



KEREITI

3

BUKA YA
MOITHUTI

Platinum

Dikhoundu le Diroboto

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

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Mophatlalatsi Whitley Makhari
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Moralo wa bokantle ba buka ka MML Visual Design
Setshwantsho sa bokantle ka MML Visual Design
Moralo wa buka ka MML Visual Design
Botaki ka AJ Erasmus, Angela Bowring, Illana Dillon, LT Design Worx, Courtney Smith, Natalie Phillips, MML Visual Design
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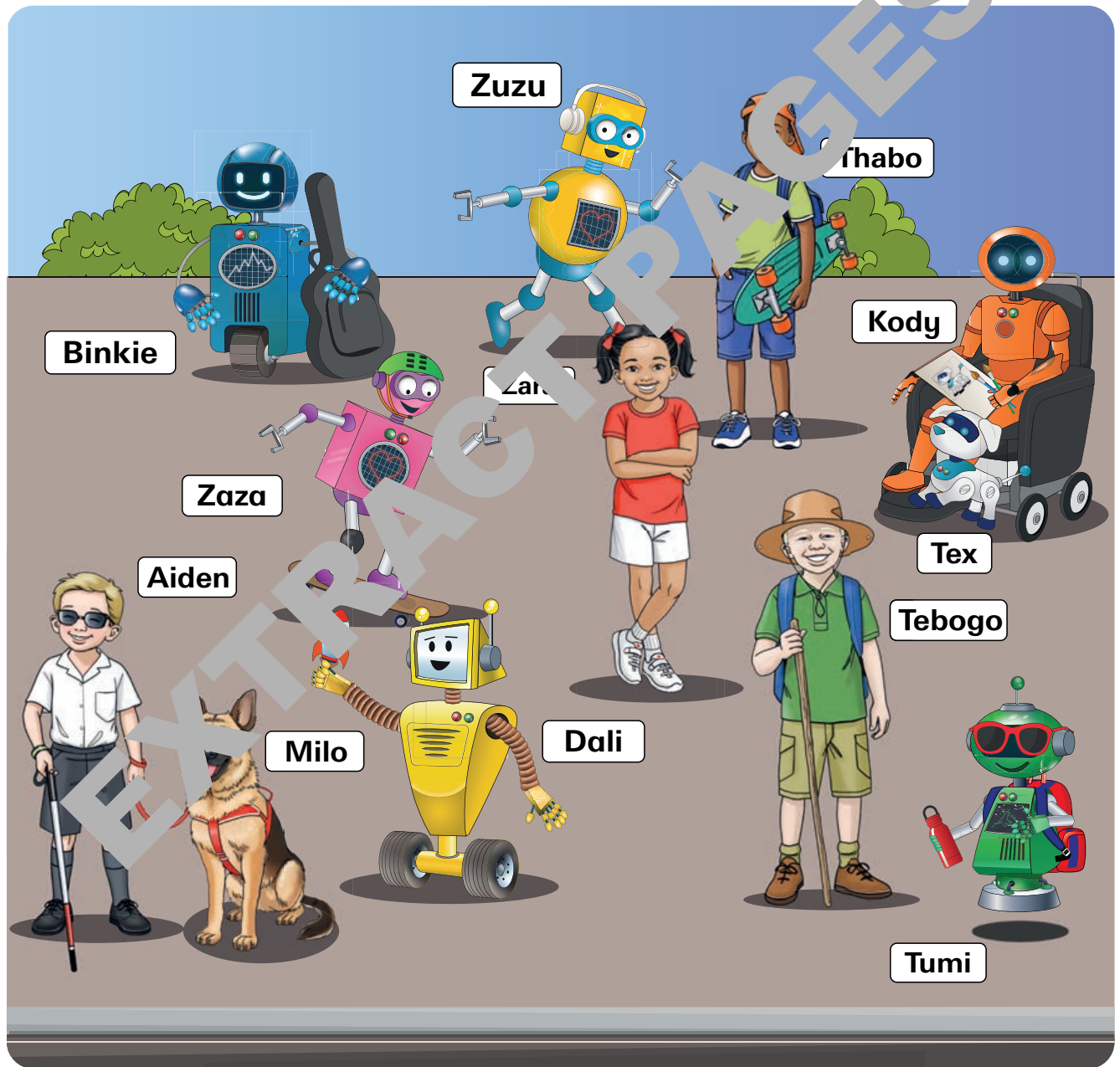
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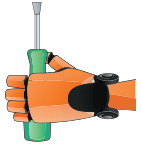







Moithuti ya Ratehang,

Re a o amohela bukeng ena ya baithuti e thabisang! O tla kopana le metswalle e ratehang. Metswalle ena ke batho ba nang le botho bo ikgethileng jwalo ka ba hao!

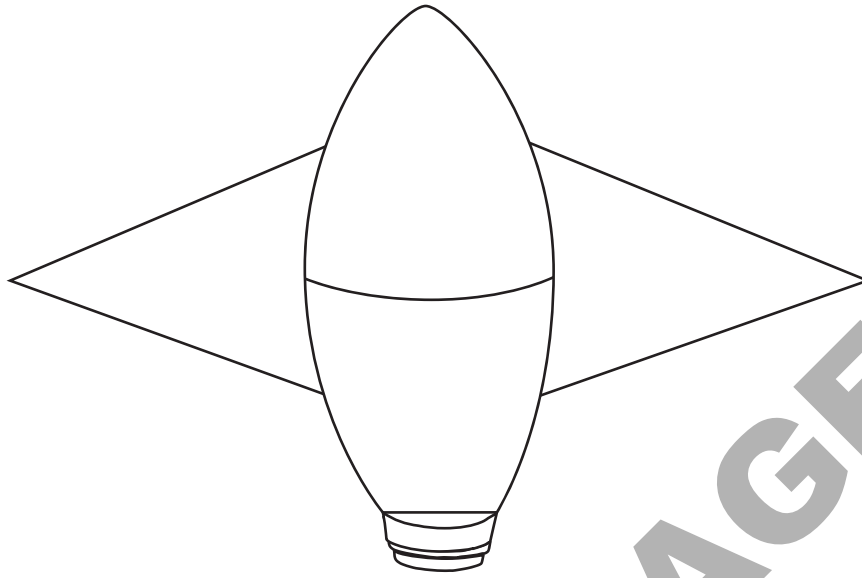
Itokisetse ho ithuta, ho bapala le ho etsa dintho tse ding le metswalle ya hao. Thabela ho ithuta.



Mokgwa wa ho sebedisa bukantswe ena

| Ha o bona | Ho bolela: |
|---|---|
|  | nako ya ho sebetsa le motswalle |
|  | nako ya ho sebetsa le le sehlopha |
|  | nako ya ho sebedisa matshoho a ka le boko ba... |
|  | nako ya ho taka le ng... |
|  | nako ya ho bua ka dintho |
|  | nako ya ho sebedisa booko le monahano |
|  | nako ya ho tsamaisa mmele |
|  | ke nako ya ho khouda |
|  | nako ya ho arolelana |
|  | ho khouda ka ho bapala |

Ho utlwisisa mohopolo wa tataiso



Etsa rokete:

O tla hloka:

- Dithupa tse 4. O ka penta thupa, lebokose kapa pampiri ka mmala o etsa ditotwana. Ntho efe kapa e molo e ka fumanehang.
- I mmala mothebedu
- I mmala lamunu
- I mmala wa lehodimo
- I mmala o mosehla
- Sekgomaretsi.

Ho etsa rokete:

Kopolla rokete ka ka ho beha pampiri hodima yona..

- Seha rokete e kopollotsweng.
- Taka rokete ya hao.
 - Hodimo – kgubedu
 - Tlase – ka botala ba mmala wa lehodimo (manamisa) rokete ya hao sekgetjhaneng sa lebokose.
 - Ka ho le letona – mmala wa lamunu.
 - Ka ho le letshehadi – mmala o mosehla.
- Kgomaretsa rokete ya hao sekgetjhaneng lebokoses.

Kotara ya 1



| | |
|---|----|
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Kotara ya 2



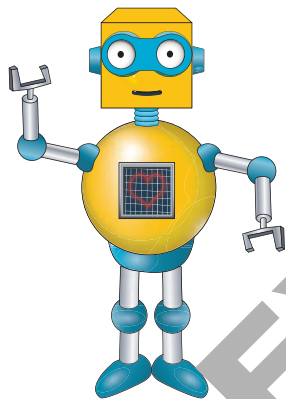
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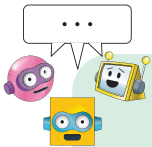
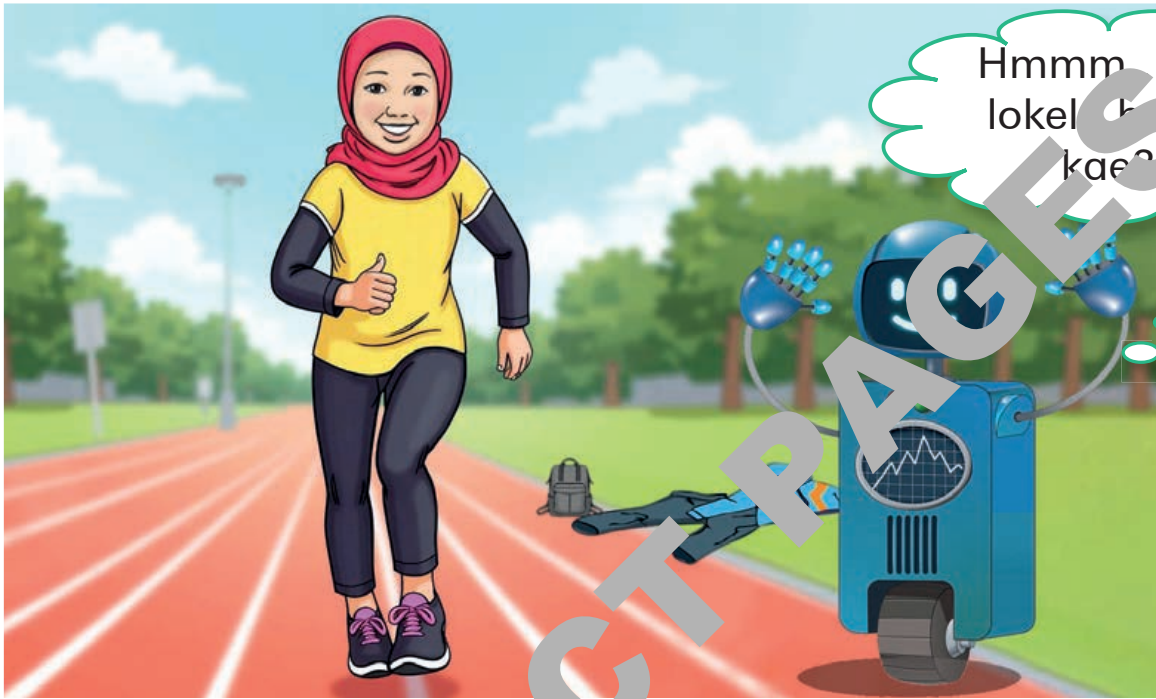
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Ke Letsatsi la Dipapadi sekolong.

Re etsa diqeto ka dinako tsohle. O etsa qeto jwang?



Ha e tse

Na sena ke paterone.

Kahoo, tatellano ke eng jwale?



E, sheba dipalesa tse iphetang. Paterone ke sehlopha sa ditatellano tse iphetang.

Tatellano ke sehlopha sa dintho. Ha di ipheta, di bopa paterone.

Mosebetsi wa 1



Khoudu ya I

- I. Thusa ho fumana diapara tsa Amir le Sheba kiriti.
 - a. Fumana diaparo tsa dipapadi.
 - b. Fumana diaparo tse tlwaelehileng.



pheta-pheta – ho ntho e etsahalang kgafetsa

ntho – ntho e ka fumanwa nthong e kang tatelano





Mantswe
a matjha

Mosebetsi wa 1



2. Etsa khoutu e tla ya borikgweng bo bokgutshwane bo bokgubedu.

- Khoutu e tlameha ho qala motsung o qalang.
- Qoba ditshitiso tse tseleng ya haka ho di feta.

| | | | |
|----------------------------|---|---------------------|---|
| Pele |  | | |
| Thinyetsa ho le letshehadi |  | Thinyetsa ho letona |  |
| Tlolela |  | Pheta dipalo | ② ③ ④ ⑤ |

3. Ngolisa mme o e hlahlobe.

4. Kopa setho sa sehlopha ho e hlahloba.

Mosebetsi wa 2 (O tswela pele)

Khoudu ya 2

I. Sheba kiriti..



- Fumana diaparo tsa dipapadi.
- Fumana diaparo tse tlwaelehileng.

2. Etsa khoudu ya ho bokella diaparo tsa dipapadi ebe o qetella ka ho emisa.

Khoudu e tlameha ho qala motsung o qalang.

- Bokella bonyane dintho tse tharo.



| | | | |
|----------------------------|--|------------------------|-----------------|
| Pele | | | |
| Thinyetsa ho le letshehadi | | Thinyetsa ho le letona | |
| Thonaka | | Pheta dipalo | (2) (3) (4) (5) |

Mosebetsi wa 2 (O tswela pele)

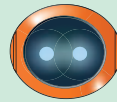


3. Ngola khoutu mme o e leke. Kgetha setshwantsho se tsamaisanang le ho araba potso.

Na khoutu e na le diphoso?



E, diphoso tse mmalwa



Phoso e nngwe e ba ts'ona e feela



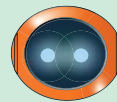
Tjhe, ha hona diphoso!

4. Kopa setho se sehlopha ho e hlahloba.

Na khoutu e rarantse bothata?



E na ba betere







Hantle



Hantle haholo

O ikutlwa jwalo ka mosebetsi oo o o entseng?

| | | | | | | | |
|---|---|---|---|---|--|---|---|
| 1 |  | 2 |  | 3 |  | 4 |  |
| | Thabile! | | Thabile! | | Motlotlo! | | Alilili! |

Lenaneo – Lethathamo la ditaelo tse hlahosang khomphyutha, diroboto, kapa ho etsa seo o lokelang ho se etsa.

Khomphyutha – Motjhini o o thusang ho etsa dintho tse ngata, jwalo ka ho bua le ba bang, ho bapala dipapadi le ho fumana lesedi.

Mantswa a matjha

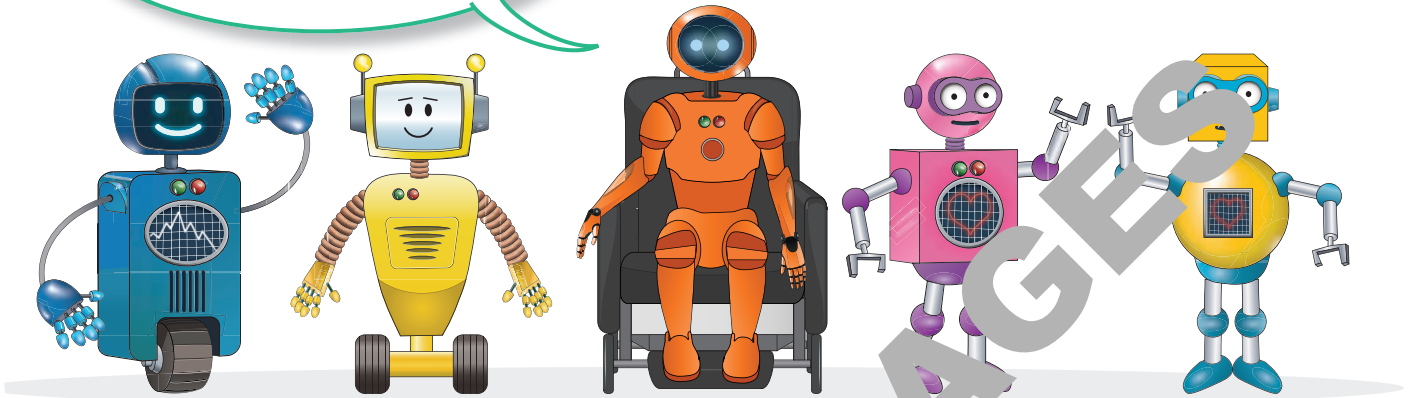
Tsohle di mabapi le nna

C1, C2
C3

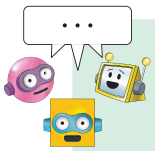
R1, R2

D2

Ke
batla ho o
tseba hahollwanyane.
Mpolelle ka wena?



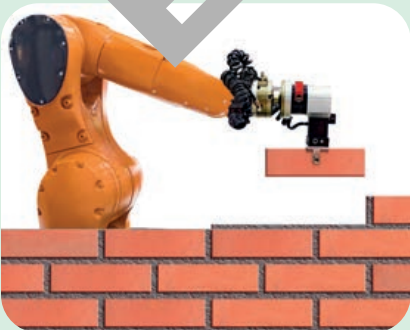
Na wa tseba hore na ke tlhahisolesang efe e
bolokehileng ho kopanela, hore ha ho jwalo?



Ha re qale

Roboto ke motsoalle. E hlophisitswe ke motho ya
sebedisang kompyutha..

Roboto e laela ditaelo. E thusa batho ho etsa
mesebetsa.



Mosebetsi wa 1



Buisanang ka hore diroboto tse na di etsa mesebetsi efe.



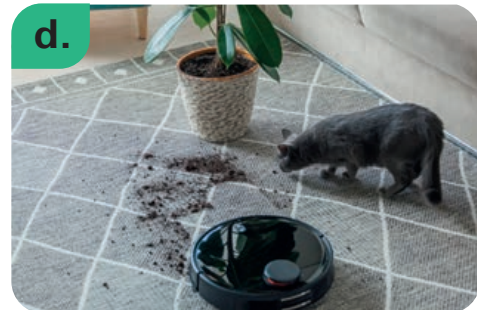
Letsoho la motjhini



Roboto ya fektheri



Roboto e kutang
jwang



Roboto e hlwekisang

Mosebetsi wa 2



Kody o batla ho ithuta haholo ka wena. O tlameha o be bohlale.

Haeba potso e amana le sephiri sa hao, lokela ho re, “Tjhe, ha ke no o bolele tse, ke tlhahisoleseding e amang le sephiri sa ka.”



| | | | | |
|--|--|--|--|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

- Ke ketsahalo efe eo o e ratang haholo?
- Nomoro ya hao ya mohala ke eng?
- Aterese ya hao ke mang?
- Lebitso la hao ke mang?
- Dijo tseo o di ratang haholo ke dife?
- O rata asekrimi kapa soda?
- O rata ho tansha?
- Mmala oo o o ratang haholo ke ofe?
- O rata ho etsa eng kamora sekolo?



Mosebetsi wa 2 (O tswela pele)



O na le metsu e 13:





- Ditaelo tse 2 tsa 'tjhekela ka ho le letona'
- Ditaelo tse 9 tsa 'pele'
- Ditaelo tse 2 tsa 'tjhekela ka ho le letshehla'

Hape o na le:

1. Ka hohle kamoo o ka e nkang.
2. "pheta" ditoken.

1. Ngola khoutu. Sebedisa metsu.
2. Khoutu e tlameha ho isa dikareteng tse pedi tse tshehla le ho e nkangwe e kgubedu.
3. Lekola khoutu ya hao.
4. Fapanyetana khoutu ya hao le motswalle.
5. Latella khoutu ya motho eo. Bala potso eo o e qetang mme o e arabe.
6. Tlameha pele ha sehlopha sohle se ntse se mamela dipotsole dikarabo.
7. Sehlopha sohle se tla fetola ho fihlela dikhoutu tsohle di lekwa mme di bale.

O ikutlwa jwang ka mosebetsi oo o o entseng?

| | | | |
|---|---|--|---|
| 1  | 2  | 3  | 4  |
| Ho leka! | Thabile! | Motlotlo! | Alilili! |



Na re ka di taka hape?

O batla ho taka eng?

Ha re qale

Mahlale a theknoloji a reretswe ho thusa batho le ho ntlafatsa sebopeho sa rona ya bona ya bophelo. Re fumana theknoloji dibakeng tse ngata.



a. Malapeng a rona



b. Mapolasing



c. Ha re eta

Ha re qale

Sesebediswa sa khomphyutha se sebetsa ka tlhahisoleseding ya dijithale e re thusang ho etsa mesebetsi ya rona.



Ka puisano ya dijithale



Mosebetsi





Ho kopanya batho ho potoloha le lefatshe















Mosebetsi wa 1













































Etsa qeto hore ya hore na khouda ke mang le hore robo to ke mang.

Khouta o bala khoudu. Roboto o a mamela mme o hula kiriti e se nang letho. 'Pene hoam e bolela ho tlohela boloko bo se na leti 'ho bolela ho taka ka hara boloko. Katla ditaelo.

| | |
|---------------------|---|
| Pene hodimo Pele |   |
| Pene fatshe Pele |   |

| | | | | | | | | | |
|---|---|--|---|---|---|---|---|--|--|
| 1 |  | | | | | | | | |
| 2 |  | | |  | |  | | | |
| 3 |  | | |  | | | | | |
| 4 |  | |  | | | |  | | |
| 5 |  | | |  |  |  | | | |
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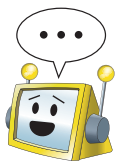
Fapanyetsana mesebetsi le motswalle wa hao le ntona qala ho etsa mosebetsi hape. Lentswe le letjha.

Mosebetsi wa 2

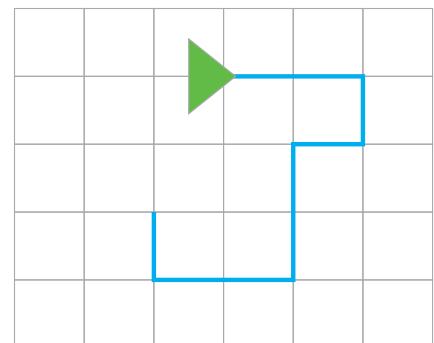


I. Rala setshwantsho sa hao ka mela e ka hara kiriti.

- Dula le furallane le ntano taka le sa sheba.
- Etsang qeto hore khouda ke mang le hore roboto ke mang.
- Khouta o fana ka ditaelo tse hlaking yah ore o take o sebedisa mantswa a ka reng, pele, tlase, fanyetsa ka ho le letshehadi, thjreisa ka ho le letona, pene hodimo, le pene tlase.
- Roboto e namela mme e taka khoudu ho kiriti e se nang letho ka pene ya mebalokopa pensile.
- Fapanyetsana mesebetsi le ntano sheba mosebetsi wa motswalle ka mong.

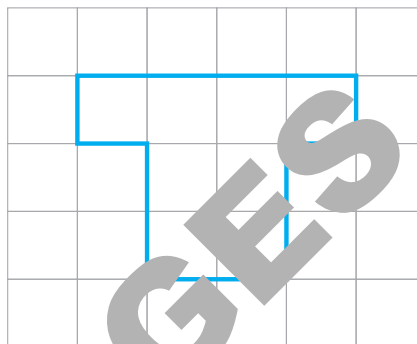


Qala mona. Bua ka sebopelo Fapanyetsana mesebetsi le ntano sheba mosebetsi wa motswalle ka mong. taka.

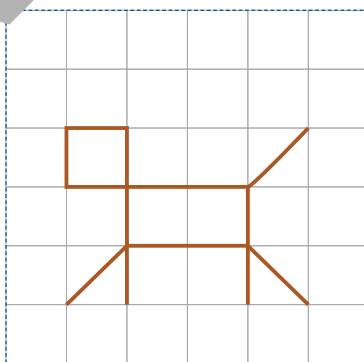
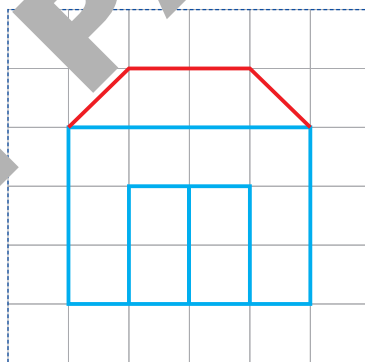
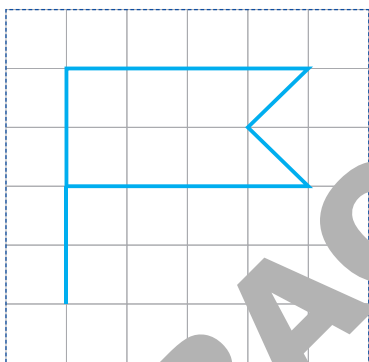


Mosebetsi wa 2 (O tswela pele)



Sena ke sebopelo seo o lokelang ho se taka.

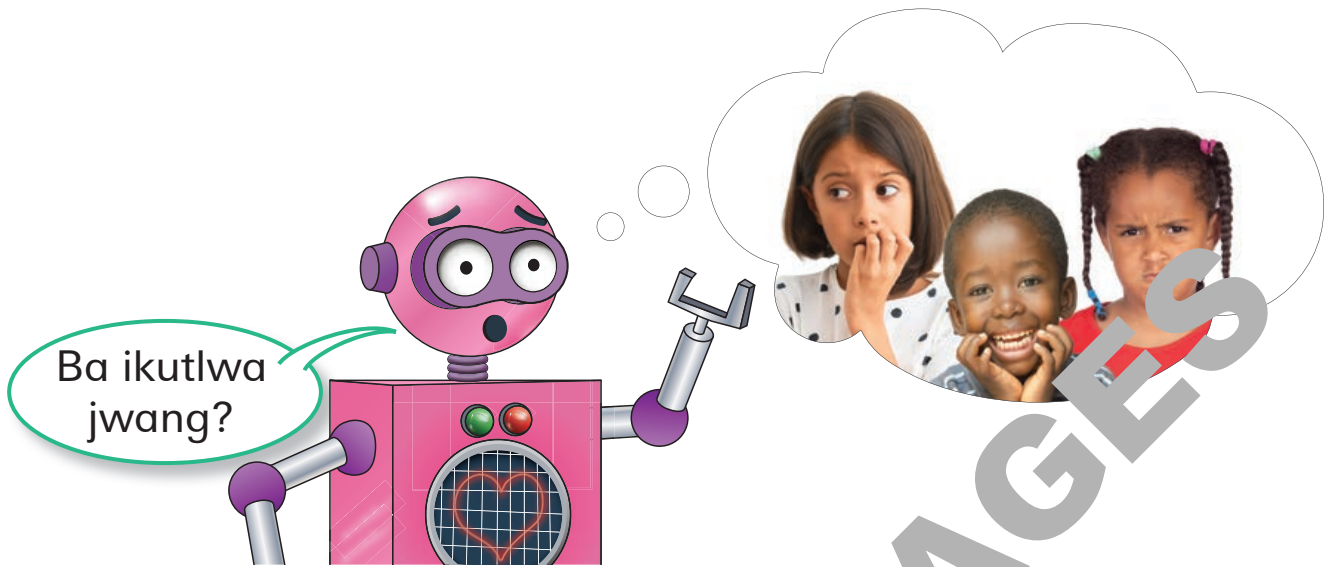


2. Kopiletsa ditshwantsho tse di dikeriting.



O ikutlwa jwang ka mosebetsi oo o o entseng?

| | | | |
|---|---|--|---|
| 1  | 2  | 3  | 4  |
| Ho leka! | Thabile! | Motlotlo! | Alilili! |



O ka tseba jwang hore motho o ikutlwa jwang?

Ha re qale

Theknoloji ya Tlhamisoleseding (IT) e mabapi le disebediswa tse re disebedisang ho sebetsa le tlhahisoleseding, jwalo ka mantswe, dinomoro, ditshwantsho le modumo.



Dinomoro



Ditshwantsho



Modumo



Khomphyutha e hopola tlhahisoleseding hobane e na le mohopolo.



Khomphyutha e boloka ditaba tsa nnete e yohle di bolokehile hore e ka sebediswa kamorao.



Sengolwa sa
ditaba



Mosebetsi
wa sekolo o
etswang hae



Sehatisa
ditshwantsho tsa
inthanete

Tlhahisoleseding ya khomphyutha e ka rarolla bofnata ka dinomoro.

Mohopolo – Sebaka se nang le tlhahisoleseding yohle e bohlokwa e le hore khomphyutha e ka e fumana.

Tsebetso – Ke tsebetso e tshwanang le risepe e bontshang mokgwa wa ho etsa ntho.




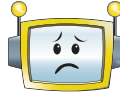


Mantswa
a matjha

Mosebetsi wa 1



Sheba setshwantsho. Kgetha setshwantsho se nyalanang.



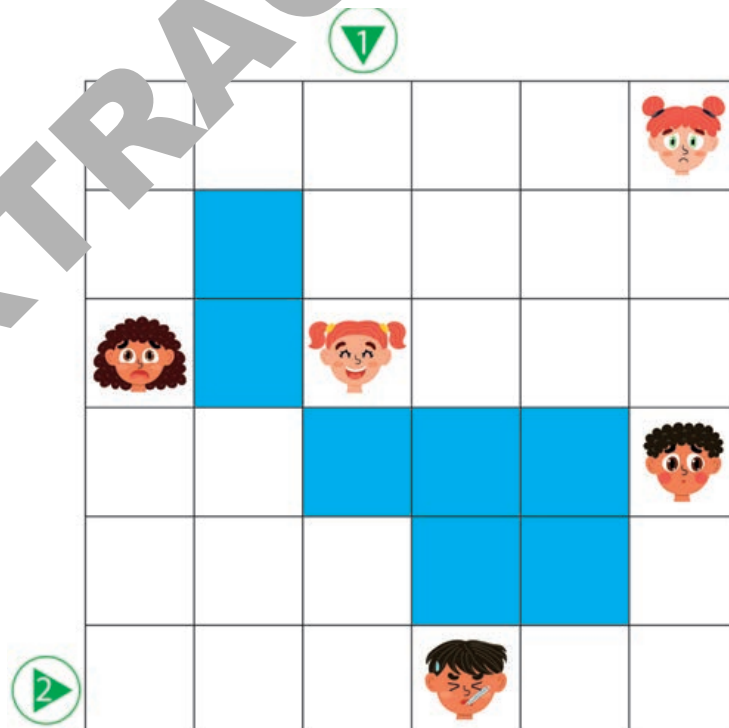
1. 
2. 
3. 
4. 
5. 
6. 

Mosebetsi wa 2

Re ba le maikutlo a fapaneng letsatsi le leng le leng.

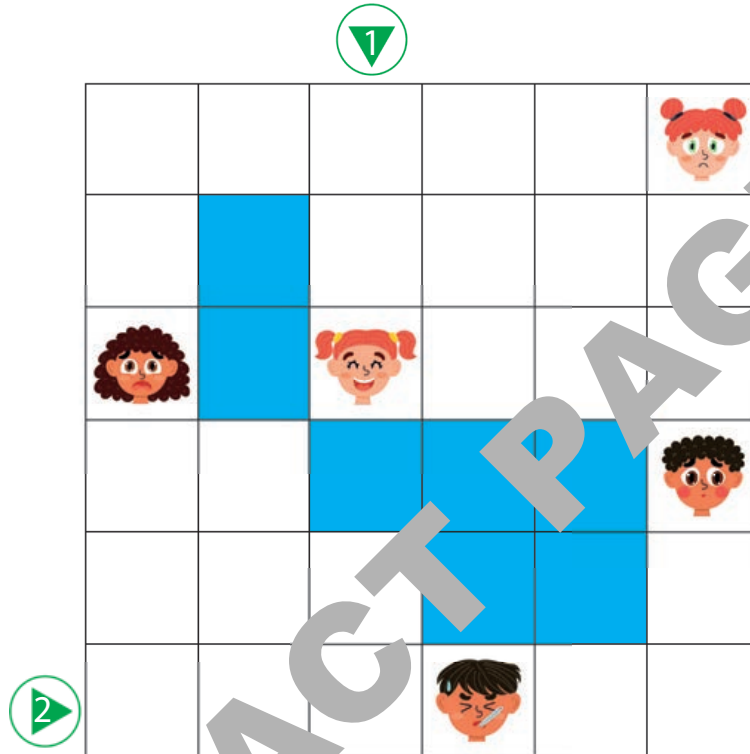


- I. Qala ka motsu o qalang
 - a. Ngola khoutu y e bo bokella maikutlo ohle a mahlano ho kiriti.
 - b. Lekola khoutu e e tshaba.
 - c. Hlakola ha o hlokahala.







Mosebetsi wa 2 (O tswela pele)

2. Qala motsung wa bobedi. 



- a. Nya ona khoutu ya ho bokella maikutlo hle a mahlano ho kiriti.
- b. Lekola khoutu.
- c. Hlakola, ha o hlokeha.
- d. Khetha mokgwa oo o o ratang ka ho fetisisa.
4. Kgutsufatsa khoutu.

O ikutlwa jwang ka mosebetsi oo o o entseng?

| | | | |
|---|---|--|---|
| 1  | 2  | 3  | 4  |
| Ho leka! | Thabile! | Motlotlo! | Alilili! |



Ka dinako tse ding re ba le kotsi ebile re hloka mokotlana wa thuso ya pele.

Ha re oale

Dikotsi tsa rona tsahala. O hloka ho ba hloko le ho dula o bolokehile lefatsheng la mmele le inthaneteng.

1. Bua ka boitshwaro bo bolokehileng le bo sa bolikehang setshwantshong.

2. Tsela ya boitshwaro bo jwalo bo ka ama bophelo bo btle le polokeho ya rona jwang?

3. Bapisa boitshwaro bobong le bo bong bosa bolokehang ka boitshwaro bo bolokehileng. Ngola nomoro le ditlhaku feela.



Boitshwaro bo sa bolokehang



Ke palama baesekele ya ka ke ntse ke bua ka founo.

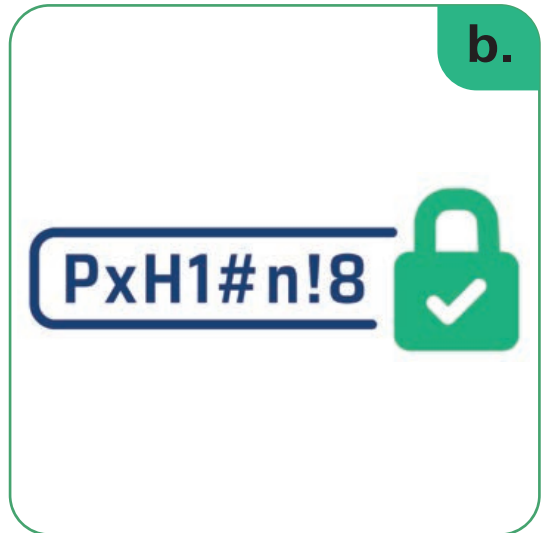


Ke tsamaya tseleng ha ke ntse ke romella melaetsa ka mohala wa ka.

Boitshwaro bo bolokehileng



Emera koloï thetjhela mora pele ke nka bolo.



Ke sebedisa nomoro ya lekunutu e matla e nang le ditlhaku, dinomoro le matshwao.

Boitshwaro bo sa bolokehang

3.



Ke sebedisa nomoro ya ka ya lekunutu ka dinomoro kapa ditlhaku feela.

Boitshwaro bo bolokehileng

c.



Ke parana baesekele ya ka mme ke sheba sephetephele. Mohala wa ka o ka mokotlaneng.

4.



Ke mathela ka morao ho koloi e kgutlelang marao ho nka bolo ya ka.

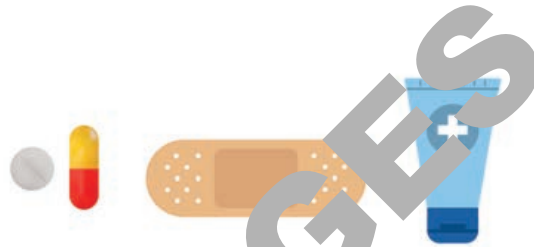
d.



Ke ema le ho sheba sephetephele pele ke tshela tsela.

Mosebetsi wa 1

Etsa mokotlana wa thuso ya pele



1. Sheba ditshwantsho. Etsa ka dintho tse tlamehileng ho kena ka hara mokotlana wa thuso ya pele

O tla hloka:

- Karolwana e le 1 ya khateboto e kguhedutsoya A4
- Karolwana e le 1 ya ho taka dintho tse tla kena ka hara mokotlana wa thuso ya pele:
 - Boga ba khothono, setlama maqeba, setlolo, sehlohlotso ditsebe, dikausi tsa matsoho, jj.
 - Sekere
 - Rulara ya 30 cm
 - Pensele le dipensele tsa ho taka
 - Pene ya khokhi
 - Sekgomaretsi

Mosebetsi wa 1 (O tswela pele)

Tse hlokehang

- I Pampiri ya mokotlana wa thuso ya pele e lekana le sekotwana sa pampiri ya A4, e tshetse dintho tse hlano.

Ditaelo



- Menahlofo pampiri ya A4 ka ho lekana. Etsa mehele ka mahlakoreng kaofela mme o a kgorametse. hodlmo leqhepeng.

Sehlopho lwantsho se fapakaneng sa pampiri e tshweu. Setla etsa letshwao leo o tlang ho le kgorametsa ho mokotlana wa thuso ya pele.

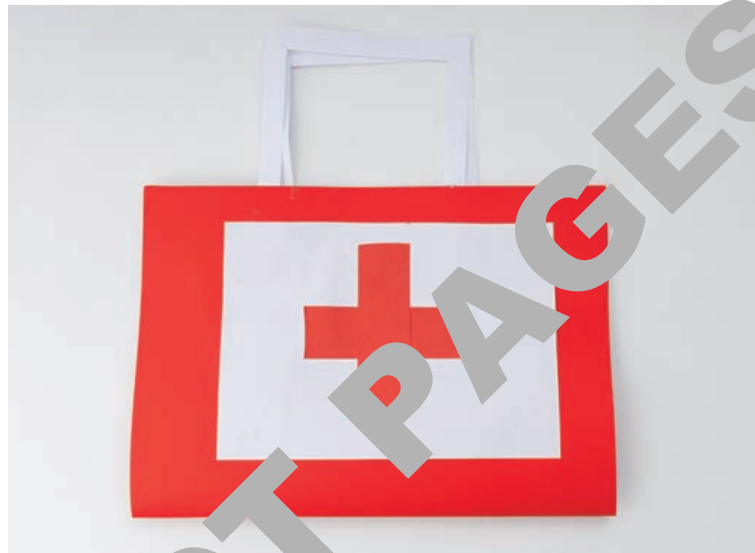


Hatiseletsa, taka, o be sehe dintho tse tlo kena ka hara mokotlana.

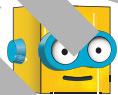
Kgomaretsa dintho lehlakoreng le menweng.

Mosebetsi wa 1 (O tswela pele)

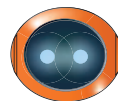
Mona ke sehlahiswa se fedileng.



Lekola mokotlana wa hao wa thuso ya pele. Etsa setshwantsho se hlalosing karabo ya hao.



Hantle haholo



Hantle



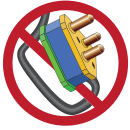
E ka ba betere

Mokotlana wa ka wa thuso ya pele o bulehile le kwaleha hantle ha kae?

Mokotlana wa ka wa thuso ya pele o entswe ka makgethe ha kae?

Ke kgabisitse le ho phetela mokotlana wa ka wa thuso ya pele ka makgethe ha kae?

Mosebetsi wa 2








Khoutu ena o tla nka mme o tole dintho tse ding.

Tshitiso ya tlola ka hodimo ke kolobane
ya bakudi le setima-mollo



Sebedisa dikarete tsena tsa routing:

| | | | | |
|---|---|---|---|---|
|  |  |  |  |  |
| Pele | Thinyetsa ho le letshekadi | Thinyetsa ho le letona | Nka karete (tshwara) | Tlola |

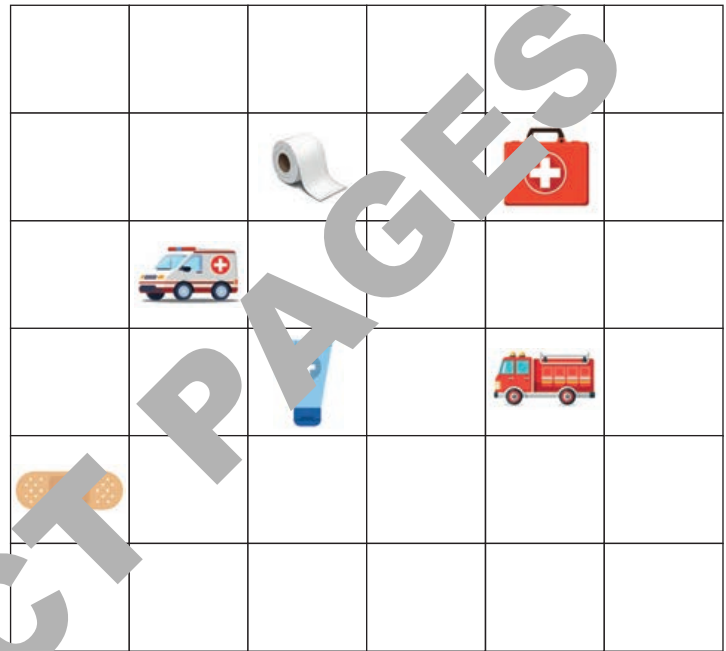


Mosebetsi wa 2 (O tswela pele)



Khoutu ya I

1. Sheba kiriti.
Latela
khoutu.
Qala qalong
▶.






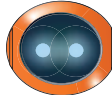

[Pele, tshabela ka ho le letona], pele, [pele, tshabela ka ho le letshehadi], pele, [pele, nka], [pele, tshabela ka ho le letona], tlola ambulance, pele, [pele, nka bandage].

Mosebetsi wa 2 (O tswela pele)



2. Bua ka tse latelang le motswalle wa hao:
 - a. Ke khoundu e nepahetseng?
 - b. O ile tlola hodima eng?
 - c. O ile wa emisa ho kae?
 - d. O ka lokisa khoundu jwang?
3. Ngola khoundu.
4. Bapisa di khoundu tse pedi. Ke khoundu efeng e kgutshwanyane?
5. Kgutsufatsa khoundu.
 - a. Kgetha tsela e kgutshwanyane ho feta.
 - b. Kgutsufatsa khoundu e kgutshwane ka ho sebedisa dikonopo tse phetwang.
6. Hlakola, ho lokela hala.



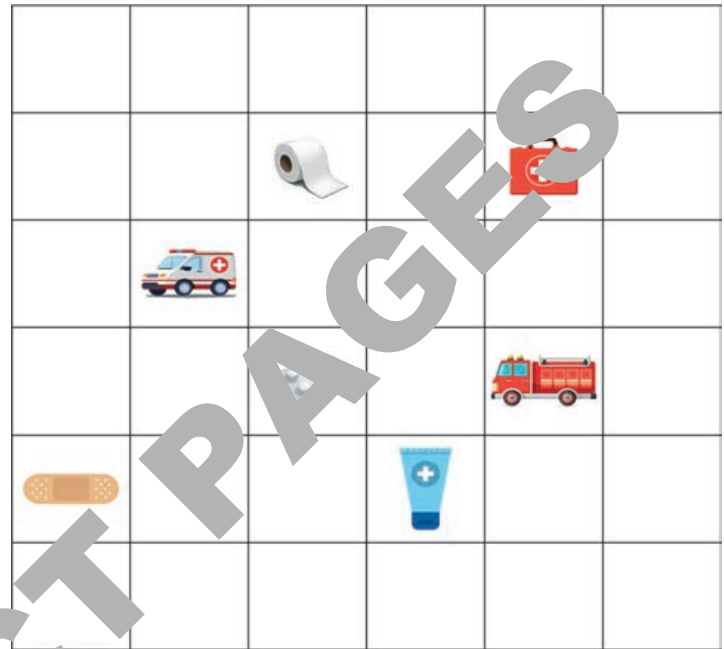
| Na khoundu e ntle diphoso? | | |
|---|---|---|
|  |  |  |
| Tjhe, ha ho diphoso | Phoso e le nngwe kapa tse pedi feela | E, diphoso tse mmalwa |
| Na khoundu e rarollotse bothata? | | |
|  |  |  |
| Hantle haholo | Hantle | E ka ntlafatswa |

Mosebetsi wa 2 (O tswela pele)



Khoutu 2

1. Bala le ho latela khoutu eo. Qala qalong.



Pele [pele, nka], pele, [pele, tjhekela ka ho le letona], tlola , [pele, tjhekela ka ho le letona], , [pele, tlola], [tjhekela ka ho le letona, pele, nka], [pele, tjhekela ka ho le letona], pele, [pele, nka] [tjhekela ka ho le letona, pele], pele, nka

Mosebetsi wa 2 (O tswela pele)



2. Bua ka tse latelang le motswalle wa hao:

a. O ile tlola hodima eng?

b. O ile wa emisa ho kae?



3. Ngola khoudu.

Kamora ho fetola khoudu, o ile wa rarena mathata?



E, re atlehile!







Re ne re hloka
thuso e nnyane
feela.



Re ne re hloka
thuso le ho
bontshwa pele.

O ikutlwa jwang ka mosebetsi oo o o entseng?

| | | | | | | | |
|---|---|---|---|---|--|---|---|
| 1 |  | 2 |  | 3 |  | 4 |  |
| | Ho lekal! | | Thabile! | | Motlotlo! | | Alilili! |

Ke tseba jwang
dijo tse phetseng
hantle kapa tse
se nang phepo
e ntle?



Na o ka thusa Tumi ho etsa kgetho e nepahetseng ya dijo?

Ha re qale

Hona le dijo tse nang le phepo e ntle le tse se nang le phepo e ntle le tse nang le phepo e ntle..

Sheba ditshwantsho tse o kgethe poleiti e nang le phepo e ntle.

Arola poleiti ya dijo, ka dijo tse fapaneng bakeng sa ho ja.

Ngokh lenne la dijo tse fapaneng tseo o di kgethang bakeng sa ho ja.



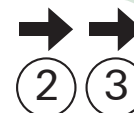
Mosebetsi wa 1



1. Sheba kiriti mme o etse khoudu ya dijo tsohle tse phetseng hantle.
2. Fapanyetsa khoudu ya hao le sehlopha se seng.
3. Kgutsufatsa khoudu ya hao o seba le sephetapheto ya dikarete.









Pheta:
dithoukene



Mosebetsi wa 1

4. Lekola mme o leke khoudu.

| Na khoudu e na le diphoso? | | |
|---|---|---|
|  Tjhe, ha ho diphoso! |  Phoso e le nngwe kapa tse pedi fela. |  Diphoso tse mmalwa |
| Na khoudu e rarollotse mathata? | | |
|  Hantle haholo |  Hantle |  E ka ntlafala |

Ho qhaqholla – Ho kgaola dikarolo tse nyane.

Hlakola – Ho fumana le ho lokisa diphoso

Mantswa
a matjha

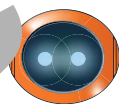
Mosebetsi wa 2



1. Sheba kiriti.
2. Theha khoundu ho tloha Qalong ho fihlela Qetellong. Haeba o dula ka hara boloko bo bosehla, jwale o lokela ho bokella dijo tse phetseng hantle.
3. Ngola le ho leka khoundu



Na khoundu e na le diphoso?



Tjhe, ha b...
diphos...

Phoso e le nngwe
kapa tse pedi feela

E, diphoso tse
mmalwa

Na khoundu e na e rollotse bothata?



Hantle haholo





Hantle

E ka ntlafala

Mosebetsi wa 2 (O tswela pele)

5. Kgutsufatsa khoudu.

O ikutlwa jwang ka mosebetsi oo o o entseng?

| | | | |
|---|---|--|---|
| 1  | 2  | 3  | 4  |
| Ho leka! | Thabile! | Motlale! | Alilili! |



Na o tseba ho etsa kolo ho tswa ha thepa e ntjhafatsaditsweng?.

Ha re qal

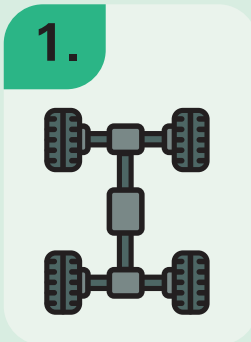
Pele o rala, o tseba hore na o tla naha ho rera le ho fumana lesedi ka thepa eo o batlang ho e etsa.

O tseba eng ka kolo? Kolo e na le dikarolo tse fapaneng.

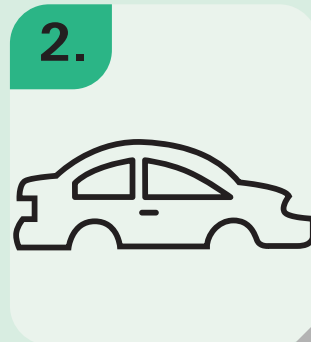
Ha etsa kolo eo o hloka disebediwa.

- O sebedisitse eng bakeng sa mmele?
- O sebedititse eng bakeng sa mabidi?

- Mabidi a ka morao le a ka pele a tlo tshwana?
- O tla sebedisa eng bakeng sa ho etsa ase?



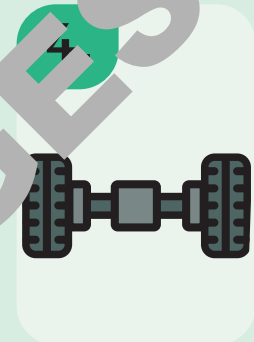
Motheo o tshehetsang koloji mme o tshwere mabidi.



Mmele wa koloji o beha mokganani le baqalami ba dula ho tse kenile.



Mabidi a dumella koloji hore e tsamaye.



Ase e tshwara mabidi.

Ke dife tsa disebediswa tsena tseo o ka di sebedisang?

| | |
|---|--|
| Botlolo ya polastiki | Lebokoso la mollo |
| Terei ya polistrini | Lebokoso la seena a meno |
| Sekwahelo se seholo sa polastiki | Dikwahelo tsa polastiki tse batletseng |
| Dikwahelo tsa dibotlolo tsa polastiki | Dikwahelo tse fapaneng tsa polastiki |
| Mahlakana a polastiki ho tshwara di ase | Thupa ya dowel e tshesane |
| Lebokoso la sesepe | Dihlohlotsa meno |
| Sekiwara sa paf... | |

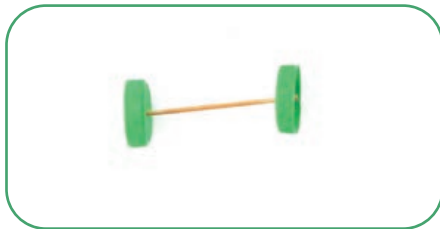


Mosebetsi wa 1



I. O tla sebedisa disebediswa dife bakeng sa dikarolo tse fapaneng tsa mmele?

Lehlakana la polastiki, Di-hlohlotsa meno, Sekwahelo sa polastiki

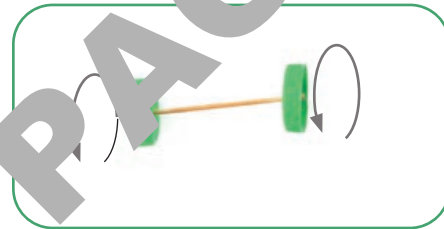


Mabidi a tsamaya ha bonafela hare di ase.

Mathisa mabidi

Mabidi ao a tsamaya mantle.

Mabidi a kgarama swa aseng.

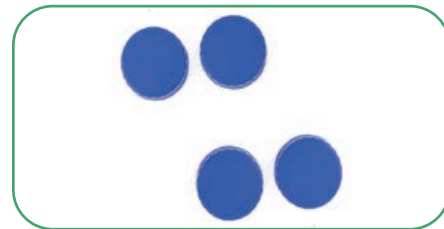


O tlamehile hoba le mabidi a tsamayang.

sa diteko tsa mabidi.



Leka nanele e fapaneng.



Leka di ase tse fapaneng.

Algorithmi – ketso ya ditaelo.

Dikarolo – Dikarolo tse fapane tse kopaneng ho etsa ho hong

Mantswa
a matjha

Mosebetsi wa 1 (O tswela pele)

Mmele wa koloji
Tshwarella dikwahelo pela
mmele.

Bohare ba mabidi bo tlame-
hile bo be pela bokatlase,
e seng ka tlase hore ase e
tsebe ho tshwara hantle.



Sheba mabidi a seke eba
maholo ho feta mm...



Ltsa masoba bakeng sa
ase ya koloji.

2. O tla etsa masoba jwang mabiding?



3. Ke mang ya tla etsa dikarolo tse fapaneng?

4. Na ke sehlopha se tla etsa koloji?

5. Ngola fatshe mehato (algorithmi) eo o
tlo e nka.

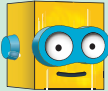
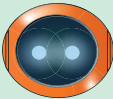

6. Balla sehlopha se seng mehato. Tatelano
ya mehato ya hao e nepahetse?






Mosebetsi wa 1 (O tswela pele)



7. Etsa koloi.




|  Ka dinako tsohle |  Boholo ba nako |  E ka ntlafala |
|---|---|--|
| Na sehlopha se latela moralo wa sona wa nne e ka koloi? | | |
| Na le bua ka diphetoho dife kapa dife tse lokelang ho etswa mme le etse qeto le le sehlopha se... | | |
| Na sehlopha se sebetsa ka polokotlano e disebediswa? | | |
| Na le boloka sebaka seo le sebetsang ho sona se le makgethe? | | |
| Na sehlopha se arolelana e disebediswa hantle? | | |
| Na sehlopha se sebetsa disebediswa ka bohlale ntle le ho di senya? | | |

8. Ho hlahloba koloi.





|  E haholo |  Hantle |  E ka ntlafala |
|---|---|--|
| Mabidi a bidikoloha hantle hakae? | | |
| Koloi e ne e phethetswe ka makgethe hakae? | | |
| Koloi e ile ya tsamaya e otlohile hakae ho theosa ka rempe? | | |

Mosebetsi wa 1 (O tswela pele)

9. Sehlopha sa lona se sebeditse jwang mmoho?

| | | |
|---|---|---|
|  |  |  |
| Ka dinako tsohle | Boholo ba nako | Ho ba tlalata |
| Na ke ile ka etsa karolo ya ka ya mosebetsing? | | |
| Na ke ile ka mamela ba bang? | | |
| Na ba bang ba ile ba mmamela? | | |
| Na ke ile ka etsa mesebetsi yohle e keneng ke lokela ho e etsa? | | |

O ikutlwa jwang ka mesebetsi oo o o etseng?

| | | | |
|--|---|---|--|
| 1  |  | 3  | 4  |
| Ho leka! | Thabile! | Motlotlo! | Alilili! |