nobrega
Mothalo wa bokwantle ka MML Visual Design
Botaki jwa bokwantle ka MML Visual Design
Mothalo wa buka ka [MML Visual Design]
Botaki ka AJ Erasmus, Angela Bowering, Illana Dillon, Bev Victor, Ken Etberg, Tabitha Buffet, LT De Vries, James Whitelaw, MML Visual Design
Thulaganyo ya mokwalo ka Design Wave, Digital Paper Mermaid, MML Visual Design
E gatisitswe ke

Ditebogo

Mokwadi le mophasalatsi ba lebogela tshebediso ya ditshwantsho go tswa go

L2e,somchai/Shutterstock; L2f, Aimm/Shutterstock; L2h, Dmitri Disterheft/Shutterstock; L2i, Dmitri Disterheft/Shutterstock; L3a, phive/Shutterstock; L3b, Mimadeo/Shutterstock; L3d, Nick Beer/Shutterstock; L3e,boyphare/Shutterstock; L3f, Claudio Soldi/Shutterstock; L5a,StockBURIN/Shutterstock; L5b, Denys Kurba/Shutterstock; L5c, rawf8/Shutterstock; L5d,phive/Shutterstock; L8,Ground Picture/Shutterstock; L9a,popovich_vl/Shutterstock; L9b,onyand/Shutterstock; L9c, PixaHub/Shutterstock; L9d, illupic/Shutterstock; L13,Nsit/Shutterstock; L14a, Jacques Hugo/Shutterstock; L14b, Ariadna22822/Shutterstock; L14c, Nature's Charm/Shutterstock; L14d, Geoff Sperring/Shutterstock; L16e, addinia/Shutterstock; L17a,Mykhailo Baidala/Shutterstock; L17b, vilax/Shutterstock; L17c, VRVIRUS/Shutterstock; L17d, Mav/Shutterstock; L17e, Pixel-Shot/Shutterstock; L17f, Flystock/Shutterstock; L17g, 19 STUDIO/Shutterstock; L17h, Boijonell Prod/Shutterstock; L19a, Black Salmon/Shutterstock; L19b, one photo/Shutterstock; L19c, Den Rozhnovsky/Shutterstock; L28a,wavebreakmedia/Shutterstock; L28b,Prostock-studio/Shutterstock; L31a-b,PeopleImages/Shutterstock; L32a, GagliardiPhotography/Shutterstock; L32b,WBMUL/Shutterstock; L32d, Vasyl Shulga/Shutterstock; L34a, guys_who_shoot/Shutterstock; L34b, Cloudy Design/Shutterstock; L34c, bonchan/Shutterstock; L34d, Pixel-Shot/Shutterstock; L34e, somchai/Shutterstock; L34f,imagedb.com/Shutterstock; L34g, Photoongraphy/Shutterstock; L34h, Panidchapon22/Shutterstock; L39a, guys_who_shoot/Shutterstock; L39b, bonchan/Shutterstock; L39d, Pixel-Shot/Shutterstock; L39e, somchai/Shutterstock; L39f,imagedb.com/Shutterstock; L39g, Photoongraphy/Shutterstock; L39h, Panidchapon22/Shutterstock; L41a, guys_who_shoot/Shutterstock; L41b, Cloudy Design/Shutterstock; L41c, bonchan/Shutterstock; L41d, Pixel-Shot/Shutterstock; L41e, somchai/Shutterstock; L41f, imagedb.com/Shutterstock; L41g, Photoongraphy/Shutterstock; L41h, Panidchapon22/Shutterstock; L49a, mmar/Shutterstock; L49c, akreativ/Shutterstock; Nastya Trel/Shutterstock; L49e, cobalt88/Shutterstock; L49f, Arlee.P/Shutterstock; L49g, ismail19797/Shutterstock; L50d, renaapshotPhotos/Shutterstock; L50h, tanachai tantrakool/Shutterstock; L50g, grey_and/Shutterstock; L50f, New Africa/Shutterstock; L50i, Chase D'animull/Shutterstock; L54a, Lucian Coman/Shutterstock; L54b, Anze Furlan/Shutterstock; L54c, Sara Winter/Shutterstock; L54d,Dzmitro/Shutterstock; L62a, luck luckyfarm/Shutterstock; L62b, Sara Winter/Shutterstock; L62c, Dzmitro/Shutterstock; L62d, Daniel Tadevosyan/Shutterstock; L69, ifong/Shutterstock; L72a,evkaz/Shutterstock; L72b, Grinvalds/Shutterstock; L72c,MyImages - Micha/Shutterstock; L72d, ifong/Shutterstock; L72f,Den Rozhnovsk/Shutterstock; L72e, Gorodenkoff/Shutterstock; L75a, Inspired Vectorizator/Shutterstock; L75b,Dziegler/Shutterstock; L77a, Inspired Vectorizator/Shutterstock; L77b,Dziegler/Shutterstock; L78a, Inspired Vectorizator/Shutterstock; L78b,Dziegler/Shutterstock; L84a, Egor86a, Aleksandr Mosiichuk/Shutterstock; L84b,Nastya Trel/Shutterstock; L84c, ismail19797/Shutterstock; L84d, bonchan/Shutterstock; L84f,Nsit/Shutterstock; L84e, tanyabosyk/Shutterstock; L85a,Nsit/Shutterstock; L85b, Nastya Trel/Shutterstock; L85c, ismail19797/Shutterstock; L85d,Oleksandr Mosiichuk/Shutterstock; L85e, Myurenn/Shutterstock; L85, tanyabosyk/Shutterstock; L85f, NPavelN/Shutterstock; L86a, Aleksandr Mosiichuk/Shutterstock; L86b,ismail19797/Shutterstock; L86c, tanyabosyk/Shutterstock; L88a, Scharfsinn/Shutterstock; L88b, MONOPOLY919/Shutterstock; L88c, P and P Studio/Shutterstock; L88d, Ozan karatekin2/Shutterstock; L92a,ifong/Shutterstock; L92b,Kaspars Grinvalds/Shutterstock; L92c, Dmytro Zinkevych/Shutterstock; L96a, Kinwunz/Shutterstock; L96b, Gorodenkoff/Shutterstock; L96c, Engineer studio/Shutterstock; L104a,4LUCK/Shutterstock; L104b, perfect photographer 8699/Shutterstock; L104c,ChekmanDaria/Shutterstock; L104d,Tatiana Popova/Shutterstock; L104e,THP Creativ/Shutterstock; L104f,Martin Bergsma/Shutterstock; L106, aekikuis/Shutterstock; L109a, WBMUL/Shutterstock; L109b,ThomsonD/Shutterstock; L109c,ThomsonD/Shutterstock; L113c, GBJSTOCK/Shutterstock; L113b, years44/Shutterstock; L116,OATZ To Go FACTORY/Shutterstock; L117b, vectorsector/Shutterstock; L117c, AtlasbyAtlas Studio/Shutterstock; L117d, yabluko_draws/Shutterstock; L118a, AtlasbyAtlas Studio/Shutterstock; L118b, yabluko_draws/Shutterstock; L119a, AlexLMX/Shutterstock; L121,Aozorastock/Shutterstock; L132a, Riccardo Mayer/Shutterstock; L132b, rawf8/Shutterstock; L132c, Timmary/Shutterstock; L132d,Pixel-Shot/Shutterstock; L142a,Creativa Images/Shutterstock; L142b, TheVanya43/Shutterstock; L142c, Mick Russell/Shutterstock; L142d, Aninka Bongers-Sutherland; L142e, Nixx Photography; L142f, Pyranon Sima; L146a, Eric Isselee/Shutterstock; L146b, Nancy Pauwels/Shutterstock; L146c, Vladyslav Travel photo/Shutterstock; L146d, Trixy Gatto/Shutterstock; L146e, Eric Isselee/Shutterstock; L161a, ismail19797/Shutterstock; L161b, tanyabosyk/Shutterstock; L168a, Ground Picture/Shutterstock; L168b, Andrey_Popov/Shutterstock; L168c,Yuganov Konstantin/Shutterstock.

Diteng

Morutabana yo o rategang

1. Botlhokwa jwa go kwala dikhoutu le dirobotoviii
2. Go kwala khoutu le Diroboto mo Kgatong ya Motheoviii
3. Tsela ya go dirisa motseletsele ono ix
4. Dikarolo tsa Kaedi ya Morutabana.....xiv
5. Molebokakaretso.....xiv
6. Dikgono tse di Rileng.....xvi
7. Go Kopanya Go kwala khoutu le Diroboto mo Kgatong ya Motheo..... xviii
8. Kabelo ya nako xviii
9. Pharologanyo, Tekatekano le Kakaretso..... xix
10. Go dira phaposiborutelo e e ntsi e ntsi batho
botlhe le fa ba farologane..... xxi

EXTRACT PAGES

11. Mokgwa wa go ruta o o akaretsang	xxiii
12. Tsela ya go Ruta go Kwala Dikhoutu le Diroboto.....	xxiv
13. Go laola thuto ka tsela e e atlegang.....	xxvi
14. Go laola phaphosiborutelo e kgolo.....	xxvii
15. Go Dirisa Mokgwa wa go Ithuta ka go Tlhama le go Dirisa Di.....	xxviii
16. Tikologo e nngwe	xxviii
17. Go Tshegetsa Mefuta e Farologaneng ya go Ruta.....	xxix
18. Boitekanelo jwa Morutabana.....	xxx
19. Tlathhobo	xxxi
20. Khoutu ya palelo	xxxiii
21. Leano le le Akantshiwang la go Ruta.....	xxxiii

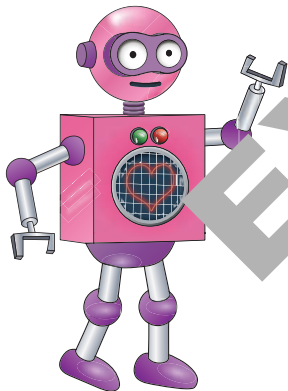
Diteng

Paka 1



Beke 1: Re tlhoka metsi go tshela	1
Beke 2: Dijo tse di nang le dikotla di botoka.....	7
Beke 3: Mafelotshireletso a dira gore re nne re babalesegile e bile re omile.....	12
Beke 4: Thekenoloji e mosola	15
Beke 5: Mongwe le mongwe o kgethegile.....	20
Beke 6: Re tshela mo lefatsheng la dijithale	26
Beke 7: Tlhopa tsela.....	31
Beke 8: Ditatelano le dipaterone tse di nna tsang	38
Beke 9: Ditatelano tse di itekanetseng.....	41
Beke 10: Roboto e e tsamaeng ya ga Thabo	45

Paka 2



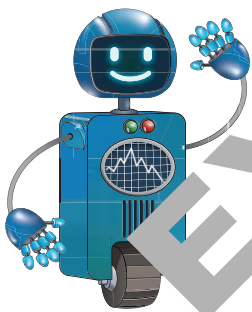
Beke 1: Dikgakolamo e gae gile	46
Beke 2: Nna tala e molemo	51
Beke 3: Kgato e botu ya 'roboto'	55
Beke 4: Ditlha ke eng.....	60
Beke 5: Phologolo ya me ya pampiri.....	64
Beke 6: Didiriswa tsa me tsa dijithale.....	67
Beke 7: Tsela e thekenoloji e fetogileng ka yone.....	71
Beke 8: Go namola dinaledi tsa lewatle.....	75
Beke 9: Dira mmutla wa pampiri.....	79
Beke 10: Thusa diphologolo go ya gae.	83

Paka 3



Beke 1: Go ijesa monate mo polaseng	87
Beke 2: Dimela tse di ntle mo dipitseng	91
Beke 3: Baakanya roboto	95
Beke 4: Batla dibopego mo polaseng	99
Beke 5: Kwala melaetsa ya sephira	103
Beke 6: Rarabolola dikhoutu tsa sephira.....	108
Beke 7: Mafetlho di a kgatlhisa	112
Beke 8: Batla thuso e e tshwanetseng	115
Beke 9: Batla tsela	120
Beke 10: Kwala khoutu	124

Paka 4



Beke 1: Fa e le seno, tse di ntle ke eng?	129
Beke 2: Diroboti mo Afrika Borwa	134
Beke 3: Seno se le sengwe ka naga ya rona	139
Beke 4: Diroboti tse di ntle e e monate	143
Beke 5: Tse di ntle moagi wa dijithale	147
Beke 6: Tlhaeletsano bogologolo le jaanong	150
Beke 7: Khoutu ke eng?	153
Beke 8: Suthisa lebokoso	156
Beke 9: Nna moitseanape wa mokgokolosa.	160
Beke 10: Thekenoloji e e re dikologileng.	164

Morutabana yo o rategang

Letsatsi le lengwe le le lengwe fa o tsena mo phaposiborutelong jwa gago, ga o tsene fela mo lefelong le le tletseng di tseke le dibuka. O tsena mo lefelong leo go bopiwang isagwe ya batho gone le mo go simololwang maitemogelo a mašwa. O na le maatla a a seng kana ka sepe a go tlotltheletsa, go kaela le go nonotsha baetedipele ba rona ba kamoso, batlhami le badiradiphelelo go ba rona. Fa o dira seno ka lorato, ga e kitla e nna kgang fela ya go ruta. O tseba go jala dipeo tsa bopelonomi, bopelokgale, go tlotla batho le mowa ya Ubuholo mo dipelong tsa bana bano.

Re a itse gore ga se ka metlha go leng bonolo. Dikgwetho sa nna morutabana, segolobogolo kwa dikolong tse di senang ditlholo tse di lekaneng, ka dinako tse dingwe di ka dira gore o ikutlwe o feekane maikutlo. Le fa go ntse jalo, kgwetho nngwe le nngwe e o lebanang le yona go naya tshono ya go dira pharologanyo ya mmatota. O bontsha barutwana ba gago gore ba ka kgona go dira sengwe le sengwe le gore go tsefetswe gore ba kgone go fitlhelela dilo tse dikgolo mo botshelong.

Ke gone ka moo mokgwa wa rona wa go ruta o tlleng go go thusa. E re ka re o tthamile re akantse ka CAPS, re tlo go tllama mogopolo mo go ruteng ka tsela e e akaretsang bana botlhele go tllama gore ngwana mongwe le mongwe a ikutlwe e le karolo ya se go buiva ka sona. Ditshwantsho, dikgang le dithuto tse di tla bong di sena di tllile go akaretsa maemo otlhe a rona a a farologaneng, mme seno se tllama thusa morutwana mongwe le mongwe gore a ikutlwe e le karolo ya se go diragalang mo phaposiborutelong.

Ga re a go lebalala boitekanelo jwa gago bo botlhokwa thata fela jaaka re lebeletse gore barutwana ba gago ba atlege. Re akareleditse di dirisiwa tse o ka di dirisang ka bowena gore o nne o tlotltheletsegile ebile o itekanetse, ka gonne re a itse go ikutlwa sentle barutwana ba gago le bone ba tla atlega. Fa o itumetse, seno ga se tlotltheletse fela tsela e o rutang ka yona gape se aga karolo e e molemo le barutwana ba gago mme ba tla ikaega ka wena go bona tsholelano go tlotlthelediwa mo botshelong.

Fa Aforika Borwa e tswelletse go dira gore Basic Education Law Amendments Act (BELA) e nne molao ka 2024, maitlhomong a rona a go dira gore thulaganyo ya thuto e nne e e lekalekaneng le e akaretsang botlhele a gola le go feta. Seabe se o tlleng go nna le sona mo maitlhomong ano e tllile go nna se segolo tota, mme go tllaloganya CAPS le BELA go tla dira gore phaposiborutelo ya gago e nne lefelo le mo go lona barutwana ba gago ba baakanyediwang go atlega.

Ke wena yo o tlileng go thusa gore go nne le diphetogo tse di molemo mme seabe sa gago mo phaposiborutelong e tlike go nna se se segolo thata. Fa o ntse o ruta, itse gore ga o kaele barutwana ba gago fela; o bopela metse ya rona, naga ya rona le lefatshe la rona isagwe e e molemo.

Re lebogela sengwe le sengwe se o se dirang!

1. Botlhokwa jwa go kwala dikhoutu le diroboto

Ijoo nna wee! Re lebane le serutwa se se ntšhwa gotlhelele—se se tšhwanang se tshosa e bile se na le thotloetso! Go kwala dikhoutu? Re akanya ka motheo yo o obegileng mo godimo ga sekirini sa khomphiuta, a seka ka tsedimisetso e e ka tlhologangwang ke batho ba se kae fela ba batho ba bang. Diroboto? Seo se utlwala jaaka sengwe se se tswang mo baeseng ya ditlhamane tsa saense! A ga re a tshwanela go leta dingwaga ditlhamane a matlhano gore diroboto di laole lefatshe? A diroboto ga se tsa tsamaisa saense le baithutalobopo fela? Ke ka ntlha yang fa seno se tshwanetse sa tsama jaaka barutabana?

Dikgang tse di monate ke tse: go kwala dikhoutu ga go lebege go le thata jaaka go lebelala. Tota e bile, re kwala dikhoutu letsatsi le letsatsi, mme re ntse re dira jalo ka lobaka lo lolaele. Le fa gone re a tshwanelwa ke go ithuta dilo tse dintšhwa gore re kgone go ruta baithuti ba rona ka tsela e e nang le matswela, seo ke sone se se itumedisang!

Re tshela mo lefatsheng mo go lone kgatelopele e e bofefo ya thekenoloji e leng selo se se ka go sediveng. E nna e ntse e fetoga, mme le rona re tshwanetse go fetoga go lone. Goreng? Ka gone re baakanyetsa baithuti ba rona isagwe e lefatshe e ruang.

Mo motseletseleleng ono, re tla lo kaela go ralala lefatshe le le sa itsiweng la go kwala dikhoutu le diroboto ka go kwala khoutu ntle le go dirisa khomphiuta.

Gare ga barutabana ba dirisa diboto tse dintsho, ditšhoko le dikarata tsa go ithuta mo phaposiborutelong. Mme ke nako ya go amogela diphetogo le go tlamela barutwana ba rona ka bokgoni jo ba tla bo tlhokang mo motlheng ono wa dijithale!

2. Go kwala khoutu le Diroboto mo Kgatong ya Motheo

Re a lo amogela mo Go kwala khoutu le Diroboto Mophato 1! Motseletseleleng ono o na le Buka ya Morutwana le Kaedi ya Morutabana e e rotloetsang go ruta ka

katlego ya Go kwala khoutu le Diroboto mo Mophatong 1. Go kwala khoutu le Diroboto Mophato 1 e kwadilwe go ya ka ditlhokego tsa dikaelo tsa Pegelo ya Pholisi ya Kharikhulamo le Tlhatlhobo (CAPS). Ka jalo, fa o dirisa motseletsele ono wa ditlhogo, o ka tihomamisega gore se se mo kharikhulamong se akareditswe ka botlalo.

Go kwala khoutu le Diroboto go dirilwe ka tsela e e kgethegileng go tsa tsaaisana le CAPS ya Go kwala khoutu le Diroboto ka ditsela tse di latelang.

3. Tsela ya go dirisa motseletsele ono







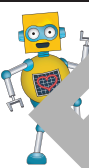


3.1 Dikarolo Tsa Buka ya Morutwana

- Buka ya Morutwana e na le setlhogo se se boeletsa se se tsamaisanang le ditiro tsa beke nngwe le nngwe, se se dirang gore go nne le boitemogelo jwa go ithuta jo bo tshwaraganeng le jo bo tshwaraganeng.
- Beke nngwe le nngwe e na le tiragalo e ntšha e e gwetlhang barutwana go dirisa kitso ya bone mo maemong a mosola. Kopa barutwana go thala nngwe ya difatlhego tse nne mo ditlhatlhobong tsa bone kgotsa ba supe monwana o le mongwe go ya go e le mena go leka nyetsa matsapa a bone mo tirong.
- Karolo ya “A re Simolole” e di tshaba ntlha ya go simolola go sekaseka kitso ya ntlha ya barutwana mo maemong a mosola ka tshwaraganeng le tshedimosetso e ba tlhokang go e ithuta.
- Kwa bokhutlong jwa beke nngwe le nngwe, karolo ya “Go Itlhatlhoba” e naya barutwana tšhomo e e kganya ka tiro ya bone, go ba rotloetsa go tsaya kgato ka kelotloko go ba ithuta.
- Mo godimo ga moo, go na le karolo ya “Lefoko le le ntšhwa” e e tlhalosang mafoko a a sa tlwaelegang a a fitlhelwang mo dithutong, e leng se se thusang barutwana go oketsa tlotlofoko ya bone ka tsela e e mosola.

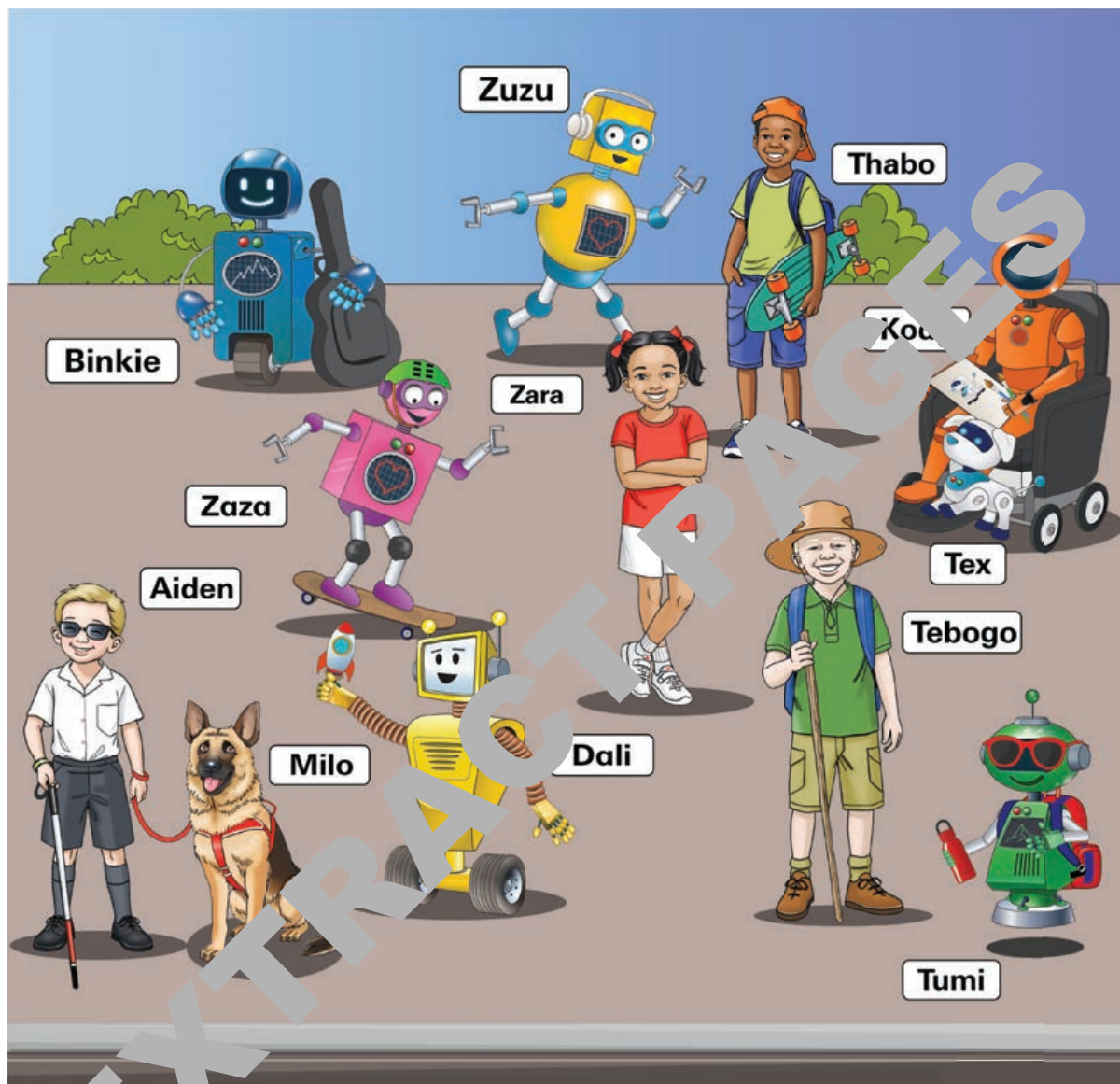
	2 	3 	4 
Go leka!	Itumetse!	Motlotlo!	Alilili!

Matshwao:












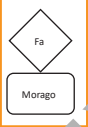





Mo bukeng eno yotlhe re tsentse ditshwantsho tse di supang mofuta wa go ithuta le ditiro tse di dirwang.















	nako ya go dira le tsala ya me
	nako ya go dira jaaka sethlopha
	nako ya go dirisa diatla tsa me le boboko jwa me
	nako ya go thala le go kwala
	nako ya go bua ka dilo
	nako ya go tsamaisa boboko le monagano
	nako ya go tsamaisa mmele wa me
	nako ya go kwala khoutu
	go kwala khoutu ka go tshameka

3.2. Kopa le sethopho

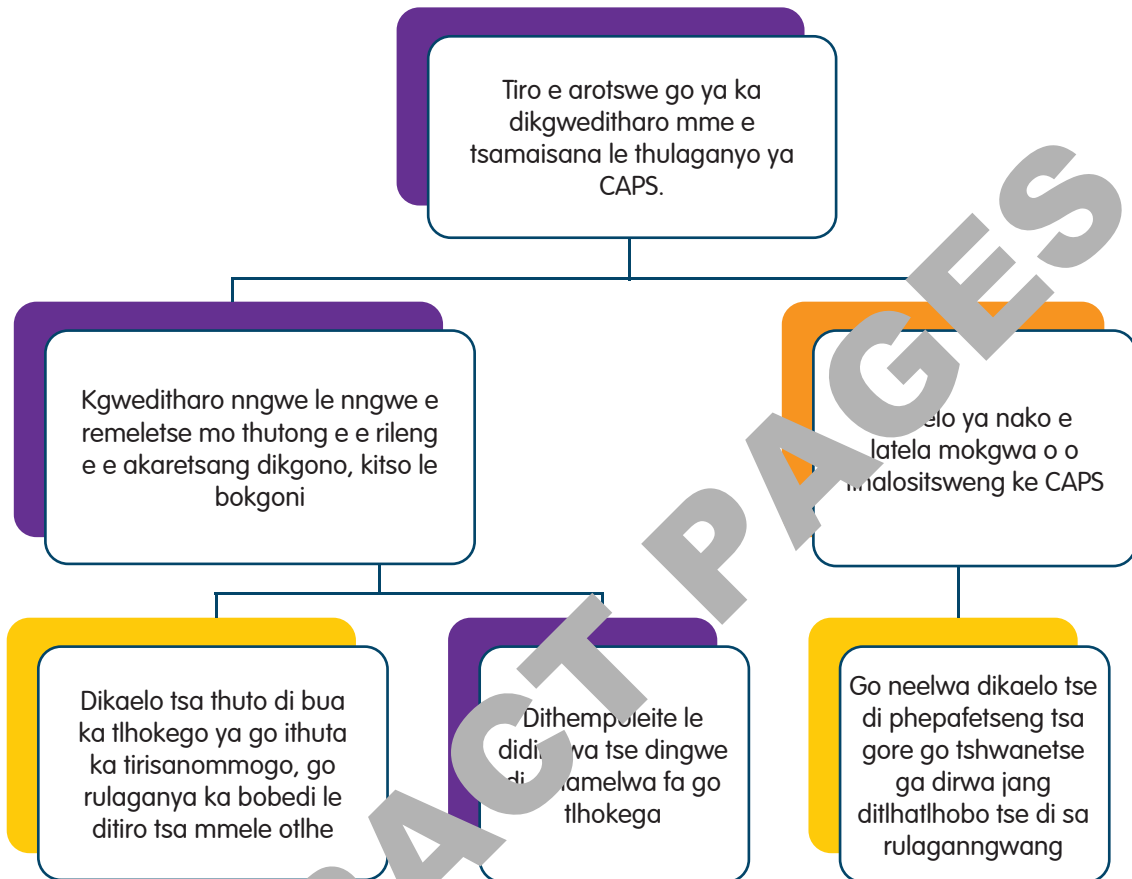


3.3. Dikarata tsa go kwala khoutu

Karata ya go kwala khoutu	Letshwao	Tihaloso (tiro)	Karata ya go kwala khoutu	Letshwao	Tihaloso (tiro)
	Kwa pele	Tsamaya kgato e le nngwe go ya kwa pele.		Boeletsa makgetlo a le matlhano	Boeletsa tiro makgetlo a le matlhano.
	Godimo	Tsamaya kgato e le nngwe go ya kwa godimo.			
	Tlase	Tsamaya kgato e le nngwe go ya tlase.		Poapoeletso (Modikologo)	Letshwao la modikologo le go bolelela go boeletsa matlhano ya dikgato.
	Molema	Tsamaya kgato e le nngwe go ya molemeng.		Letshwao la leta	Letshwao la leta le go bolelela go emisa metsotswana e mebedi.
	Moja	Tsamaya kgato e le nngwe go ya mojeng.		Modumo	Letshwao la modumo le go bolelela go reetsa modumo.
	Retologela ka fa molemeng	Retologela ka fa molemeng.		Bina (Motantsho)	Letshwao la motantsho le go bolelela go tantsha gangwe.
	Retologela ka fa mojeng	Retologela ka fa mojeng.		Bua	Letshwao la go bua le go bolelela go bua.
	Fa/morago	Fa (polelo), morago dira seno (dira tiro).		Retologa (Dikologa)	Letshwao la go dikologa le go bolelela go dikologa gangwe. (Retologa ka gotlhe).
	Sekamela kwa pele	Sekamisetsa mmele wa gago kwa pele.		Thala	Letshwao la go thala le go bolelela go thala.
	Sekamela kwa morago	Sekamisetsa mmele wa gago kwa morago.		Phaphata (Opa diatla)	Letshwao la opa diatla le go bolelela go opa diatla gangwe.

	Sekamela ka fa molemeng	Sekamisetsa mmele wa gago ka fa molemeng.		Go keteka (Tsholeletsa seatla kwa godimo)	Letshwao la tsholeletsa seatla kwa godimo le go bolelela go dumela ka go tsholeletsa seatla kwa godimo.
Koaeni leringska	Sekamela ka fa mojang	Sekamisetsa mmele wa gago ka fa mojang.		Latela	Letshwao la latela le go bolelela go latela.
	Tsholetsa (Sela)	Sela selo.	5	Kgorometsa	Letshwao la kgorometsa le go bolelela go kgorometsa.
	Baya fa fatshe	Baya selo fatshe.		Goga	Letshwao la goga le go bolelela go goga.
	Simolola	Letshwao la simolola le go bontsha fao letshwao la go simolola le leng teng.		Go siame (Kgononope kwa godimo)	Letshwao la kgononope kwa godimo le dirisediwa go re ee.
	Tsamaya	Letshwao la tsamaya le go bontsha gore o simolola leng.		Ga go a siama (Kgononope kwa tlase)	Kgononope kwa tlase e dirisediwa go re nnyaa.
	Ema	Letshwao la emisa le go bontsha gore o emise leng.		Nagana	Letshwao la nagana le go bolelela go: <ul style="list-style-type: none"> • nagana ka sengwe. • itlhamele (kakanyo); • loga leano
2	Boeletsa tiro a le mabedi	Boeletsa tiro makgetlo a le mabedi.		Tlola	Letshwao la tlola le go bolelela go tlola gangwe.
3	Boeletsa makgetlo a le mararo	Boeletsa tiro makgetlo a le mararo.		Tlola sengwe (Tlola mo godimo)	Letshwao la go tlola mo godimo le go bolelela go tlola mo godimo ga sengwe.
4	Boeletsa makgetlo a le mane	Boeletsa tiro makgetlo a le mane.			

4. Dikarolo tsa Kaedi ya Morutabana

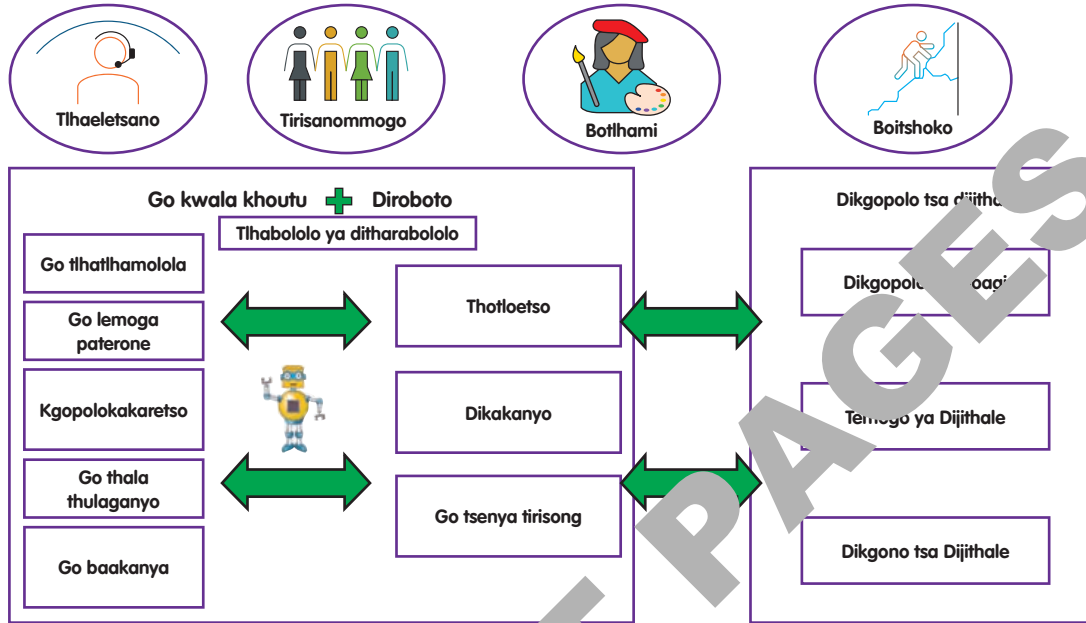


5. Molebana le karetso

5.1 Go kgetha thuto le diroboto ke eng?

- Go dira di thuto le diroboto go kopanya melaometheo ya go dira di thuto tse di tshwanetseng le go dira diroboto, go di aga le go di dirisa.
- Go tsisa dikgopolo, mekgwa le ditsela tsa go dira dithulaganyo go laola diroboto gore di dire ditiro tse di rileng.
- E akaretsa dikgopolo tsa dijithale tse di buang ka megopolo e e farologaneng, melawana le ditsamaiso tse di amanang le dithekenoloji tsa dijithale le tiriso ya tsone.

- Kharikhulamo ya Go kwala khoutu le Diroboto e ikaegile ka dipilara tse di latelang, jaaka go bontshitswe mo setshwantshong se se fa tlase:



Go kwala khoutu le Diroboto

Kharikhulamo ya Go kwala khoutu le Diroboto e theilwe mo dikgopolong tse di latelang:

- **Go kwala khoutu** ke go kwala ditaelo tse khomphiuta e ka di thaloganyang le go di latela. Ke tse tse boho ba bolelelang dikhomphiuta ka yone gore di dire eng, kgato ka yone go di dira gore di dire ditiro tse di farologaneng.
- **Diroboto** e akanya mense le boenjere go dira metšhine e e kgonang go lemoga se se e tlogileng, go dira ditshwetso le go dira ditiro tse e di dirang e le nosi. Akanya barutwana tšhono ya go ithuta, go lekeletsa le go itirela dilo tsa bontsho di tlotha mogopolo mo go tthamiweng, ditiragatso le ditiro ya diroboto.
- **Dikgopolo tsa dijithale** go akaretse mefuta e e farologaneng ya bokgoni le go thaloganya tse di thusang baithuti go dirisa thekenoloji ka tsela e e nang le mosola le ka maikarabelo.

5.2 Maitlhomong a a rileng:

- Tlhabolola bokgoni jwa go rarabolola mathata ka go akanya ka dikhomphiuta
- Tokafatsa tsela ya go akanya ka go tthama dilo gore go nne le tharabololo e e tthamang dilo tse dintšhwa e e tsepameng mo bathong.

- Nna karolo ya kokomana ya batho ba ba akanyang ka tsela e e botlhale ba ba dirisang dikhoutu, diroboto le bokgoni jwa go dirisa didirisiwa tsa dijithale go tlhalosa megopolo ya bone.
- Rotloetsa go tlhama dilo, go akanya ka tsela e e masisi, go dirisana mmogo, go buisana le go dira dilo tse dintšhwa
- Dira dilo ka tsela e e nang le boikarabelo le ka tsela e e nang le dipolelo mo lefatsheng la didirisiwa tsa dijithale.
- Tlhaloganya ka fa thekenoloji e amang setšhaba ka teng.
- Aga boikanyo jwa go lebana le dikgwetlho ka go dirisa dikhomphiuta le go akanya ka tsela e e tshwanetseng.

6. Dikgono tse di Rileng

6.1 Go nagana jaaka khomphiuta

- Go akanya ka dikhomphiuta ke mokgwa wa go rarabolola mathata o o akaretsang go kgaoganya mathata a rararaaneng ka dikarolo tse dinnye tse di laolegang
- E thusa barutwana go tokafatša bokgoni jwa bone jwa go rarabolola mathata a go kwala khoutu le a diroboto. Bokgoni jono gape bo ka dirisiwa go rarabolola mathata a letšatsi le letšatsi.
- Ke tsela ya go akanya le bokgoni jo bo dirisiwang go rarabolola mathata le go dira ditiro ka tsela e e nang le dipolelo.
- Go akanya o dirisa dikhomphiuta go thusa batho go bona tharabololo e batho le dikhomphiuta di ka e tlhaloganyang.
- Go akanya go dirisa dikhomphiuta ga se ga saense ya dikhomphiuta fela; go ka dirisa mo dikarolong tse di farologaneng le mo maemong a letšatsi le letšatsi, go thusa batho go akanya ka tsela e e utlwalang le e tshwanetseng.

E akaretsa dikarolo tse di latelang:

 <p>Kgopolokakaretso: Go tlhoma mogopolo mo tshedimosetsong e e botlhokwa le e e maleba le go itlhokomolosa tshedimosetso e e seng botlhokwa le e e seng maleba</p>	 <p>Go thatlhamolola: Go rarabolola bothata o o raraaneng ka go bo kgaoganya ka dikgwetso tse dinnye tse di kgonang go lalela.</p>
 <p>Go lemoga paterone: Go lemoga diitshwano le dipharologano. Go lemoga dipaterone tse di tshwanang mo mathateng a mangwe go go thusa go rarabolola bothata jo bošwa.</p>	 <p>Thulaganyo: Go thulaganya tatelano e e tlhomameng ya dikgato kgotsa dibe tsa go dira tiro.</p>

Mo go diroboto, barutwana ba dirisa go akanya ka dikhomphiuta go tlhama, go aga le go rulaganya diroboto. Tselo e nngwe eno e dirang ka yone e bontsha ka fa ba ileng ba dirisa tselo e nngwe go akanya ka teng fa ba ntse ba leka le go baakanya khoutu ya bone.

6.2 Go akanya ka go thala

- Go akanya ka tselo ya go thama go tlhoma mogopolo mo bathong e bile go rotloetsa go nna le kgotso jwa go tlhama le go dira dilo tse dintšhwa.

E latela thulaganyo e e latelang ya dikgato tse tharo:

- Go akanya ka go tlhama ke mokgwa wa go rarabolola mathata o o kopanyang tlhamego e nngwe mme o tsepamisetse mo go thaloganyeng le go rarabolola dikgwetlho.

Se se tshwanang se tshalosa thulaganyo ya go tlhama:

- **Go utlwela botlhoko:** go thaloganya gore modirisi wa bofelo ke mang mo maemong a a rileng.
- **Tlhalosa:** go tlhalosa ka botlalo dilo tse badirisi ba di tlhokang, go akaretsa bokgoni jwa bone, dikgele tsa bone le melaometheo ya bone ya konokono.
- **Go akanya:** go akaretsa go tlhama dikakanyo le ditharabololo ka go dirisa mekgwa e e farologaneng.

- **Setlhangwa sa ntlha:** e akaretsa go tlhama tharabololo e le nngwe kgotsa go feta go rarabolola bothata.
- **Tlhatlhoba:** go sekaseka go nonofa ga tharabololo.

7. Go Kopanya Go kwala khoutu le Diroboto mo Kgatong ya Motheo

<p>Dithulaganyo Mo go ruteng go bala le go kwala, go rulaganya dilo ka tatelano le go sobokanya go na le seabe sa botlhokwa Mo dipalong, go kgaoganya mathata a a raraaneng ka dikgato tse dinnye tse di motlhofo ke tsela e e botlhokwa ya go rarabolola mathata</p>	<p>Go fetolela go dikarolo tse dinnye Mo go tsa saense ya dikhomphiuta le dipalo, go kgaoganya tiro ka dikarolwana tse dinnye tse o kgonang go di laola go dira gore go nne motlhofo go e rarabolola</p>	<p>Dikgopolo tsa Taolo Mo go kwala khoutu, batlisisa mo go tsa taolo di tsa neng ka yona mo go tsa taolo Mo go tsa dipalo, go akanya ka go batlisisa go kaya go dirisa mabaka le go leka lekgwa e e farologaneng go rarabolola mathata</p>
<p>Go kwala khoutu le puo ya tiholego Go ithuta go kwala khoutu gantsi go tshwantshiwa le go ithuta puo e ntšhwa</p>	<p>Go tihama Go tlhama adirisitso tsa diroboto go golaganwa le dikarolo tsa Botshelo le go kopanya dikarolo tsa Dikgopolo tsa Botshelo</p>	<p>Dikgopolo tsa dijithale Dintlha tse di jaaka ditlamorago tsa thekenoloji le go nna moagi wa dijithale di amana le Dikgono jwa Botshelo (Go Itekanela ga Botho le ga Loago)</p>

8. Kabelo ya nako

Go ya ka Pegel ya Pholisi ya Kharikhulamo le Tlhatlhobo (CAPS), Go kwala dikhoutu le diroboto di abelwa ura e le nngwe mo tikologong ya matsatsi a le mathano mo Mophatong R go ya go 2, le diura di le pedi mo tikologong ya matsatsi a le mathano mo Mophatong wa 3.

Tafora e batelang e bontsha kabo ya nako ka paka ya Mophato 1:

Mophato 1 = % ka beke	Paka 1	Paka 2	Paka 3	Paka 4
Go lemoga Paterone	15	15	15	15
Dithulaganyo & Go kwala khoutu	50	50	50	50
Diroboto	30	30	30	30
Dikgopolo tsa Dijithale	5	5	5	5
Palogotlhe	10 dibeke	10 dibeke	10 dibeke	10 dibeke

9. Pharologanyo, Tekatekano le Kakaretso



Ditlhophha tsa dipharologanyo

Lebokose 1: Ditlhophha tsa dipharologanyo

Setlhophha sa pharologanyo	Tlhaloso	Phakareditsa e nang mo bukeng
1. Pharologanyo ya Setso le Morafe	Seno se raya gore re tsentsa ditso le merafe tse di farologaneng, go dira go barutwana ba ithute ka dipontso le meetlo ya batho ba ba farologaneng.	Re tsentsa baanelwa, bakwadi le batho ba ba bangwe mo hisitoring go tswa kwa ditsong tse di ntsi tse di farologaneng. Dikgang le dikao tse di akaretsang meetlo, dingwao le dipuo tse di farologaneng. Seno se thusa barutwana go ithuta ka ditso tsa batho ba bangwe le go ba thusa go tla go tlhoa batho ba bangwe ka gore ba ithute ka histori ya batho ba le dikgwetlho tse ba lebanang le tsona.
2. Pharologanyo ya Bong	Pharologanyo ya bone e raya go emela bong jotle mme go akaretsa go buisana ka sebopeho seo batho ba bong ba bangwe ba nang le sona, go tloga mo ba ba sa batleng go kgethololwa ka bong le ba ba fetolang bong jwa bona nako nngwe le nngwe.	O tla lemoga gore re lekalekantse bong jotle mo mokwalong, mo ditshwantshong le mo dikaong tse re di dirisang. Re tsentsa baanelwa ba ba sa batleng go kgethololwa ka bong le ba ba fetolang bong jwa bone eleng dilo tse di gwehlhang ditlwaelo tsa diabe tsa bong. Ka sekao, go bontshitswe basimane le basetsana ba dira ditiro tse di farologaneng, go tloga mo go thuseng mo phaposing ya boapeelo go ya kwa dilong tsa saense le botsweretsi, go rotloetsa tekatekano ya bong.
3. Pharologanyo ya loago le ikonomi	Seno se raya go tsenya batho ba maemo a a farologaneng a ikonomi le go tlotla ka go sa lekalekane ga maemo a ikonomi.	Re tsentsa batho ba ba tswang kwa maemong a a farologaneng a ikonomi, go bontsha dikgwetlho tse di leng teng tse di amanang le go bona thuto, ditirelo tsa boitekanelo le ditlamelo. Seno se thusa barutwana go tlwaelana le batho ba mmatota le go buisana le bona ka maemo a a farologaneng a ikonomi mme seno se dira gore ba bue ka tshosologo.

<p>4. Pharologanyo ya Dipuo</p>	<p>Pharologanyo ya dipuo e raya gore re akareleditse dipuo tse di farologaneng le go tlotla dipuo tse di buiwang ke batho ba le mmalwa fela.</p>	<p>O tlile go bona dikgang tse di amang dipuo tse di farologaneng le go rotloetsa barutwana go tlotla dipuo tse dingwe tse di buang ke batho ba le mmalwa. Gape re tsentswe dikao tse di bontshang botlhokwa jwa go ranola le go fetolela dipuo tse dingwe segolobogolo tse di buiwang ke batho ba le bantsi, maitlhommo e le go thusa barutwana go akaretsa dilo tse dintsi mo metlotlong yabona.</p>
<p>5. Bogole le go kgona go tsena mo dikagong</p>	<p>Seno se tlile go sekaseka thata batho ba ba tshelang ka bogole le go bua ka dilo tse di ba kgoreletsang go tsena mo dikagong dingwe.</p>	<p>Go akareditswe baanelwa ba ba tshelang ka bogole, go tlhomamisa gore ba ba sengveng mo dikganyeng le mo ditirong tse dikganyeng. Gape re tlotla ka dikgang tse di malebane tsa go tlhelela dilo dingwe, e ka tswa mo dikganyeng, ka mafaratlhatlha kgotsa mo goiseng oago mme re dirisa puo e e bonolo. Seno se tshela gore barutwana ba ba amogele go tshela ba unwela botlhoko mme ba ba tlhaloganye.</p>
<p>6. Tshekamelo ya Thobalano le go akaretsa LGBTQ+</p>	<p>LGBTQ+ e emela Lesbian (basadi ba ba ratanang le basadi ba bangwe), Gay (banna ba ba ratanang le banna ba bangwe), Bisexual (bong jo bobedi), Transgender (Bong jo bo fetotsweng), Queer or Questioning (ka se sa tlwaelegang), le tse dingwe. Letshwao la "+" le emela ba ba tshekamelo ya thobalano, ba ba tlhomologang ka bong le le ba ba bangwe, ba ba o o sa tsheleng, ba ba ja ba ba se nang bong, ba ba dirang thobalano le mo go tse le mongwe mosadi kgotsa nonna, batho ba se nang kgatlhego ya thobalano go tlhelele le batho ba bong jo bo farologanang. Lefoko leno le akaretsa batho botlhe ba ba welang mo ditlhalosong tse di boletsweng fa godimo.</p>	<p>Batho ba ba tshelang e le ba LGBTQ+ ba emisele go wana mo dibukeng tsotlhe tsa rona. Re akareditswe dikao le maemo tse di tlhalosang dikgang tse di mabapi le LGBTQ+ le ditshiamelo tsa rona, mme gape ra bua ka go tla tlhaolele, gore re tshela barutwana gore ba tlhaloganye le go tlotla go farologana mo dikganyeng tsa thobalano.</p>
<p>7. Pharologanyo ya Bodumedi le Dilo tsa Semoya</p>	<p>Seno se akaretsa go tsenyeletsa ditumelo tse di farologaneng le go rotloetsa go tlotla dingwao tse di farologaneng tsa semoya.</p>	<p>Dibuka tsa rona di na le dikgang tse di rutang barutwana ka ditumelo tse di farologaneng le dingwao tsa semoya. Gape re rotloeditse gore ditumelo tse di farologaneng di dirisane mmogo gore ba tlotlane le go tlhaloganyana gareng ga ditumelo. Go tsentswe le dipono tsa batho ba ba farologaneng gore ditumelo tsotlhe di nne le kemedi e e molemo mo setshabeng.</p>

8. Pharologanyo ya Dingwaga	Pharologanyo ya dingwaga e akaretsa batho ba dingwaga tse di farologaneng le go buisana ka kgang ya go tsofala.	Mo dibukeng tsa rona o tla bona dikao tsa baanelwa go tloga go bana go fitlha go batho ba ba godileng. Re buile thata gape le ka botlhokwa jwa go amana ga dikokomana, ra tlotla ka dikgang tse di amanang le bogodi jaaka go rola tiro le go tlhaolwa ga batho ba ba tsofetseng kwa ditirong. Seno se thusa barutwana go tlhaloganya botlhokwa jwa batho botlhe mo setshabeng.
9. Pharologanyo ya thutafatshe	Pharologanyo ya thutafatshe e emela batho le mathata ao ba nang le ona mo dikarolong le mo ditikologong tse di farologaneng, mo lefatsheng lotlhe le mo nageng ya rona.	Dibuka tseno di akaretsa dikgang tse di amanang ka dikarolo tse di farologaneng tsa lefatsheng go bua ka mathata a lefatsheng lotlhe le go renaang le one mo nageng ya rona go baakanya ba ka a tlhaloganyang motlho. Ke tse di dikao tse di lekalekaneng tsa maemo a meesetoropo le kwa magang, go bontsha ditsela tse di melemo tse di leng teng mo tlhalelang ka nngwe.
10. Pharologanyo ya Tlhaloganyo le go Ithuta	Seno se akaretsa mefuta e e farologaneng ya go ithuta, bokgoni le go tlhaloganya dilo tse di farologaneng, tse di jaaka malwetse a tlhaloganyo.	Re ruta pharologanyo ya tlhaloganyo le go ithuta ka go tsenyeletsa mefuta e e farologaneng ya go ithuta e e atlesegang mekgwa e e farologaneng ya go ithuta. Ditsela mo phaposiborutelong di dirilwe gore di akareise barutwana ba ba nang le ditlhoko tse di farologaneng tsa go ithuta, go ba tsenyeletsa mo mekolong. Gape re tsentse le ditlhatlhobo tse di tlatletsang tse o ka di dirisang.

10. Go dira phaposiborutelo e e akaretsang batho botlhe le fa ba farologane

10.1. Pharologanyo mo phaposiborutelong

Ditsela 1–10 Dira gore phaposiborutelo e nne lefelo le le monate le le akaretsang batho botlhe

1. Dira gore e nne lefelo le le babalesegileng:

Phaposiborutelo e nne lefelo leo barutwana ba ikutlwang ba babalesegile mo mmeleng, mo maikutlong le mo tlhaloganyong. Ba rotloetse gore ba botse dipotso, ba batle go itse le go thusana ka go ithuta mo balekaneng ba bone.

2. Tlhome melao e e tlhamaletseng le e e tlotlegang:

Dira gore bana ba tlotlane le go tshepana ka go tlhome melao e e tlhamaletseng ya mo phaposiborutelong. Fa mongwe le mongwe a itse gore go lebeletswe eng mo go ene, phaposiborutelo e tla nna lefelo le le siametseng botlhe.

3. Itumelele bana ba ba itshwereng sentle:

Ela tlhoko bana ba ba itshwereng sentle mme o ba akgole. Fa o ba rotloetsa seno, o tla nna le bana ba bantsi ba ba maitseo!

4. Go se ke ga sotliwa kgotsa ga kgerisanwa:

Tlhomamisa gore ga gona ope yoo kgerisang ba bangwe mo phaposiborutelong, le gore morutwana mongwe le mongwe o gololelile go araba ebile ba tsewa ba le botlhokwa le go akarelediwa mo dilong tsa bangwe.

5. Puisano e e nang le tlotlo:

Dira gore bana botlhe ba reetsane le go buisana ka tlotlo. O tse gore go bue motho a le mongwe ka nako mme botlhe ba reetsa ka lalo moko. Rotloetsa tirisanommogo! Ke one mokgwa o siameng gore bana ba ithute le go nna baeteledipele ba kamoso.

6. Rotloetsa gore yo o tshegang a bolelele ba bangwe gore o tshega eng. Dira gore barutwana ba tshege mmogo e sena a tshegane. Go dira dilo lo le mmogo go dira gore go nne monate mo phaposiborutelong.

7. Dira gore bana ba dirisane mmogo rotloetsa barutwana gore ba nne le tirisanommogo le wena le gareng ga bone le batlhokomedi/batsadi ba bona. Fa barutwana ba dirisanammogo seno se tla dira gore go nne le dipoelo tse di molemo.

8. Ruta ka ditsela tse di farologaneng. O gopole gore morutwana mongwe le mongwe o na le tsela ya gagwe ya go ithuta. Rotloetsa le go tshegetsatsela tseno tse di farologaneng.

9. Rotloetsa barutwana gore ba ithute mo go ba bangwe. Rotloetsa barutwana gore ba ithute dilo tse dingwe mo balekaneng ba bone. Seno se dira gore ba itshepe le go akgona mmogo.

10. Dira gore barutwana ba bangwe ba rute ba bangwe. Thusa barutwana gore ba kgona go ruta bana ba bangwe. Ke mokgwa o o monate le o o molemo gore barutwana ba ithute le go kgona go nna baeteledipele ba kamoso.

10.2. Itumelele go farologana ga morutwana mongwe le mongwe

Ke selo sa botlhokwa fa barutwana ba ipona le maitemogelo a bone a a farologaneng a bontshiwang mo phaposing. Seno se raya go bontsha pharologano mo mokgweng o a lebegang ka one, a buang ka gone, a itsegeng ka teng, setso sa gagwe, bodumedi, bong, tshekamelo ya thobalano (go akaretsa LGBTQ+) dingwaga le dilo tse ba kgonang go di dira. Dibuka tsa rona di na le baanelwa ba ba farologaneng go bontsha maitemogelo ano a a sa tshwaneng.

Re tlhopha ka kelotlhoko ditshwantsho, tiro e e takilweng le diteng tse di emelang batho ba ba farologaneng, ditikologo le maemo a boammaaruri a a dirang gore re itumelele go tshela mo Aforika Borwa le gongwe le gongwe fela.

Re go rotloetsa gore le wena o dire se se tshwanang mo phaposiborutelong ya gago. Anela dikgang e le go bontsha go sa tshwane ga batho ba ba farologaneng, bontsha dintshwantsho tsa kwa magaeng le mo metseseng opong mme o bua ka batho ba ba nang le bokgoni jo bo farologaneng jwa mme, bokgoni jwa thaloganyo le boitshupo go akareletsa le LGBTQ+. Tlhang ditumelo tse dia farologaneng, dingwaga le bong jo bo farologaneng, mme le sekaseke maemo a ikonomi ao barutwana ba gago ba tlhokang go tshokela. Iphe nako ya go ba ruta ka dikgolagano tse re nang le tsone le magaga tse dingwe le batho ba bangwe go ralala Aforika le mo lefatsheng lotlhe. Fa o dira seno, o tla bo o thusa gore morutwana mongwe le mongwe o tshwanele, a tseelwe kwa godimo le gore ke karolo ya lefatshe lotlhe.

11. Mokgwa wa go ruta o o akaretsang

Thuto ya pharologanyo ke mokgwa wa go ruta o o akaretsang o gantsi o tlhomang mogopolo mo dilong tsa barutwana ba di lemogang le go di thaloganya tse di amang dilo tsa botlhokwa ka gore go akareidiwe **pharologanyo** mo go tsone. Seno se re tshwana ka gore barutwana ba tshware kgopolo e e tseneletseng fa ba rutiwa ka ditsela tse di nang le dikao tse dintsi le ditsela tse di senang dikao tse gore ba bone dilo tse di farologaneng ka thuto eno le dilo tse di tshwanang ka yona.

Kgopolo ya motho ya **thuto ya Pharologanyo** ke gore barutwana ba ithuta botoka fa ba bontsiwa tsela e thuto e farologanang ka teng le kafa e tshwanang ka teng mo dilong tsa di rutiwang. Seno se re bontsha gore barutwana ga ba kgone go thaloganya dilo sentle kwantle ga gore ba bone ditsela kgotsa maemo a kgang eno farologaneng ka teng kgotsa e tshwanang ka teng. Fa o bontsha barutwana kgopolo ya se e leng sona le se e seng sona, ba tla kgona go itse go tlhopha seno sa botlhokwa.

Fa re e tlhalosa ka tsela e e bonolo fela, **fa o batla go ithuta kgopolo e e rileng sentle, e ithute dilo tse e fetogang mo go tsona le mo e sa fetogeng teng.**

Seno se ba thusa go lemoga dikarolo tsa botlhokwa tsa kgopolo eo. Rona barutabana re ka thusa ka go bontsha dikao tse di farologaneng tse di tlotlomatsang dipharologanyo tseno, gore re thusa barutwana gore ba thaloganye mo go tseneletseng.

Dikarolo tsa konokono tsa thuto ya pharologanyo mo go ruteng le mo go ithuteng di akaretsa:

11.1. Tlhome mogopolo mo diponagalong tse di bothokwa: Morutabana o tlhomolola dikarolo tsa bothokwa ka kgopolo e e rileng a bo a re neela dipharologanyo tse di gatisang diponagalo tseo.

11.2. Dipharologanyo tsa Dipaterone: Morutabana o dirisa dipaterone tse di farologaneng go thusa barutwana gore di farologana kae le gore di shwane kae. Dipaterone tseno di akaretsa:

- **Pharologanyo:** Go bontsha dikao tse di farologaneng go tlotlomatsa diphetogo.
- **Kakaretso:** Go dirisa dipharologanyo mo teng ga kgopolo e e rileng gore o tlhaloganye thuto mo go feletseng.
- **Karogano:** Go arola karolo nngwe le nngwe mo bone bothokwa jwa yona.
- **Go kopanya:** Go kopanya dikarolo tse di bothokwa gore o bone gore di tlhakana jang le kgopolo e e rileng.

11.3. Temogo: Fa barutwana ba itemogela dikao tse di farologaneng, ba tla kgona go lemoga dikarolo tse di bothokwa e go nna le kgopolo e e tseletseng ya se ba se rutiwang.

12. Tsela ya go Ruta go Kwala Dikhoutu le Diroboto

Go ruta le go ithuta ke tse di dirisa leano la go ithuta le le ikaegileng ka mathata, le le gatelelang mokgwa wa tlhagafetseng, o o tsepameng wa morutwana.

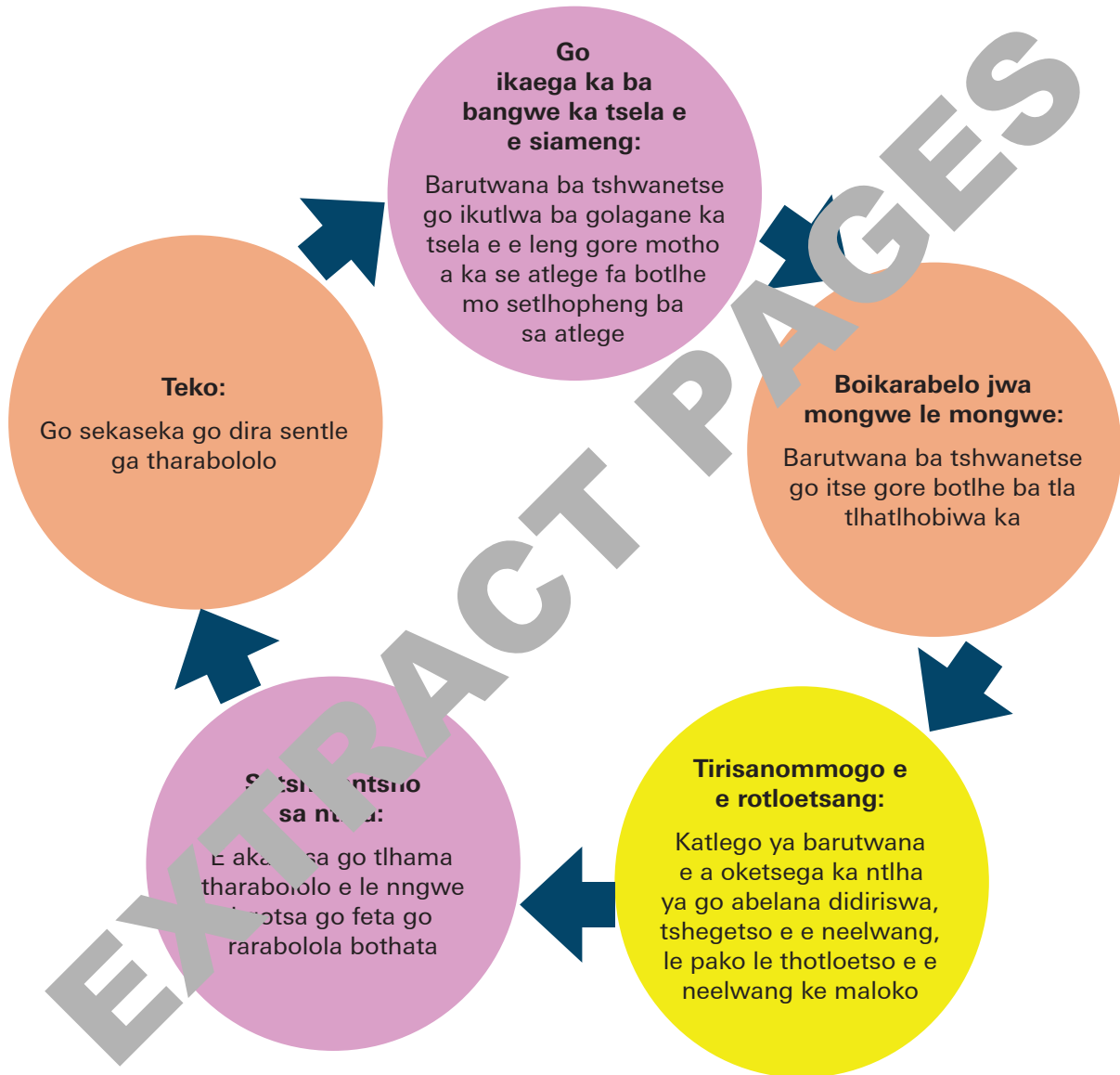
Go Ithuta go go Ikaegileng ka Bothata Kgatlhanong le Go Ithuta go go Tlwaelegileng	
<ul style="list-style-type: none"> • Barutwana ba dira ka ditlhopho go rarabolola mathata a tlwaelegileng. • Tlhomolola bokgoni jwa go dira mo tshwantshwantsho go buisana le go dira dipatlisiso. • Go tshwara bokgoni jwa go akanya ka tsela e e mpe le go rarabolola mathata. 	<ul style="list-style-type: none"> • Barutabana ba a ruta. • Barutwana ba newa tshedimosetso kwantle ga gore ba dire maiteko a magolo. • E ikaegile ka go ithuta ka tlhogo le go tshwara dilo ka tlhogo.

12.1 Go Ithuta ka Tirisanommogo

Go ithuta ka tirisanommogo ke mokgwa wa go ruta o mo go one barutwana ba dirang mmogo ka ditlhopho tse dinnye, ba thusana go ithuta. Seno se dira gore ba itumelele go ithuta e bile se ba thusa go tokafatsa bokgoni jwa bone.

Ditiro tsa go ithuta le ditiro tsa go ithuta di rulaganngwa le go tlhokomelwa ke morutabana, mme leloko lengwe le lengwe la setlhopho le tlhokomela tsela e ba

bangwe ba dirang ka yone mo dithutong tsa bone. Go atlega go tsenya tirisong go ithuta ka tisanommogo, bakwadi ba ba eteletseng pele mo lefapheng leno (David Johnson le Rodger Johnson) ba gatelela go rotloetsa ka maikaelelo dilo tse tlhano tsa motheo (Johnson & Johnson, 2021:55-56)



12.2. Go Rulaganyetsa Bobedi ka Bobedi

Go rulaganya ka bobedi ke mokgwa wa go ruta o mo go one barutwana ba babedi ba dirang mmogo go wetsa tiro kgotsa maikaelelo a a tshwanang. Go dira dithulaganyo ka bobedi go tswa mo madirelong a dithulaganyo. Mo thulaganyong ya sekolo, morutwana a le mongwe o tla diragatsa seabe sa “mokgweetsi”, mme moithuti yo mongwe ene ke “mosupatsela”.

Mokgweetsi = o dirisa khiiboto kgotsa o kwala mo pampiring.

Mosupatsela = dirisa metswedi le ditebosešwa tsa tiro ya mokgweetsi.

Mo motseletseleng ono, ditiro di le dintsi tsa kiriti di tla akaretsa morutwana a le mongwe yo o dirang jaaka “mokwadi wa khoutu,” yo o tla rulaganyang “roboto.” Morutwana o tla tsaya karolo ya “roboto,” go latela ditaello tsa mokwadi wa khoutu.

12.3. Go ikatisa ka metlha

Go kwala khoutu le diroboto go tlhoka gore motho a akanye ka tse e masisi, a tsepamise mogopolo le go ikatisa ka metlha. Mokgwa ono o tshela tse go nna le boikaelelo, o rulaganngwe sentle, mme o agelwe ka kepele no kitsong e e setseng e le teng. Go ikatisa ka go rata go akaretsa go nna maikaelelo a a rileng, go utlwa gore ba bangwe ba ikutlwa jang go dira maiteko a go tokafatsa bokgoni jwa gago

12.4. Saense ya go ithuta

Kharikhulamo e kaelwa ke saense ya go ithuta, e e lemogang maano a a gaisang a go ruta a a theilweng mo bosuping go tokafatsang go nna le kitso ka lobaka lo lolele le go tokafatsa dipholo tsa go ithuta.

13. Go laola thuto ya tsela e e atlegang

Rulaganyetsa kwa pele

Rulaganya dithuto o na le dikgelele di tlhamalela le didirisi tse di siameng. Mmo se boloka maemo se thusa baithuto o nna ba tlolele mogopolo.

E dire bonolo

Arola ditiro go nna tsa di dikgato tse di potlana, gore barutwana ba di latele ka tsela e e bonolo.

Fetofetola Maemo

Iketleitse go fetola thuto ya gago fa o lemoga gore barutwana ga ba tshaloganye kgotsa fa go nna le dikgoreletsi.

Akaretsa barutwana

Dirisa ditiro tse di farologaneng gore barutwana ba nne ba kgatlhegetse thuto le go nna le seabe.

Laola Nako

Dirisa thulaganyo mme fela o letle barutwana go botsa dipotso le go lekelela dikgopolo tse disha.

14. Go laola phaphosiborutelo e kgolo

- Go laola diphaposiborutelo tse dikgolo, e leng selo se se tlwaelegileng thata mo dikolong di le dintsi, e ka nna kgwetlho. Go dira dikaelo tse bana botlhe ba tlileng go di ikobela go thusa gore ba go tlotle le gore ba itumelele go ithuta. Go dira gore barutwana ba ithophele mekgwa e ba tlileng go e dirisa mo phaposing le go ipeela dikgele tsa go ithuta go dira gore ba ate ditaelo tseno le go di ikobela ka tshosologo. Mekgwa e e siameng go laola phaposiborutelo e akaretsa:
- Go baya meelwane: Tlhalosa sentle melao le meelwane tse e boniweng go tloga fela kwa tshimologong mme o ba gopotse yone nako le nako.
- Tlwaelo le popego: Go tlwaela go dira dilo ka molao go thusa go laola diphaposiborutelo tse dikgolo.
- Tiro ya balekane: Go abela barutwana go dira ba le tshwar kgotsa e le setlhopha go thusa gore ba rutane, ba dirisane le go rwa nako nako e le setlhopha.
- Dithuso tsa pono le tsa kutlo: Dirisa dithuso tsa pono (diphousetara, matshwao a diatla) le dithuso tsa kutlo (mmimo, go opa diatla) go godisa ditaelo.
- Taelo e e farologantsweng: Dirisa gore dithuto tsa gago di fitlhelele ditlhoko tse di farologaneng tsa barutwana mo phaposing.
- Go botlhokwa go gakololelwa gore bana botlhe ke batho ba ba farologaneng, mme ga go kgonege go akaretsa go tshaloganya le kitso mo ditsong tsotlhe le ka nako e nngwe. Go ithuta go nna teng ka ntlha ya go nna le maitemogelo barutwana mongwe le mongwe o na le kitso ya gagwe e e leng teng le ikamileng ka maitemogelo a nako e e fetileng; mongwe le mongwe o go kgonege.
- Gore barutwana ba gago ba dire ka natla, o tshwanetse go ba thusa gore ba itshepe barutwana yo o itshepang ke yo o ikemiseditseng go lebana le dikgwetlho mme ka jalo o tla tshaloganya megopolo e mentšhwa motlhofo.
- Go bono tikologo e e sireletsegileng e mo go yone barutwana ba ikemiseditseng go itsenya mo kotsing le go dira diphoso ke selo se se tlwaelegileng e bile ke karolo ya thulaganyo ya go ithuta. Dirisa gore barutwana ba atlege fa ba simolola loeto lwa bone lwa go ithuta bokgoni jwa motheo jo bo akareditsweng mo Kgatong ya Motheo ya Seesemane. Seno se raya go simolola mo maemong a bone, go ba naya motheo, le go ba ema nokeng fa ba ntse ba ithuta puo e ntšhwa le go ithuta go bala le go kwala.

- DUMELA MO GO BAO O BA RUTANG! Morutwana mongwe le mongwe o tshwanetse go itse gore go na le mongwe yo o dumelang mo go ene le gore o tla atlega.

15. Go Dirisa Mokgwa wa go Ithuta ka go Tlhama le go Dirisa Ditemosi

Go tsenya ditiro tsa go tlhama mo ditlhwaelong tsa letsatsi le letsatsi tsa phaposiborutelo go ka dira gore barutwana ba nne le seabe le go tshafatsa tsela e ba tlhaloganyang tikologo ya go ithuta ka yone. Seka mmogo go dirisiwa lefatshe ka bophara go dira gore go nne le moya o o siameng, go tshala maikutlo le go thusa mo go ithuteng. Dipatlisiso di bontsha gore mmogo go thusa boboko go dira dilo, go bua le go gakologelwa dilo tse o di ithuteng. Fa o dirisa mmogo, netefatsa gore ga o ame ka tsela e e sa siameng barutwana ba ba nang le mathata a go utlwa kgotsa a go utlwa le go akaretsa barutwana mo go tlhopheng mmogo go dira gore e nne boitemogelo bo akaretsang botlhe.

Go tshikinyega, go opela go ka tlhotlheletsa barutwana le go ba thusa go gakologelwa dilo ka go di boaboeletsa, go di opela le go itshidila mmele. Ditiro tseno di dira gore dilo tse di dirwa go tshafatsa le letsatsi di farologane mme di dira gore go ithuta go nne monate.

16. Tikologo e nngwe e

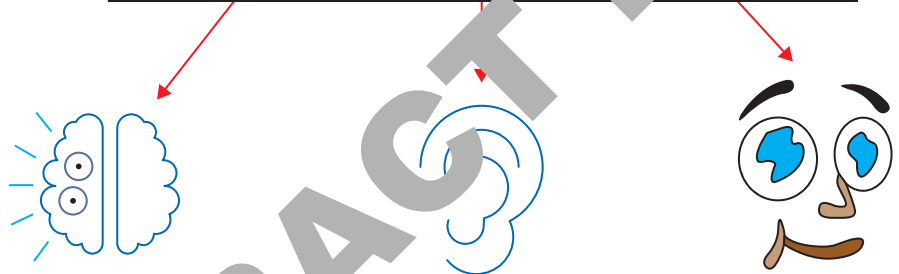
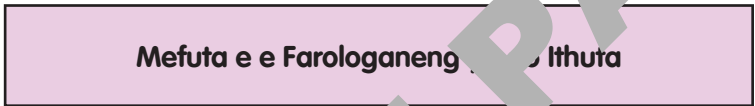
Go dira gore go nne monate a farologaneng kgotsa go fetola tsela e phaposiborutelo e rulagantsweng ka yone go ka dira gore go nne motlhofo go ithuta. Ka dina tse dingwe go tshwarela dithuto kwa ntle kgotsa go rulaganya lefelo la phaposiborutelo sešwa go ka thusa. Fa e le gore ga go kgonege go tsaya maemo letsatsi a thuto, go dira diphetogo tse dinnye fela mo phaposing ya borutelo, tse di jaaka go fetola tsela e ditulo di rulagantsweng ka yone kgotsa go tsenya go dirisiwa tse dišwa, go ka dira gore tikologo e nne e e kgatlhang.

Fa go kgonega, maeto a go ya go bona mafelo a a farologaneng a neela ka tšhono ya go ithuta go tswa mo maitemogelong a bone. Ka metlha tlhomamisa gore o latela dikaelo tsa sekolo sa gago fa o rulaganya maeto. Fa e le gore o ka se kgone go ya kwa maetong, kopa batsadi kgotsa batho ba mo lefelong la lona gore ba go thuse ka dilo tse di amanang le ditlhogo tse go ithutiwang ka tsone go dira gore go ithuta go nne monate.

17. Go Tshegetsa Mefuta e Farologaneng ya go Ruta

17.1. Lemoga gore barutwana ba ba farologaneng ba ithuta ka ditsela tse di farologaneng

Rotlhe re amogela tshedimosetso, re e dirisa le go e tshalosa ka ditsela tse di farologaneng go ikaegile ka tsela e re ithutang ka yone. Nna o gakolofetse gore mo phaposiborutelong ya gago go tla bo go na le barutwana ba mokgwa wa bone wa go ithuta o farologaneng le wa gago. Bua ka mefuta e e farologaneng ya go ithuta mo phaposiborutelong. Bana bangwe ba tla go bona tshedimosetso e ntšhwa, fa ba bangwe bone ba ithuta botoka kgone utlwa ka ditsebe. Fa o ka kgona go bua ka mekgwa e e farologaneng ya go ithuta, o tla kgona go oketsa bokgoni jwa barutwana, go tokafatsa go itshepa le go itlotla ga bone.



Go Tlhaloganya Dilo ka Tselo e e Utlwalang/ya Dipalo.

- O rata go dira ditshedimosetso, go tlhaloganya dilo, go dira ka dipalo.
- O ithuta botoka ka go baya dilo ka ditlhopa, go di kanganya le go dira ka ditšhwa tse di raraaneng.
- **Dikao tsa ditiro:**
- Go rarabolola bothata
- Rotloetsa barutwana go lekeletsa
- Ba laletse go tla go go thusa kgotsa
- Rulaganya didiriswa tsa phaposiborutelo

Go Bua ka Puo/Go Utlwa:

- O rata go bala, go kwala le go anela dikgang
- O ithuta botoka ka go bua, go utlwa le go bona mafoko
- **Dikao tsa ditiro:**
- Tlamela ka tshedimosetso e e kwadilweng
- Buisetsa barutwana
- Ba rotloetse go go bolelela ka kgang kgotsa ka tshedimosetso e ba e buisitseng kgotsa e ba e utlwileng
- Go abelana sengwe se ba se kwadileng
- Ba rotloetse go ya kwa dilaaboraring kgotsa go dira dipatlisiso mo inthaneteng
- Tlamela ka metshameko ya mafoko

Ditshwantsho:

- O rata go thala, go aga, go tlhama le go bopa dilo
- O ithuta botoka fa a dirisa mebala, ditshwantsho le ditaekeramo.
- **Dikao tsa tiro**
- Neela ka mefuta e mengwe ya ditshwantsho go na le go dirisa mafoko sekao ditshwantsho, diphousetara, dimmapa tsa tlhaloganyo, ditshwantsho, dikerafo le ditshwantsho.

18. Boitekanelo jwa Morutabana

Go ruta ke tiro e e nang le kgatelelo e kgolo go baitsenape ba bantsi. Ga se fela gore ke tiro e e batlang nako e ntsi ya gago mme e na le dikgwetlho di le dintsi tsa go tlhoka didirisiwa, gape e na le dikotsi di le dintsi mo nageng ya rona e e nang le bosenyi le tirisodikgoka tse di kwa godimo. Ka ntlha ya mabaka ano go botlhokwa gore o nne le mekgwa e o e dirisang go itlhokomela, go fokotsa ditiragalo tse o tla iphitlhelang o tsene mo kotsing.

Go ela tlhoko le go tlhatlhanya

Tsaya metsotso e le mmalwa letsatsi lengwe le lengwe gore o tlhatlhanya, ikatiso ya go hema le go ritibatsa mogopolo di ka go fokoletsa kgatelelo ya maikutlo. Go na le di dirisiwa tsa mahala tsa go tlhatlhanya tse o ka iponelang tsona mo mmananeteng tse o ka di dirisang mo phaposiborutelong ya gago ka dinako tsa gago dimetse.

Rotloetsa baagi ba ba tshegetsanang

Tsenela kgotsa simolola setlhopha sa barutabana mmogo le wena go thusana le go ithuta. Go arolelana maitemogelo le maikutlo a gago go ka go thusa go lebana le dikgwetlho tsa go ruta le go go naya mekgwa e ntsi ya go itshoka.

Go tshela sentle

Ja sentle, o ikatise le go tlhokomela lentšwe la gago. Go nna le mekgwa e e siameng ya ka metlha jaaka go nna le mekgwa e e siameng, go ja dijo tse di nang le dikotla le go ikatisa ka metlha di tla go thusa go tshela maatla le go sireletsa boitekanelo jwa gago.

Boitekanelo jwa mogopolo le jwa maikutlo

Go ruta (go bašwa), ba ba leng mo kotsing go ka go batla maikutlo. Go botlhokwa gore o nne le lefelo le le bolokese gileng koo teng o ka buang ka maikarabelo a gago ka maikutlo a gago le go fokotsa boima jwa mogopolo jwa seabe se o se tshamekang.

19. Tlhatlhobo

Tlhatlhobo e akaretsa mefuta e e farologaneng ya mekgwa e e dirisiwang go lekanya kgatelopele ya barutwana le go tlhaloganya mo dipalong. Ga se fela ka ga ditlhatlhobo - ke go batlisisa gore barutwana ba tlhaloganya dikgopolo le go dirisa bokgoni jwa bone sentle go le kana kang. Tlhatlhobo e e tsweleng ya barutwana ba kgato ya motheo e tlhophatsa go lekola kgatelopele ya barutwana le dipholo tsa go ruta. E go letla go sekaseka mekgwa ya go ruta le kgatelopele ya morutwana le go dira ditshwetso tse di tshwanetseng tsa go ruta ya letsatsi le letsatsi. Ditshekatsheko di tshwanetse go tsenngwa mo thulaganyong mo thulaganyong ya go ruta le go ithuta ka go dirisa mekgwa e e kgang, e e itumedisang le e e rotloetsang go dira gore barutwana ba nne seabe ka matlhagatlhaga.

Tlhatlhobo e akaretsa mekgwa e e farologaneng ya go lekanya kgatelopele ya barutwana le go bona gore ba tlhaloganya dilo tsa go ruta. Fa go dira ditlhatlhobo tseno ka gale di tla go thusa go bona gore barutwana ba tlhaloganya dilo jang le go di dirisa mo botshelong. Mo kgatong ya motheo, go dira ditlhatlhobo tseno nako le nako go go thusa go bona kgatelopele ya morutwana le gore o kgone go ba ruta sentle. Seno se tla go thusa go sekaseka mekgwa e o e dirisang ya go ruta le go bona kgatelopele ya morutwana, mme se tla go thusa go dira ditshwetso tsa ka metlha tse di botlhale le tse di mpele.

19.1. Tlhatlhobo ya go ithuta

Tlhatlhobo ya go ithuta e tsenngwa mo thulaganyong ya gago ya go ruta, moo teng go neng monate le go nna le seabe mme mekgwa e e dirisiwang e tshwarutwana go itumelela seo. E go thusa go bona gore barutwana ba tlhoketshuso e e kana kang le go go kaela gore o kgone go ba ruta ka tsela e e tshwanetseng.

Ela tlhoko ka nako ya ditiro

Sheba kafa barutwana ba dirang ditiro tsa bona mme o ba botse dipotso tse di ba kaelang go ba thusa.

Dumela le go Gana ka monwana wa kgonope

Dira seno morago ga thuto go bona gore barutwana ba go tthalogantse.

Go itlhatlhoba

Barutwana ba thala sefatlhego sa roboto se se tsamaisanang le tsela e ba ikutlwang ka yone ka tiro e ba e dirileng sentle.

Go rulaganya ka bobedi ka bobedi

Barutwana ba akanya ka bobone, ba buisana le tsala ya bone, go tswa foromo ba ba tlotla le tlotla go bona gore ba tthaloganya eng.

Begela Molekane

Barutwana ba arolelana tiro ya bona le barutwana mmogo le bona le go ba naya pegelo e e rotloetsang ka ga se ba se dirileng.

Ditiro tsa mmele otlhe

Metshameko e e monate, e e dirwang ke bana botlhe e go thusa go bona gore ba kgona go dira eng.

Dipotso tsa nako ya ditiro

Barutwana dipotso tse di tshwanang maikutlo go rotloetsa barutwana go tthalosa megopolo ya bona le go kgona go baya mabaka.

19.2. Go dira tlhatlhoba ya thuto e tswelletse

Go dira tlhatlhoba ya thuto e tswelletse go dira gore barutwana ba ele tlhoko kgatelopele ya thuto, le go ba thusa go tsaya maikarabelo ka se ba ithutang sona. Fa o dira jaloka ba thusa gore ba tthaloganye se ba ithutang sona, mme ba tla ithuta mo mo oketsegileng le go ikitse botoka.

19.2.1. Tlhatlhoba ya go ithuta

Tlhatlhoba ya go ithuta e dira gore o kgone go bona diphitlhelelo tsa morutwana mo dikarolong tse di farologaneng ka nako e e rileng, mme seo se go thusa go lekanya kgatelopele yotlhe ya bona le go go thusa go tsaya ditshwetso tse di botlhale mo go se ba se ithutang.

20. Khoutu ya palelo

KHOUTU YA PALELO	TLHALOSO YA BOKGONI	DIPERESENTE
7	Phitlhelelo ka dinaledi	80–100
6	Phitlhelelo ka matsetseleko	70–79
5	Phitlhelelo e e botlhokwa	60–69
4	Phitlhelelo ka tekano	50–59
3	Phitlhelelo e e lekanyeditsweng	40–49
2	Phitlhelelo ya motheo	30–39
1	Ga a fitlhelela	0–29

21. Leano le le Akantshiwang le go tuta:

Mophato 2

Paka 1:		
Beke	Setlhogo	Bokgoni
1.	Re tlhoka metsi go tshela	C1 C2 C3
2.	Dijo tse di nang le dikotla di botoka	C1
3.	Mafelotshirelelwane dira go tse nna babu, mabile e bile re omile	C3 C6
4.	Technoloji e mosola	C2 D1 D3
5.	Mongwe le mongwe o kgethegile	C1 C3 R1 R5
6.	Re tshela mo lefatsheng la dijithale	D2 D3

7.	Tlhopha tsela	C2
		C3
8.	Ditatelano le dipateroneng tse di kgatlhisang	C2
		C6
9.	Ditatelano tse di itekanetseng	C2
10.	Roboto e e tsamayang ya ga Thabo	C1
		C2

Paka 2:

Beke	Setlhogo	Bokgoni
1.	Dikgakologo di gogile	C2
		C3
2.	Nna tsala e e molemo	C2
		D2
3.	Kwala khoutu ya roboto	C1
		C3
		R1
		R2
		D1
		D2
4.	Ditlha ke eng	C1
		C2
		R6
5.	Phologolo wa mampiri	R5
6.	Didiriswa tsa me tsa thale	C2
		C3
		D3
7.	Tselo thekenoloji e feogileng ka yone	R1
		D1
		D3
8.	Go namola dinaledi tsa lewatle	C2
		C3
		R6

9.	Dira mmutla wa pampiri	C1
		C2
		R5
10.	Thusa diphologolo go ya gae	C6

Paka 3:

Beke	Setlhogo	Bokgoni
1.	Go ijesa monate mo polaseng	C1
		C2
		C3
		R1
		R2
		R4
2.	Dimela tse di ntle mo dipitseng	C4
		C6
		C7
		D3
3.	Baakanya roboto	C2
		C3
		R3
4.	Batla dipopego mo polaseng	C1
		C2
		R3
		R4
5.	Kwala melantsu e sephiri	C4
		D8
6.	Rara borola e moutu tsa sephiri	C6
		C7
		D2
		D4
7.	Mafetlho a a kgatlhisa	R5
		R6
		R7

8.	Batla thuso e e tshwanetseng	C2
		C3
		C4
		R1
		R2
		R3
		R4
9.	Batla tsela	C1
		C2
		C3
		C7
		D5
10.	Kwala khoutu	C1
		C2
		C3
		C4
		C6
		C7
		D1
		D2
		D3

Paka 4:

Beke	Setlhogo	Dokgoni
1.	Fa e le seno, moga ke eng?	C2
		D6
2.	Diroboti tsa Aforika Borwa	C2
		C3
		R2
		R3
3.	Sengwe le sengwe ka naga ya rona	C1
		R5
4.	Dira metshameko e e monate	C3
		R5

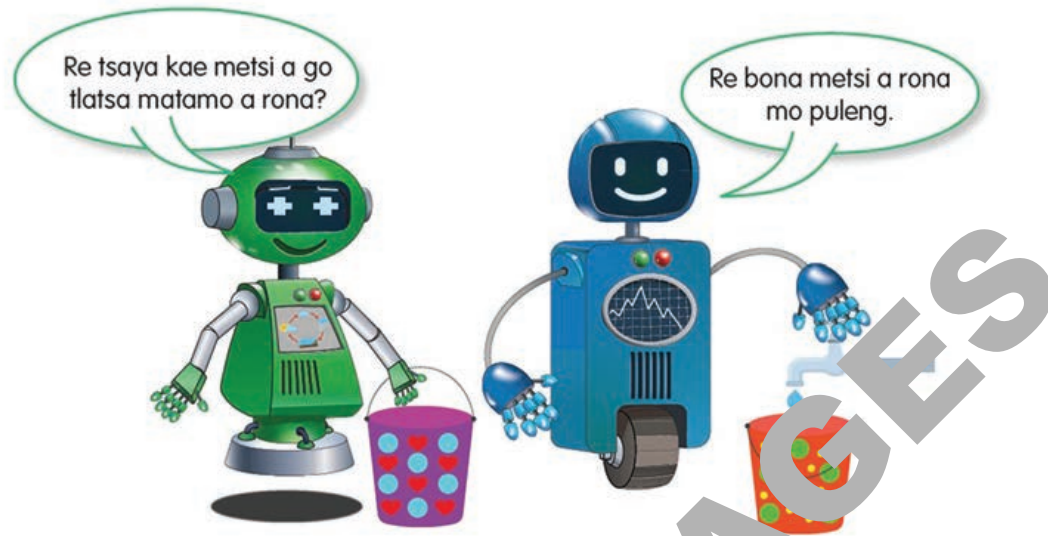
5.	Ke moagi wa dijithale	C2
		C3
		R1
		R3
		D2
		D3
		D6
		D7
6.	Tlhaeletsano bogologolo le jaanong	C7
		R6
		R7
7.	Khoutu ke eng?	D7
		D8
		D9
8.	Suthisa lebokoso	C2
		C3
		C6
9.	Nna moitseanape wa mokgokolosa	C1
		C2
		C4
		C5
10.	Thekenoloji e e re dikologileng	D2
		D3
		D4
		D6

EXTRACT PAGES

EXTRACT PAGES

Paka 1 Beke 1: Re tlhoka metsi go tshela

Karolothuto	Go kwala khoutu Diroboto				
Nako ya go ruta	<ul style="list-style-type: none"> • Ditiro tsa tiragatso: 30 metsotso • Ditiro tsa go ruta le tsa buka: 30 metsotso 				
Dintlhana go morutabana	<p>Mo thutong e, barutwana ba tla ithuta ka modikologo wa metsi le go dira leotwana la modikologo wa metsi ba dirisa Bokgoni jwa go Akanya ka Khomphiuta.</p> <p>Re akanya gore o simolole ka "A re Simolole" go dira gore barutwana ba lekeletse bokgoni pele o ba itsise "Bothata" le go ba tsa gore ba feleletse ditiro.</p> <p>Kwa bofelong jwa beke, re ne ra tsenya lenaane tse nang le dikao tse di motlhofo tsa go dirisa dikakanyo tsa go akanya ka dikhomphiuta tse o ka di bolelelang barutwana fa nako e letla.</p> <p>Ela Tlhoko. Barutwana ga ba tlhoke go tloga thutabopu ya bokgoni jwa go akanya ka dikhomphiuta.</p>				
Metswedi e e atlenegisitsweng	A re simolole Tiro 1 Tiro 2 Tiro 3				
	<table border="1"> <tr> <td>Tiro ya tiragatso: - Dikonopo - Diphekese - Dibopego - Diboloko - Dithobane - dimonamo - Dikhomphiuta tsa buka</td> <td>- Phousetara ka tsa - ditshwantsho tsa - modikologo wa metsi</td> <td>Morutwana mongwe le mongwe o tshwanetse go nna le: - Phini ya go thala - 2 x A4 didiko - Sekere - Dikherayone tsa phensele</td> <td>- Dikarata tsa khoutu</td> </tr> </table>	Tiro ya tiragatso: - Dikonopo - Diphekese - Dibopego - Diboloko - Dithobane - dimonamo - Dikhomphiuta tsa buka	- Phousetara ka tsa - ditshwantsho tsa - modikologo wa metsi	Morutwana mongwe le mongwe o tshwanetse go nna le: - Phini ya go thala - 2 x A4 didiko - Sekere - Dikherayone tsa phensele	- Dikarata tsa khoutu
Tiro ya tiragatso: - Dikonopo - Diphekese - Dibopego - Diboloko - Dithobane - dimonamo - Dikhomphiuta tsa buka	- Phousetara ka tsa - ditshwantsho tsa - modikologo wa metsi	Morutwana mongwe le mongwe o tshwanetse go nna le: - Phini ya go thala - 2 x A4 didiko - Sekere - Dikherayone tsa phensele	- Dikarata tsa khoutu		
Bokgoni	<ul style="list-style-type: none"> • 1 • 2 • 3 				
Dikgono	<p>Barutwana ba tla ithuta go:</p> <ul style="list-style-type: none"> • Lemoga le go farologanya dikarolo tse di farologaneng tsa modikologo wa metsi. • Dirisa kgopolo ka go tlosa ditshwantsho tse di sa tlhokegeng mo tatelanong. 				
Kitsa	<p>Barutwana ba tla dira seno ka go:</p> <ul style="list-style-type: none"> • Go bontsha gore o tlhologanya modikologo wa metsi le ditlamorago tsa one. • Go baya tatelano ya modikologo wa metsi ka tatelano e e siameng. • Go lemoga dikgato tse di farologaneng tsa modikologo wa metsi. 				
Tirisanommogo	<p>Dikgono tsa botshelo: Modikologo wa metsi Dipalo: Rarabolola bothata ka tsela e bo leng ka yone</p>				



A re simolole

Thusa Tumi

1. Leba dibopego tse di mo dikgamelong tsa metsi.
 - a. Batla kgamelo e e nang le dikgololame tse di botala jwa tlhaga le marontho a a serolwana.
 - b. O ne o tshwanetse go batla eng? Ke eng se o neng wa tshwanelwa ke go se ithlokomolosa?
 - c. Batla kgamelo e e nang le kgogele tse di botala jwa loapi le dipelo tse di khibidu. Ke dikgamelo di le kae tse di nang le dipelo tse dikhibidu?
 - d. O ne o tshwanetse go batla eng? Ke eng se o neng wa tshwanelwa ke go se ithlokomolosa?



Tiro 1

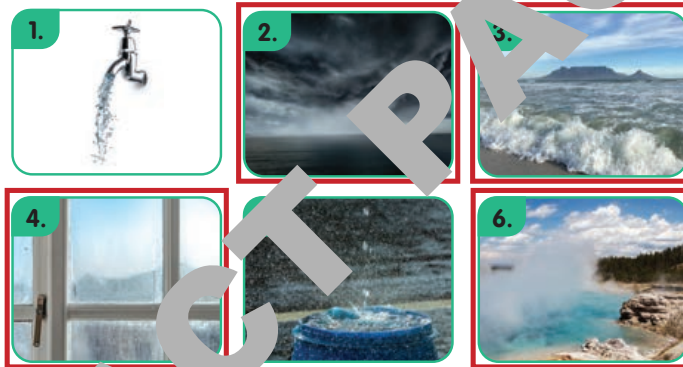
Paka 1 Beke 1

Modikologo wa metsi

Kaelo ya tiro

- Leba ditshwantsho 1–6 mo Buka ya Morutwana.
- Ka bobedi ka bobedi ba bua ka ditshwantsho le go umaka phousetara ka go buak'oga wa metsi.
- Ba swetsa ka gore ke ditshwantsho dife tse pedi tse di sa tshwanen.
- Jaanong ba tshwanetse go tlotla ka ditshwantsho tsa modikologo wa metsi le go di baya ka tatelano e e siameng (go latelana ga tsone) le go tlhalosa lebaka la gogo ba dira jalo.
- Karabo

Go mowafala, Go metsifala, Go na ga pula, Go kokoanya



Ditiro tse dingwe tse di tshwang

- Baya phousetara wa modikologo wa metsi mo botong gore barutwana ba kgone go e dirisa fa go mo gaga.
- Morutwana o tshwanetse go mongwe o na le kgetsana e e nang le selotlele le pene e e nnela moruri.
- Thothaba, lewatle, letsatsi, maru le pula - ka tatelano e e siameng jaaka di diragala go mo modikologong.
- Ba botlhe ba setse ba baakantse dikgetsi tsa bone tse di nang le dilotlele. Jaanong barutwana mongwe le mongwe o tlatsa kgetsana eno ka 1/4 ya metsi a bo a e tswala go godimo.
- Tlala mola o o supang gore metsi a kwa kae.
- Tlogela kgetsana eo mo letsatsing mme o lebelele modikologo wa metsi o diragala fa pele ga gago.

Mekgwa ya thuso

Barutwana ba ba gatetseng pele: Naya barutwana ditshono tse di oketsegileng tsa go batlisisa dikakanyo tse nne ka go baakanyetsa ditiro tse di oketsegileng go di dirisa.

Barutwana ba ba nang le mathata: Fa o dira tiro ya setlhophha kgotsa ya bobedi ka bobedi, kopanya barutwana le ba ba tlhaloganyang botoka dilo tse di rutiwang. Letla gore balekane ba gago ba ba rute fa ba ntse ba tshwaregile ka ditiro tse dingwe. Lemoga barutwana ba tota ba nang le mathata mme o dire le bone mo mmetsheng o ntse o dirisa didirisiwa tse di tlhomameng go tlhalosa dikgopolo.

Tiro 2

Paka 1 Beke 1



Didiriswa tse dingwe

- pampiri ya mmala
- pente
- sekgomaretsi

Kaelo ya tiro

Simolola thuto ka go bua ka setshwantsho sa modikologo wa metsi. Tlotha ditlhatso tse nne le barutwana mme o netefatsa gore ba tlhloganya tatelano ya mmetso.

1. Latela ditaelo tsa go dira leotwana la gago la modikologo wa metsi

- **Naya** ditaelo tse di latelang ka iketlo le ka tsela e e utlwalang sentle. Tse ka wa tsenya tshedimosetso e e sa tlhokegeng.
- Morutwana mongwe le mongwe jaanong o na le ditse tse di tsa A4 tse di kgaogantsweng ka dikotara. Kgaola dikgolokwe tse no bobedi.
- Tsaya nngwe ya didiko tse di kgaogantsweng ka dikotara mme o e kgaole ka dikotara di le 1/4. Kgaola mo meleng.
- Jaanong o na le sediko se le 1 se se nang le dikgato di le 4 le sediko se le 1 se se nang le 1/4 e e kgaotsweng.
- Tsaya sediko se se nang fela le 3/4 ka se se sekhurumelo sa ka fa pele. Kgabisa "Modikologo wa me wa metsi". Dira gago nne mebalabala le go bonala sentle.
- Tsaya sediko se se sa ntseng o na le dikotara tsotlhe tse 4. Thala dikgato tse nne ka tatelano e e siameng e e tsamaisang le tshupanako.
- Gakologelwa go tshwaya kgato nngwe le nngwe.
- Tsenya sediko sa setshwantsho mo goimo ga sediko se se nang le dikgato tse nne. Tsenya phini e e kgaoganeng.
- Bona gore a modikologo wa gago o mo tatelanong e e siameng fa o o dirisa, fa o sa o dirise.. ba barutwana mme simolole gape.
- A modikologo wa gago ga motlhofo?
- A ditshwantsho di tle ka mebalabala?
- A ditshwantsho di mo tatelanong e e siameng?
- Me eng se se ka se tokafatsang?

Thuto: Thusa barutwana ka bobedi fa go tlhokega. Barutwana ba tlotla mmogo ka bobedi fa ba ntse ba tlhama modikologo wa metsi.

Mogwa ya thuso

• Na ditiro tsa tlaleletso

Ditiro tse dingwe tse di akantshiwang

- Dirisa poleiti ya pampiri, pampiri e e kgaotsweng go nna kgolokwe kgotsa dikhukhu tsa polasetiki tse di dirisitsweng gape.
- Neela barutwana ba gago tege ya motshameko ya mebala e e farologaneng - mmala o o serolwana, o o botala jwa legodimo, o mosweu le mmala mongwe le mongwe go bontsha metswi ya modikologo.
- Go tswa foo barutwana ba dira modikologo wa metsi jaaka go bontshitswe mo setshwantshong.
- Kopa barutwana go tshwaya dikgato tse nne ka go kwala mo manathwaneng a pampiri

Tiro 3

Paka 1 Beke 1



Kaelo ya tiro

1. Dira ditaelo tsa go isa Binkie kwa mothong yo o mo setulong sa maotwana.

- Simolola thuto ka go naya setlhophha sengwe le sengwe dikarata tsa go kwala khoutu.
- Morago ga moo barutwana ba leba mmepe wa kiriti mo bukeng ya morutwana.
- Buisetsa barutwana dipolelo.
- Ka ditlhophha tsa bobedi ka bobedi, ba dira ditaelo tse di tla thusang Binkie go fimelela motho yo o mo setulong sa maotwana.
- Tlhalosetsa barutwana gore metswi e ka dirisiwa makgetlo a le mmalwa.
- **Botsa:** A ditaelo tsa gago di ne tsa isa Binkie kwa mothong yo o mo setulong sa maotwana?

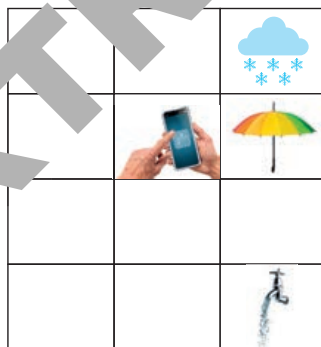
Thusa Barutwana ba bobedi ka bobedi ba ba sokolang go dira ditaelo.

Mekgwa ya thuso

- Tsenya ditiro tsa mmele otlhe gore barutwana ba mokolole ka ga go kaelwa.
- Tsaya barutwana o ba ntshetse kwa ntle gore ba tsele le lefelo le legolo le ba ka tsamayang mo go lone. Fa seno se sa kgonege, tsa se dire mo phaposing ya borutelo.
- Tshameka "Simon a re" sk. "Simon a re" Tsamaela ka fa molemeng."

Ditiro tse dingwe tse di akannaganeng

- Dira kiriti ya 5 x 5 mo mmetse e e kgotsa kwa ntle mo lebaleng la metshameko.
- Baya dikgato tse nne tsa mmetse e e kgotsa mokgokolosa mo dibolokong tse di farologaneng.
- Ka bobedi ka bobedi kopa barutwana go kwala khoutu ya molekane wa bone barutwana ba kwala molekane khoutu go dikgato fa e ntse e diragala.
- E seng jalo, o ka kwala molekane wa bone barutwana ba le mmalwa khoutu go dikgato tse di farologaneng go dikgato tse di farologaneng fa phaposi yotlhe e reeditse.



Bokgoni jwa go Nagana ka Khomphiuta

Kgopolokakaretso	Fa motsadi wa gago a go kopa gore o phepafatse ntlwana ya boapeelo, o se ka wa dira sengwe le sengwe ka nako e le nngwe. Sa ntlha o tla tsaya lefeelo, o simolole go feela, o tseye seolela matlakala, o olela matlakala o bo o latlhela leswe mo teng ga motomo wa matlakala. O ne o dira tiro eno kgato ka guto.
Go tlhatlhamolola	Letsatsi le a fela, mme re tloga re tsamaya. Ke eng se tlang pele? Re phepafatsa ditafole tsa rona ka go tsenya dipene tsa rona mo dikgetsaneng tsa rona tsa dipene. Re tsenya dikgosi tsa rona tsa diphensele mo dikgetsaneng tsa sekolo. Go tloga fela re leba mo dibukeng tsa rona go bona gore ke eng se re tshokang go ya le sone gae go ya go dira tiro ya sekolo. Re tloga dibuka tseo mo dikgetsaneng tsa rona. Dibuka tse ding tsothe re di baya ka fa tlase ga ditafole tsa rona. Re latlha leswe tse fela le le leng mo ditafoleng tsa rona mo teng ga motomo wa leswe.
Go lemoga paterone	Kopa barutwana gore ba tloga mo maposiborutelong mme ba bone gore a go na le dipaterone. Botsi gore ke ka ntlha ya eng fa ba re ke paterone kgotsa ke tsa se se dirang gore e nne paterone
Bothatatharabololo	Fa re dira borotho jwa botoro ya matonkomane, re latela thulaganyo e e rileng. Sa ntlha re tla batla dilo tse re tla di tlhokang mmogo, e leng borotho, majerine, botoro ya matonkomane le thipa. Re baya borotho mo poleitleng, re bo re tsaya thipa le majerine re bo re di tshela mo borothong. Go tswa foo, re tsaya thipa mme re bo re tshela botoro ya matonkomane mo godimo ga borotho. Go tswa foo re kopa barutwana tse pedi tsa borotho re bo re di sega.

Paka 1 Beke 2: Dijo tse di nang le dikotla di botoka

Karolo ya thuto	Go kwala khoutu						
Nako ya go ruta	<ul style="list-style-type: none"> • Ditiro tsa tiragatso: 30 metsotso • Ditiro tsa go ruta le tsa buka: 30 metsotso 						
Dintlhana go morutabana	<p>Mo thutong eno, barutwana ba tla ithuta go tlhoma mogopolo mo go se se leng botlhokwa le gore ba ka kgaoganya jang sengwe ka dikarolo tse di farologaneng ka go leba dikarolo tsa kuku.</p> <p>Re tshwaela gore o simolole ka go itsise "Bothata" go barutwana morago o diragatse bokgoni mo karolong ya "A re simolole".</p>						
Metswedi e e atlenegisitsweng	<table border="1"> <thead> <tr> <th>A re simolole</th> <th>Tiro 1</th> <th>Tiro 2</th> </tr> </thead> <tbody> <tr> <td>- Buka ya morutwana</td> <td>- Ditshwantsho tsa dikuku ka dikgabiso tse di farologaneng. - Ditaelo tsa kuku e rileng.</td> <td>- Dikarabane tsa pherele - Ditshwantsho tsa dikuku - A5 pampiri kgotsa dibuka tsa tiro</td> </tr> </tbody> </table>	A re simolole	Tiro 1	Tiro 2	- Buka ya morutwana	- Ditshwantsho tsa dikuku ka dikgabiso tse di farologaneng. - Ditaelo tsa kuku e rileng.	- Dikarabane tsa pherele - Ditshwantsho tsa dikuku - A5 pampiri kgotsa dibuka tsa tiro
A re simolole	Tiro 1	Tiro 2					
- Buka ya morutwana	- Ditshwantsho tsa dikuku ka dikgabiso tse di farologaneng. - Ditaelo tsa kuku e rileng.	- Dikarabane tsa pherele - Ditshwantsho tsa dikuku - A5 pampiri kgotsa dibuka tsa tiro					
Bokgoni	<ul style="list-style-type: none"> • C1 						
Dikgono	<p>Barutwana ba tla ithuta go:</p> <ul style="list-style-type: none"> • Dirisa kgopolokakaretso ka go leba se se tshwanetseng go nna mo kukung le gore ke eng se se tshwanetseng go ithokomolosa. • Dirisa go tlhatlhamolola ka go bolela dikarolo tse di farologaneng tse di dirang kuku. 						
Kitso	<p>Barutwana ba tla di tseeno ka go:</p> <ul style="list-style-type: none"> • Go tlhophisa kuku e siameng go ya ka dintlha tse di neilweng. • Go tseena go tshelosa lebaka la go bo ba ile ba rarabolola bothata joo. • Go tseena go tlhatlhamolola kuku ka go re bolelela dikarolo tse di farologaneng tsa kuku. 						
Tirisanommogo	<p>Dikarolo tsa Botshelo: Go tshela o itekanetse</p>						

A o ne o itse?

Kgopolokakaretso le go tlhatlhamolola ke karolo ya bokgoni jwa go akanya ka go dirisa dikhomphiuta. Go raya gore o tlhoma mogopolo mo tshedimosetsong e e botlhokwa mme o itlhokomolose tshedimosetso e o sa e tlhokeng go rarabolola bothata. O tshwanetse go letla barutwana go bala ditaelo le go swetsa gore ba tla rarabolola bothata jang. Ba tshwanetse go tlhalosa ka fa ba neng ba rarabolola bothata ka teng.

Tlhaloetsa barutwana gore re tshwanetse go bala bothata bongwe kgotsa taelo nngwe bo re tlhaloganya se re se balang. Re tshwanetse go tlhoma mogopolo mo tshedimosetsong e e botlhokwa.

Bothata

Zaza o akanya ka dikuku e bile o rata dikuku. O ja dikuku tse di kgethegileng ka bo re o batla kuku ya tshokolete e e nang le tšheri, masarasarane le aesing ya tshokolete. O tshwanetse go bona kuku e a e ratang thata?

A re simolole

Kgopolokakaretso

1. **Bontsha** barutwana setshwantsho sa tafelane e nang le dilo tse di farologaneng, tse di jaaka kuku le dijo tse di monate
2. **Botsa** barutwana gore ke dijo dife tse di gaisi ba tla di fitlhelang kwa tafoleng ya moletlo.

Dikarabo tse di ka tlhagelelang: Kuku e nang le mofuta wa matsalo, diseneke, dimonamone, ditšhipisi, diratsure, dipoleiti, metshameko ya monate, matsalo le jalo.

3. **Kopa** barutwana gore ba tshwanetseng go tse pedi tse o tshwanetseng go di itlhokomolosa fa o baakanyetsa moletlo ka le go tsi la botsalo.



Dikarabo tse di ka tlhagelelang: Salate le sireie.

Dikao tse dingwe tsa go tlhatlhamolola: Fa e le gore o batla lefoko Dali mo khabareng ya buka (kgotsa o leka go batla lefoko mo lebokosong la go batla mafoko), o tla tlhoma mogopolo fela mo go se se leng botlhokwa mme o itlhokomolose tshedimose tse e nngwe.

Go tlhatlhamolola

1. **Bontsha** barutwana setshwantsho sa tonate.
2. **Botsa** barutwana gore dikarolo tsa tonate ke dife.

Dikarabo tse di ka tlhagelelang: Tonate, aeing le masarasane

Dikao tse dingwe ke tsa go tlhatlhamolola: Mo Dipalong, barutwana ba tlhoka go tlhatlhamolola dibonto tsa dipalo ka go kgaoganya palo e kgolo go nna dikarolo tse pedi.

Go lemoga paterone

1. **Botsa** barutwana gore a ba ka tlhalosa gore paterone ke eng.

Dikarabo tse di ka tlhagelelang: Ba tshwanetse go tlhalosa gore ke karolo ya dipoeletso. Karolo eo e bidiwa tatelano.

2. **Bontsha** barutwana setshwantsho sa paterone ya dikuku.
3. **Kopa** barutwana go tlhalosa paterone e ba e hlang.



Tiro 1



Paka 1 Beke 2

Kaelo ya tiro

1. Thusa Zaza go batla kuku e a e ratang

- **Neela** bothata go barutwana le go ba bolelela gore ba tlhoka go thusa Zaza go batla kuku ya gagwe e a e ratang.
- **Bontsha** barutwana ditshwantsho tsa dikuku
- Ka bobedi ka bobedi kopa barutwana go bua ka ditshwantsho le simolotse gore ke efe e Zaza a tla e jang.
- **Botsa** barutwana:
 - Ke dikarolo dife tse di farologaneng tse di dirang kuku e Zaza a e ratang?
 - Goreng o tlhophile kuku eo?
 - O ne wa rarabolola jang bothata?
 - O simolotse kae?
 - O ne wa lebelela eng pele?
 - O ne wa batla eng se se latelang?

Karabo: kuku ya tšhokolete e e nang le maso e tšheri mo godimo.

2. Tlhopha kuku ya gago e o e ratang thata

- **Kopa** barutwana go tlhopha kuku e ba e ratang thata. Ba tshwanetse go tshalosetsa molekane wa bone dikarolo tse di farologaneng tse di bopang kuku ya bone.

Mekgwa ya go thusa

- Kgopolokakaretso le go lena ga paterone: Dira paterone ka go dirisa dilo tse di tlhomameng tse di janka di tšhela go tsa dipopego.
- Tsenya sengwe se go tšhelelwang gore se nne teng mme se bonala sentle gore ga se tshwanelege.
- Kopa barutwana go sula selo se e seng sa bone.
- Tlosa selo tšhelelwang barutwana gore a ba kgona go bona paterone.
- Botsa gore o tšhela ba re ke paterone.

Tiro 2



Paka 1 Beke 2

Kaelo ya tiro

1. Dikarolo tsa kuku

- **Bontsha** barutwana ditshwantsho tsa kuku le dikarolo tsa yona.
- **Kopa** barutwana go bua ka dikarolo tse di farologaneng tsa kuku.
- **Kgaoganyana** barutwana ka ditlhophha tsa batho ba babedi le go ba kopa go aroganane balekane ba bone dikuku tsa bone tsa mmamoratwa.
- **Ba bolele** gore ba tla tlhoka go thala le go tshwaya kuku ya mmamoratwa ya balekane wa bona.
- **Botsa barutwana:**
 - Sekaseka ditshwantsho tsa mongwe le mongwe. A ba ne ba thala kuku ya gago sentle? A o ne wa thala kuku ya bone sentle? A e tshwanetseng kuku tse di mo bukeng?
 - A dikarolo tsotlhe di thadilwe le go tshwaiwa sentle?
 - A kuku ya gago e e kgabisitsweng mo sethwananeng ya gago e mo tatelanong e e tshwanang jaaka le e e mo setshwantsho?

Ditiro tse dingwe tse di akantshiwana

Morutwana mongwe le mongwe o tshwanetse go tlhophha kuku go tswa mo bontsing jwa ditshwantsho tsa kuku

- Kopa barutwana go kwala maitebeng ya 15 kgato ka kgato ya se ba tshwanetseng go se batla go tlhophha kuku e e neng.
- Kokoanya ditshwantsho tsa dikuku di taelo tsa barutwana
- Baya ditaelo tsotlhe tsa moko o mong mme o kope morutwana mongwe le mongwe go thala ditaelo tse di neng. Baya a tshwanela go itirela sete ya bone ya ditaelo, mme ba tshwanetse go a refoa ka sete e nngwe ya ditaelo.
Ba tshwanetse go thala dikgato le go rarabolola bothata ka go bolela gore ba thadile kuku efe.

Mekgoba ya go botsa

- Kopa barutwana gore ba thuse ka go tlisa dikuku, aasing le magasagasane mo thaposibetelong. Bobotlana kuku e le nngwe mo morutwaneng mongwe le mongwe. Baya o letha barutwana go kgabisa kuku ya bone, ba bontshe dikgato tsa go kgabisa kuku mme lo tlotle ka go kgabisa kuku.
- Go tswa foo barutwana ba ikgabisetsa dikuku tsa bone.
- Go tswa foo ba tlhalosetsa molekane wa bone ka fa ba neng ba kgabisa kuku ya bone ka teng.