



IBANGA

2

INCWADI  
KATHISHA

# Platinum

Imibhalo efihliweyo  
NamaRobhothikski

A. Elliot • K. Walstra • B. Willemse • M. Zeeman

Maskew Miller Learning (Pty) Ltd  
10 Freedom Way, Milnerton, Cape Town, 7441

© Maskew Miller Learning (Pty) Ltd 2022

Wonke amalungelo agodliwe. Ayikho ingxenywe yalolushicilelo efanele yenziwe kabusha, ilondwe endaweni enokutholakala kuyo lula, noma idluliselwe phambili ngolunye uhlobo noma ngenye indlela, ye-elektroniki, kusetshenziswa imishini, ngokwenza amakhophi, ngokuqoshwa, noma ngezinye izindlela, ngaphandle kwemvume ebhalwe phansi yalowo onamalungelo alokho okushicilelwe.

Ukuthola imvume yokushicilela noma ukusebenzisa ingxenywe layencwadi, xhumana neqembu lwamaLungelo nezimvume kule nombolo 021 532 6000 noma uthumele i-imeyili ku: rightsgranting@mml.co.za. Ukubika abaphula umthetho welungelomnikazi sicela uthumele umyalezu ku: copyright@mml.co.za.

Ishicilelwe ngowezi: 2025

ISBN 978-1-779-83160-6  
ePDF ISBN 978-1-834-97848-2

Umshicileli ngu: Whitley Makhari  
Umhleli ophethe ngu: Georgia Mehl  
Ikhava yencwadi yahlelwa yi: MML Visual Design  
Umdwebo kwikhava yencwadi ngu: MML Visual Design  
Incwadi idizayinwe u: MML Visual Design  
Umdwebo ngu: AJ Erasmus, Angela Bowring, Illana Dillon, Bev Victor, Ken Ethelberg, Tabitha Harfet, LT Design Worx, James Whitelaw, MML Visual Design  
Ukukhulwa kokuthayipha yi: Straive, MML Visual Design  
Igaywe abakwa:

### Ukubonga

Ababhali kanye nomshicileli babonga ukusetshenziswa kwalezi zithombe emandelayo:

### Shutterstock

i.5e, i.42e, somchaij; i.5f, Aimmii; i.5g, Nixx Photography; i.5h, Anitri Disterheft; i.6a, phive; i.6b, Mimadeo; i.6d, Nick Beer; i.6e, boyphare; i.6f, Claudio Soldi; i.11a, Olympe; i.11b, Sirichai; i.12a, Ground Picture; i.12, popovich\_vl; i.12c, grey\_and; i.12d, PixaHub; i.12e, illupic; i.12f, kais; i.16a, i.90b, i.92f, Nsit; i.17a, Nature's Charm; i.17b, Jacques Hugo; i.17c, Ariadna22822; i.17d, Geoff Sperring; i.20a, fiziks; P20b, WiStudio-Elements; i.20c, Dragon Images; i.20d, garagestock; i.21a, Mykhailo Baidala; P21b, i.21c, VRVIRUS; i.21d, swavo; i.21e, i.76a, Pixel-Shot; i.21f, Flystock; i.21g, 19 STUDIO; i.21h, Boijonell; i.22a, Black Salmon; i.22b, one photo; i.22c, Den Rozhnovsky; i.25a, Ratchat; i.25b, FOTO Eak; i.29a, Andrey\_Popov; i.31a, fizkes; i.31a, wavebreakmedia; i.31b, Prostock-studio; i.34a, GagliardiPhotography; i.34b, WBMUL; i.34c, i.35a, i.35b, PeopleImages.com; i.41a, i.41b, i.41c, Maria Kuznecova; i.42a, guys\_who\_shoot; i.42b, Cloddy Design; i.42c, bonchan; i.42d, i.138d, Pixel-Shot; i.42f, imagedb.com; i.42g, Photoongraphy; i.42h, Paraphrase; i.45a, Goami; i.45b, ZenitX; i.52a, i.53d, innakreativ; i.52b, i.53g, mmar; i.52c, Nastya Trel; i.52d, cobalt88; i.53a, Arlee.P; i.52f, i.89a, i.90c, i.92e, i.93c, i.171a, ismail19797; i.53b, tanachai tantrakool; i.53c, Chase D'Amore; i.53d, Jones M; i.53h, New Africa; i.53i, grey\_and; i.57a, Lucian Coman; i.57b, Anze Furlan; i.57c, i.65b, Sarah; i.57d, i.65c, Dzmitro; i.59a, i.74b, i.77b, i.79d, i.101b, Kaspars Grinvalds; i.59b, i.74d, i.79e, Carkhe; i.59c, i.74c, i.77a, i.101a, ifong; i.59d, Maxxionn; i.59e, IM Imagery; i.59f, Terelyuk; i.59g, Frame Stock Footage; i.59h, Paopao; i.64a, i.65a, i.65b, i.65c, i.65d, i.65e, i.65f, i.65g, i.65h, i.65i, i.65j, i.65k, i.65l, i.65m, i.65n, i.65o, i.65p, i.65q, i.65r, i.65s, i.65t, i.65u, i.65v, i.65w, i.65x, i.65y, i.65z, i.66a, i.66b, i.66c, i.66d, i.66e, i.66f, i.66g, i.66h, i.66i, i.66j, i.66k, i.66l, i.66m, i.66n, i.66o, i.66p, i.66q, i.66r, i.66s, i.66t, i.66u, i.66v, i.66w, i.66x, i.66y, i.66z, i.67a, i.67b, i.67c, i.67d, i.67e, i.67f, i.67g, i.67h, i.67i, i.67j, i.67k, i.67l, i.67m, i.67n, i.67o, i.67p, i.67q, i.67r, i.67s, i.67t, i.67u, i.67v, i.67w, i.67x, i.67y, i.67z, i.68a, i.68b, i.68c, i.68d, i.68e, i.68f, i.68g, i.68h, i.68i, i.68j, i.68k, i.68l, i.68m, i.68n, i.68o, i.68p, i.68q, i.68r, i.68s, i.68t, i.68u, i.68v, i.68w, i.68x, i.68y, i.68z, i.69a, i.69b, i.69c, i.69d, i.69e, i.69f, i.69g, i.69h, i.69i, i.69j, i.69k, i.69l, i.69m, i.69n, i.69o, i.69p, i.69q, i.69r, i.69s, i.69t, i.69u, i.69v, i.69w, i.69x, i.69y, i.69z, i.70a, i.70b, i.70c, i.70d, i.70e, i.70f, i.70g, i.70h, i.70i, i.70j, i.70k, i.70l, i.70m, i.70n, i.70o, i.70p, i.70q, i.70r, i.70s, i.70t, i.70u, i.70v, i.70w, i.70x, i.70y, i.70z, i.71a, i.71b, i.71c, i.71d, i.71e, i.71f, i.71g, i.71h, i.71i, i.71j, i.71k, i.71l, i.71m, i.71n, i.71o, i.71p, i.71q, i.71r, i.71s, i.71t, i.71u, i.71v, i.71w, i.71x, i.71y, i.71z, i.72a, i.72b, i.72c, i.72d, i.72e, i.72f, i.72g, i.72h, i.72i, i.72j, i.72k, i.72l, i.72m, i.72n, i.72o, i.72p, i.72q, i.72r, i.72s, i.72t, i.72u, i.72v, i.72w, i.72x, i.72y, i.72z, i.73a, i.73b, i.73c, i.73d, i.73e, i.73f, i.73g, i.73h, i.73i, i.73j, i.73k, i.73l, i.73m, i.73n, i.73o, i.73p, i.73q, i.73r, i.73s, i.73t, i.73u, i.73v, i.73w, i.73x, i.73y, i.73z, i.74a, i.74b, i.74c, i.74d, i.74e, i.74f, i.74g, i.74h, i.74i, i.74j, i.74k, i.74l, i.74m, i.74n, i.74o, i.74p, i.74q, i.74r, i.74s, i.74t, i.74u, i.74v, i.74w, i.74x, i.74y, i.74z, i.75a, i.75b, i.75c, i.75d, i.75e, i.75f, i.75g, i.75h, i.75i, i.75j, i.75k, i.75l, i.75m, i.75n, i.75o, i.75p, i.75q, i.75r, i.75s, i.75t, i.75u, i.75v, i.75w, i.75x, i.75y, i.75z, i.76a, i.76b, i.76c, i.76d, i.76e, i.76f, i.76g, i.76h, i.76i, i.76j, i.76k, i.76l, i.76m, i.76n, i.76o, i.76p, i.76q, i.76r, i.76s, i.76t, i.76u, i.76v, i.76w, i.76x, i.76y, i.76z, i.77a, i.77b, i.77c, i.77d, i.77e, i.77f, i.77g, i.77h, i.77i, i.77j, i.77k, i.77l, i.77m, i.77n, i.77o, i.77p, i.77q, i.77r, i.77s, i.77t, i.77u, i.77v, i.77w, i.77x, i.77y, i.77z, i.78a, i.78b, i.78c, i.78d, i.78e, i.78f, i.78g, i.78h, i.78i, i.78j, i.78k, i.78l, i.78m, i.78n, i.78o, i.78p, i.78q, i.78r, i.78s, i.78t, i.78u, i.78v, i.78w, i.78x, i.78y, i.78z, i.79a, i.79b, i.79c, i.79d, i.79e, i.79f, i.79g, i.79h, i.79i, i.79j, i.79k, i.79l, i.79m, i.79n, i.79o, i.79p, i.79q, i.79r, i.79s, i.79t, i.79u, i.79v, i.79w, i.79x, i.79y, i.79z, i.80a, i.80b, i.80c, i.80d, i.80e, i.80f, i.80g, i.80h, i.80i, i.80j, i.80k, i.80l, i.80m, i.80n, i.80o, i.80p, i.80q, i.80r, i.80s, i.80t, i.80u, i.80v, i.80w, i.80x, i.80y, i.80z, i.81a, i.81b, i.81c, i.81d, i.81e, i.81f, i.81g, i.81h, i.81i, i.81j, i.81k, i.81l, i.81m, i.81n, i.81o, i.81p, i.81q, i.81r, i.81s, i.81t, i.81u, i.81v, i.81w, i.81x, i.81y, i.81z, i.82a, i.82b, i.82c, i.82d, i.82e, i.82f, i.82g, i.82h, i.82i, i.82j, i.82k, i.82l, i.82m, i.82n, i.82o, i.82p, i.82q, i.82r, i.82s, i.82t, i.82u, i.82v, i.82w, i.82x, i.82y, i.82z, i.83a, i.83b, i.83c, i.83d, i.83e, i.83f, i.83g, i.83h, i.83i, i.83j, i.83k, i.83l, i.83m, i.83n, i.83o, i.83p, i.83q, i.83r, i.83s, i.83t, i.83u, i.83v, i.83w, i.83x, i.83y, i.83z, i.84a, i.84b, i.84c, i.84d, i.84e, i.84f, i.84g, i.84h, i.84i, i.84j, i.84k, i.84l, i.84m, i.84n, i.84o, i.84p, i.84q, i.84r, i.84s, i.84t, i.84u, i.84v, i.84w, i.84x, i.84y, i.84z, i.85a, i.85b, i.85c, i.85d, i.85e, i.85f, i.85g, i.85h, i.85i, i.85j, i.85k, i.85l, i.85m, i.85n, i.85o, i.85p, i.85q, i.85r, i.85s, i.85t, i.85u, i.85v, i.85w, i.85x, i.85y, i.85z, i.86a, i.86b, i.86c, i.86d, i.86e, i.86f, i.86g, i.86h, i.86i, i.86j, i.86k, i.86l, i.86m, i.86n, i.86o, i.86p, i.86q, i.86r, i.86s, i.86t, i.86u, i.86v, i.86w, i.86x, i.86y, i.86z, i.87a, i.87b, i.87c, i.87d, i.87e, i.87f, i.87g, i.87h, i.87i, i.87j, i.87k, i.87l, i.87m, i.87n, i.87o, i.87p, i.87q, i.87r, i.87s, i.87t, i.87u, i.87v, i.87w, i.87x, i.87y, i.87z, i.88a, i.88b, i.88c, i.88d, i.88e, i.88f, i.88g, i.88h, i.88i, i.88j, i.88k, i.88l, i.88m, i.88n, i.88o, i.88p, i.88q, i.88r, i.88s, i.88t, i.88u, i.88v, i.88w, i.88x, i.88y, i.88z, i.89a, i.89b, i.89c, i.89d, i.89e, i.89f, i.89g, i.89h, i.89i, i.89j, i.89k, i.89l, i.89m, i.89n, i.89o, i.89p, i.89q, i.89r, i.89s, i.89t, i.89u, i.89v, i.89w, i.89x, i.89y, i.89z, i.90a, i.90b, i.90c, i.90d, i.90e, i.90f, i.90g, i.90h, i.90i, i.90j, i.90k, i.90l, i.90m, i.90n, i.90o, i.90p, i.90q, i.90r, i.90s, i.90t, i.90u, i.90v, i.90w, i.90x, i.90y, i.90z, i.91a, i.91b, i.91c, i.91d, i.91e, i.91f, i.91g, i.91h, i.91i, i.91j, i.91k, i.91l, i.91m, i.91n, i.91o, i.91p, i.91q, i.91r, i.91s, i.91t, i.91u, i.91v, i.91w, i.91x, i.91y, i.91z, i.92a, i.92b, i.92c, i.92d, i.92e, i.92f, i.92g, i.92h, i.92i, i.92j, i.92k, i.92l, i.92m, i.92n, i.92o, i.92p, i.92q, i.92r, i.92s, i.92t, i.92u, i.92v, i.92w, i.92x, i.92y, i.92z, i.93a, i.93b, i.93c, i.93d, i.93e, i.93f, i.93g, i.93h, i.93i, i.93j, i.93k, i.93l, i.93m, i.93n, i.93o, i.93p, i.93q, i.93r, i.93s, i.93t, i.93u, i.93v, i.93w, i.93x, i.93y, i.93z, i.94a, i.94b, i.94c, i.94d, i.94e, i.94f, i.94g, i.94h, i.94i, i.94j, i.94k, i.94l, i.94m, i.94n, i.94o, i.94p, i.94q, i.94r, i.94s, i.94t, i.94u, i.94v, i.94w, i.94x, i.94y, i.94z, i.95a, i.95b, i.95c, i.95d, i.95e, i.95f, i.95g, i.95h, i.95i, i.95j, i.95k, i.95l, i.95m, i.95n, i.95o, i.95p, i.95q, i.95r, i.95s, i.95t, i.95u, i.95v, i.95w, i.95x, i.95y, i.95z, i.96a, i.96b, i.96c, i.96d, i.96e, i.96f, i.96g, i.96h, i.96i, i.96j, i.96k, i.96l, i.96m, i.96n, i.96o, i.96p, i.96q, i.96r, i.96s, i.96t, i.96u, i.96v, i.96w, i.96x, i.96y, i.96z, i.97a, i.97b, i.97c, i.97d, i.97e, i.97f, i.97g, i.97h, i.97i, i.97j, i.97k, i.97l, i.97m, i.97n, i.97o, i.97p, i.97q, i.97r, i.97s, i.97t, i.97u, i.97v, i.97w, i.97x, i.97y, i.97z, i.98a, i.98b, i.98c, i.98d, i.98e, i.98f, i.98g, i.98h, i.98i, i.98j, i.98k, i.98l, i.98m, i.98n, i.98o, i.98p, i.98q, i.98r, i.98s, i.98t, i.98u, i.98v, i.98w, i.98x, i.98y, i.98z, i.99a, i.99b, i.99c, i.99d, i.99e, i.99f, i.99g, i.99h, i.99i, i.99j, i.99k, i.99l, i.99m, i.99n, i.99o, i.99p, i.99q, i.99r, i.99s, i.99t, i.99u, i.99v, i.99w, i.99x, i.99y, i.99z, i.100a, i.100b, i.100c, i.100d, i.100e, i.100f, i.100g, i.100h, i.100i, i.100j, i.100k, i.100l, i.100m, i.100n, i.100o, i.100p, i.100q, i.100r, i.100s, i.100t, i.100u, i.100v, i.100w, i.100x, i.100y, i.100z, i.101a, i.101b, i.101c, i.101d, i.101e, i.101f, i.101g, i.101h, i.101i, i.101j, i.101k, i.101l, i.101m, i.101n, i.101o, i.101p, i.101q, i.101r, i.101s, i.101t, i.101u, i.101v, i.101w, i.101x, i.101y, i.101z, i.102a, i.102b, i.102c, i.102d, i.102e, i.102f, i.102g, i.102h, i.102i, i.102j, i.102k, i.102l, i.102m, i.102n, i.102o, i.102p, i.102q, i.102r, i.102s, i.102t, i.102u, i.102v, i.102w, i.102x, i.102y, i.102z, i.103a, i.103b, i.103c, i.103d, i.103e, i.103f, i.103g, i.103h, i.103i, i.103j, i.103k, i.103l, i.103m, i.103n, i.103o, i.103p, i.103q, i.103r, i.103s, i.103t, i.103u, i.103v, i.103w, i.103x, i.103y, i.103z, i.104a, i.104b, i.104c, i.104d, i.104e, i.104f, i.104g, i.104h, i.104i, i.104j, i.104k, i.104l, i.104m, i.104n, i.104o, i.104p, i.104q, i.104r, i.104s, i.104t, i.104u, i.104v, i.104w, i.104x, i.104y, i.104z, i.105a, i.105b, i.105c, i.105d, i.105e, i.105f, i.105g, i.105h, i.105i, i.105j, i.105k, i.105l, i.105m, i.105n, i.105o, i.105p, i.105q, i.105r, i.105s, i.105t, i.105u, i.105v, i.105w, i.105x, i.105y, i.105z, i.106a, i.106b, i.106c, i.106d, i.106e, i.106f, i.106g, i.106h, i.106i, i.106j, i.106k, i.106l, i.106m, i.106n, i.106o, i.106p, i.106q, i.106r, i.106s, i.106t, i.106u, i.106v, i.106w, i.106x, i.106y, i.106z, i.107a, i.107b, i.107c, i.107d, i.107e, i.107f, i.107g, i.107h, i.107i, i.107j, i.107k, i.107l, i.107m, i.107n, i.107o, i.107p, i.107q, i.107r, i.107s, i.107t, i.107u, i.107v, i.107w, i.107x, i.107y, i.107z, i.108a, i.108b, i.108c, i.108d, i.108e, i.108f, i.108g, i.108h, i.108i, i.108j, i.108k, i.108l, i.108m, i.108n, i.108o, i.108p, i.108q, i.108r, i.108s, i.108t, i.108u, i.108v, i.108w, i.108x, i.108y, i.108z, i.109a, i.109b, i.109c, i.109d, i.109e, i.109f, i.109g, i.109h, i.109i, i.109j, i.109k, i.109l, i.109m, i.109n, i.109o, i.109p, i.109q, i.109r, i.109s, i.109t, i.109u, i.109v, i.109w, i.109x, i.109y, i.109z, i.110a, i.110b, i.110c, i.110d, i.110e, i.110f, i.110g, i.110h, i.110i, i.110j, i.110k, i.110l, i.110m, i.110n, i.110o, i.110p, i.110q, i.110r, i.110s, i.110t, i.110u, i.110v, i.110w, i.110x, i.110y, i.110z, i.111a, i.111b, i.111c, i.111d, i.111e, i.111f, i.111g, i.111h, i.111i, i.111j, i.111k, i.111l, i.111m, i.111n, i.111o, i.111p, i.111q, i.111r, i.111s, i.111t, i.111u, i.111v, i.111w, i.111x, i.111y, i.111z, i.112a, i.112b, i.112c, i.112d, i.112e, i.112f, i.112g, i.112h, i.112i, i.112j, i.112k, i.112l, i.112m, i.112n, i.112o, i.112p, i.112q, i.112r, i.112s, i.112t, i.112u, i.112v, i.112w, i.112x, i.112y, i.112z, i.113a, i.113b, i.113c, i.113d, i.113e, i.113f, i.113g, i.113h, i.113i, i.113j, i.113k, i.113l, i.113m, i.113n, i.113o, i.113p, i.113q, i.113r, i.113s, i.113t, i.113u, i.113v, i.113w, i.113x, i.113y, i.113z, i.114a, i.114b, i.114c, i.114d, i.114e, i.114f, i.114g, i.114h, i.114i, i.114j, i.114k, i.114l, i.114m, i.114n, i.114o, i.114p, i.114q, i.114r, i.114s, i.114t, i.114u, i.114v, i.114w, i.114x, i.114y, i.114z, i.115a, i.115b, i.115c, i.115d, i.115e, i.115f, i.115g, i.115h, i.115i, i.115j, i.115k, i.115l, i.115m, i.115n, i.115o, i.115p, i.115q, i.115r, i.115s, i.115t, i.115u, i.115v, i.115w, i.115x, i.115y, i.115z, i.116a, i.116b, i.116c, i.116d, i.116e, i.116f, i.116g, i.116h, i.116i, i.116j, i.116k, i.116l, i.116m, i.116n, i.116o, i.116p, i.116q, i.116r, i.116s, i.116t, i.116u, i.116v, i.116w, i.116x, i.116y, i.116z, i.117a, i.117b, i.117c, i.117d, i.117e, i.117f, i.117g, i.117h, i.117i, i.117j, i.117k, i.117l, i.117m, i.117n, i.117o, i.117p, i.117q, i.117r, i.117s, i.117t, i.117u, i.117v, i.117w, i.117x, i.117y, i.117z, i.118a, i.118b, i.118c, i.118d, i.118e, i.118f, i.118g, i.118h, i.118i, i.118j, i.118k, i.118l, i.118m, i.118n, i.118o, i.118p, i.118q, i.118r, i.118s, i.118t, i.118u, i.118v, i.118w, i.118x, i.118y, i.118z, i.119a, i.119b, i.119c, i.119d, i.119e, i.119f, i.119g, i.119h, i.119i, i.119j, i.119k, i.119l, i.119m, i.119n, i.119o, i.119p, i.119q, i.119r, i.119s, i.119t, i.119u, i.119v, i.119w, i.119x, i.119y, i.119z, i.120a, i.120b, i.120c, i.120d, i.120e, i.120f, i.120g, i.120h, i.120i, i.120j, i.120k, i.120l, i.120m, i.120n, i.120o, i.120p, i.120q, i.120r, i.120s, i.120t, i.120u, i.120v, i.120w, i.120x, i.120y, i.120z, i.121a, i.121b, i.121c, i.121d, i.121e, i.121f, i.121g, i.121h, i.121i, i.121j, i.121k, i.121l, i.121m, i.121n, i.121o, i.121p, i.121q, i.121r, i.121s, i.121t, i.121u, i.121v, i.121w, i.121x, i.121y, i.121z, i.122a, i.122b, i.122c, i.122d, i.122e, i.122f, i.122g, i.122h, i.122i, i.122j, i.122k, i.122l, i.122m, i.122n, i.122o, i.122p, i.122q, i.122r, i.122s, i.122t, i.122u, i.122v, i.122w, i.122x, i.122y, i.122z, i.123a, i.123b, i.123c, i.123d, i.123e, i.123f, i.123g, i.123h, i.123i, i.123j, i.123k, i.123l, i.123m, i.123n, i.123o, i.123p, i.123q, i.123r, i.123s, i.123t, i.123u, i.123v, i.123w, i.123x, i.123y, i.123z, i.124a, i.124b, i.124c, i.124d, i.124e, i.124f, i.124g, i.124h, i.124i, i.124j, i.124k, i.124l, i.124m, i.124n, i.124o, i.124p, i.124q, i.124r, i.124s, i.124t, i.124u, i.124v, i.124w, i.124x, i.124y, i.124z, i.125a, i.125b, i.125c, i.125d, i.125e, i.125f, i.125g, i.125h, i.125i, i.125j, i.125k, i.125l, i.125m, i.125n, i.125o, i.125p, i.125q, i.125r, i.125s, i.125t, i.125u, i.125v, i.125w, i.125x, i.125y, i.125z, i.126a, i.126b, i.126c, i.126d, i.126e, i.126f, i.126g, i.126h, i.126i, i.126j, i.126k, i.126l, i.126m, i.126n, i.126o, i.126p, i.126q, i.126r, i.126s, i.126t, i.126u, i.126v, i.126w, i.126x, i.126y, i.126z, i.127a, i.127b, i.127c, i.127d, i.127e, i.127f, i.127g, i.127h, i.127i, i.127j, i.127k, i.127l, i.127m, i.127n, i.127o, i.127p, i.127q, i.127r, i.127s, i.127t

# Okuqukethwe

1. Ukubaluleka kwemibhalo efihliwe namarobhothiksi
2. Imibhalo Efihliwe namaRobhothiksi eZingeni Lemfundo Eyisisekelo
3. Indlela yokusebenzisa lolu chungechunge
4. Okuqukethwe Kusiqondiso Sikathisha
5. Isifinyezo
6. Amakhono abaluliwe
7. Ukudidiyela Izifundo zeMibhalo Efihliwe namaRobhothiksi eZingeni Lemfundo Eyisisekelo
8. Ukwaba isikhathi
9. Ukuhlukahluka, Ukulingana kanye Nokufakwa
10. Ukudala ikilasi elibandakanya wonke umuntu futhi elihlukahlukene
11. Indlela eyiPedagogical
12. Indlela yokufundisa Imibhalo Eyimfihlo namaRobhothiksi
13. Ukuphatha izifundo ngempumelelo
14. Ukuphatha amakilasi amakhulu
15. Usebenzisa Ukuzijwayeza Ubuciko Nezinzwa Ekufundeni
16. Indawo ehlukele
17. Ukusekela Izitayela Zokufunda Ezihlukahlukene
18. Ukuphila kahle kukathisa
19. Ukuhlola
20. Izinga lokulinganisa

EXTRACT PAGES

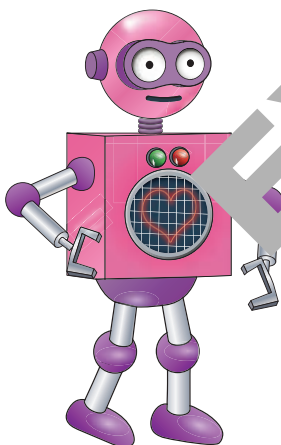
# Okuqukethwe

## Ithemu yoku-1



Sidinga amanzi ukuze siphile .....	2
Ukudla kokubamba umoya okunempilo kungcono .....	10
Izindawo eziyimipheme zisigcina siphephile futhi somile .....	15
Ubuchwepheshe buwusizo.....	19
Wonke umuntu ubalulekile.....	24
Siphila emhlabeni wobuchwepheshe.....	28
Khetha Umzila.....	32
Uchungechunge kanye namaphethini amanyansayo.....	36
Uchungechunge olulungele impilo.....	40
Irobhothi elinyakazayo likaToni.....	44

## Ithemu yesi-2



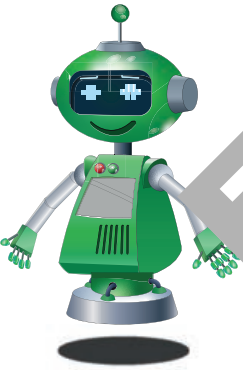
Intwasahlobo isifikile .....	48
Yiba umngani olungile.....	56
Enza ikhondo 'i-robhothi' .....	61
Niyazi izimbongi zonyaka?.....	66
Izilwane namisi esiyiphepha .....	71
Amalungu wayisi ami obuchwepheshe.....	75
Indlela ubuchwepheshe obushintshe ngayo .....	79
Inhlanzi esankanyezi iyasiza .....	84
Enza unogwaja wephepha.....	89
Siza izilwane zigoduke .....	93

### Ithemu yesi-3



Ubumnandi basepulazini.....	98
Izitshalo ezinhle zasezitsheni .....	105
Lungisa irobhothi.....	109
Thola imimo epulazini.....	113
Ikhodi eyimfihlo .....	117
Xazulula amakhodi ayimfihlo.....	121
Amafeni ayapholisa.....	125
Ukuthola usizo olufanele .....	128
Thola umzila.....	132
Bhala ikhodi .....	135

### Ithemu yesi-4



Uma kunjé, kusho ukuthi ni? .....	139
Amarobhothi eNingizimu Afrika .....	147
Konke ngezwe letho .....	152
Yakha imininingwane ebulisayo.....	157
Ngizizimisi sezobuchwepheshe .....	161
Ukubhuma kwakudala nokwamanje .....	166
Tyini ikhodi? .....	170
Yambisa ibhokisi.....	174
Yiba umpetha wendlelakuphica .....	178
Ubuchwepheshe busizungezile .....	182

# Isingeniso

## Sawubona Thisha,

Njengoba ungena ekilasini lakho nsuku zonke, awungeni endaweni egcwele amadeski nezincwadi zokufunda nje. Ungena endaweni lapho uzoqeqesha khona ikusasa eliqhakazayo, lapho amathuba amasha empumelelo ezozalwa khona. Unamandla amangalisayo okukhuthaza, ukuqondisa, nokukhulisa abaholi bakusasa, abasunguli, nabantu ekuyibona abazoletha ushintsho. Ngokwabelana ngogqozi lwakho nothando lwezemfundo, wenza okungaphezu nje kokufunda; utshala imbewu yomusa, isibindi, inhlonipho, nobuntu kuzo zonke zinhlelo zabafundi bakho.

Siyaqonda ukuthi akulula ngaso sonke isikhathi. Kuba nezimodeli zokufundisa, ikakhulukazi ezindaweni ezingenazo izinsizakusebenza, kweziwe isikhathi zingaba nkulu kakhulu. Kodwa ngenselele ngayinye obhekana nazo, wenza umehluko wangempela. Ukhombisa abafundi bakho ukuthi ikhona indlela alinamkhawulo nokuthi bayabonakala, baziswa, futhi bangakwazi ukuzibukhulu.

Yingakho sikhande izinsiza zokufundisa zilapha ukuze zizokweseka. Zikhandwe kucatshangwa ngezinjongo ze-CAPS, igama ekubandakanyekeni nasekudaleni indawo yokufunda lapho yonke inganani libizibona imelwe khona. Izithombe, izindaba, kanye nezifundo ezikukhulobisa ukwehlukahlukana kwengqikithi yendawo, kusiza wonke umfundi zizwisesekhaya ekilasini lakho.

Asikhohliwe nawe. Inhlalakahle yakho ibalulekile njengempumelelo yabafundi bakho. Sifake amathuluzi okufundisa ukuze sikugcine unomdlandla futhi unempilo ngoba siyazi ukuthi uba uzizwa ukahle, ikilasi lakho liyaphumelela. Injabulo yakho ayithi ngokwephela ukufundisa kwakho kodwa futhi nobudlelwano obakhayo nabafundi bakho, ababheke kuwe ukuze bathole ithemba nogqozi.

Njengoba iMingizim Afrika iqhubeka nokuthuthuka ngoMthetho Wokuchibiyela Umthetho Wemfundo Eyisisekelo (i-BELA), owasayinwa waba umthetho ngo 2024, kungcono wokwakha uhlelo lwemfundo olulinganayo nolubandakanyayo uya ngokwaba uqina. Indima yakho kulo msebenzi ibaluleke kakhulu, futhi ukuqondisa kokubili i-CAPS ne-BELA kuqinisekisa ukuthi ikilasi lakho liyindawo lapho abafundi balungiselelwe kahle ukuze bazophumelele.

Unomthelela omkhulu ekukhandeni ushintsho oluhle, futhi umthelela owenzayo ekilasini lakho mkhulu kunalokho ongakubona. Njengoba ufundisa, yazi ukuthi awugcini nje ngokuqondisa abafundi bakho; ubumba ikusasa lemiphakathi yethu, izwe lethu kanye nomhlaba.

Siyabonga ngakho konke okwenzayo!

# 1. Ukubaluleka kwemibhalo efihliwe namarobhothiksi:

Hhayibo! Sibhekene nesifundo esisha sha — sibukeka sethusa futhi siyangikhungatha! Izifundo zamakhodi? Sicabanga umuntu obambelele eskrinini sekhompyutha, ehlunga imininingwane eqondwa abantu abambalwa kuphela. IRobhothiksi? Lokho nje ngathi into ephuma efilimini yezinto ezingakenzeki zesayensi zangomuso! Ave kungaba ngcono uma uma singalinda imininingwane engamashumi amahlanu kuqala ukuze amarobhothi abuse umhlaba? Amarobhothi ave kuyizinto zososayensi nabacubungula izinto zasemihlabeni kuphela? Thina njengothisha sihlanganaphi?

Nazi izindaba ezinhle: ukwenza ikhodi akuxakile ngale ndlela eshangwayo. Empeleni, sihlangabezana nokwenza amakhodi nsukuzonke futhi kade saqala ukwenza lokho. Nakuba sidinga ukufunda izinto ezintsha, sizozifundisa abafundi bethu ngempumelelo, yiyona ngxenye ejabulisa kakhulu kweyeyo!

Siphila emhlabeni onokuthuthuka ngokushesha nezobuchwepheshe esingeke sabuphikisa. Buhlala bushintsha, futhi kumele sigcike kanye nabo. Ngobani? Ngoba silungiselela abafundi bethu ikusasa elizoba yindlalifa yabo.

Kulolu chungechunge, sizokuqondisa kulo mhlaba ongaziwa wemibhalo efihliwe namarobhothiksi ngokusebenzisa isisekelo sezamakhodi.

Othisha bajwayela ukusebenza amaphodi, oshoki, nezingqwembe ekilasini. Kodwa sekuyisikhathi sokwaziwelela ushintsho nokuhlomisa abafundi bethu ngamakhono abazowaziwelela kulesi sikhathi sobuchwepheshe!

## 2. Imibhalo Efihliwe namaRobhothiksi eZingeni Lemfundo Eyobisekelo




Siyakwamukela kuhlelo lweMibhalo Efihliwe namaRobhothiksi 1! Lolu chungechunge luqukethe Incwadi Yomfundi kanye nesiQondiso Sikathisha esikhiphela ukufundisa Imibhalo Efihliwe neRobhothiksi kuBanga loku-1 ngempumelelo. Imibhalo Efihliwe neRobhothiksi Ibanga 1 yabhalwa ngokwezidingo zeziqondiso zeSitatimende seNqubomgomo yoHlelo Lokufunda Nokuhlola (i-CAPS). Ngakho, uma usebenzisa lolu chungechunge, ungethemba ukuthi okuqukethwe kuhlelo lokufunda kudidiyelwe ngokuphelele.

Imibhalo Efihliwe namaRobhothiksi ibhalwe ngokulandela i-CAPS yezifundo Zamakhodi neRobhothiksi ngezindlela ezilandelayo.

### 3. Indlela yokusebenzisa lolu chungechunge

#### 3.1. Okuqukethwe kuNcwadi Yomfundi

- Incwadi Yomfundi iqukethe isihloko esiqhubekayo esifundwa ngemisebenzi yesonto ngalinye, okwenza kube nokuxhumana futhi kufundwe ngendlela eyenza abafundi bakwazi ukuzibandakanya kokufundwayo.
- Isonto ngalinye lethula isigameko esiba yinselele kubafundi ukuze basebenzise ulwazi lwabo ezimweni eziphathekayo.
- Isigaba esithi “Masiqale” siyindawo yokuqala yokuhlola ulwazi abafundi analo ekuqaleni kwesifundo bese kuxhunywe ngqo kulokho okudibana ukuba bakufunde.
- Ekupheleni kwesonto ngalinye, isigaba esithi “Ukumisa” sihlinzeka abafundi ngethuba lokubuka umsebenzi wabo, sikhuthaze indlela yokufunda ekhuthaza ukucabangisisa. Yalela abafundi ukuthi badibane obanye phakathi kobuso obune ezincwadini zabo noma baveze ngemisebenzi kusuka kowodwa kuya kwemine ukuze babonise izinga lomzamo wabo emsebenzini.
- Phezu kwalokho, kunesigaba “seGama Elisha” esiqondene namagama angavamile atholakale ezifundweni, ukuze abafundi bandise ulwazimagama lwabo ngendlela enokuqonda.

1 	2 	3 	4 
Ngiyazama!	Ngijabule!	Ngiyaziqhenya!	Yebo!

**Izithombe:** Sifake izithombe ezincane encwadini yonke ukuveza uhlobo lokufunda ngokusebenzisa emisebenzi eqhubekayo.



Ukufunda nophathini: isikhathi sokusebenza nomngani wami



Ukufunda ngokuhlanganyela: isikhathi sokusebenza ngeqembu



Ukwenza umsebenzi: isikhathi sokusebenzisa izandaba kanye nengqondo yami



Dweba: isikhathi sokudweba nokubhala



Khuluma: isikhathi sokuxoxa ngezinto

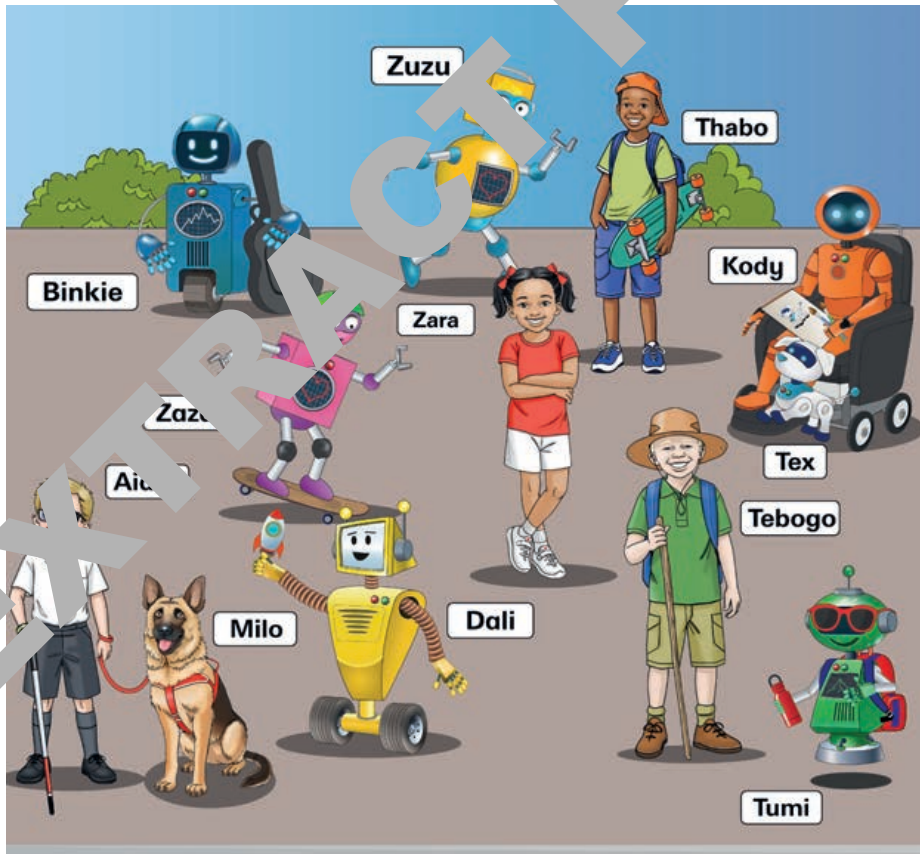


Cabanga: isikhathi sokusebenzisa ingqondo kanye nomcabango lami




























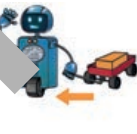








Ukunyakaza komzimba: isikhathi sokunyakazisa umzimba lami


### 3.2. Hlangana neqembu



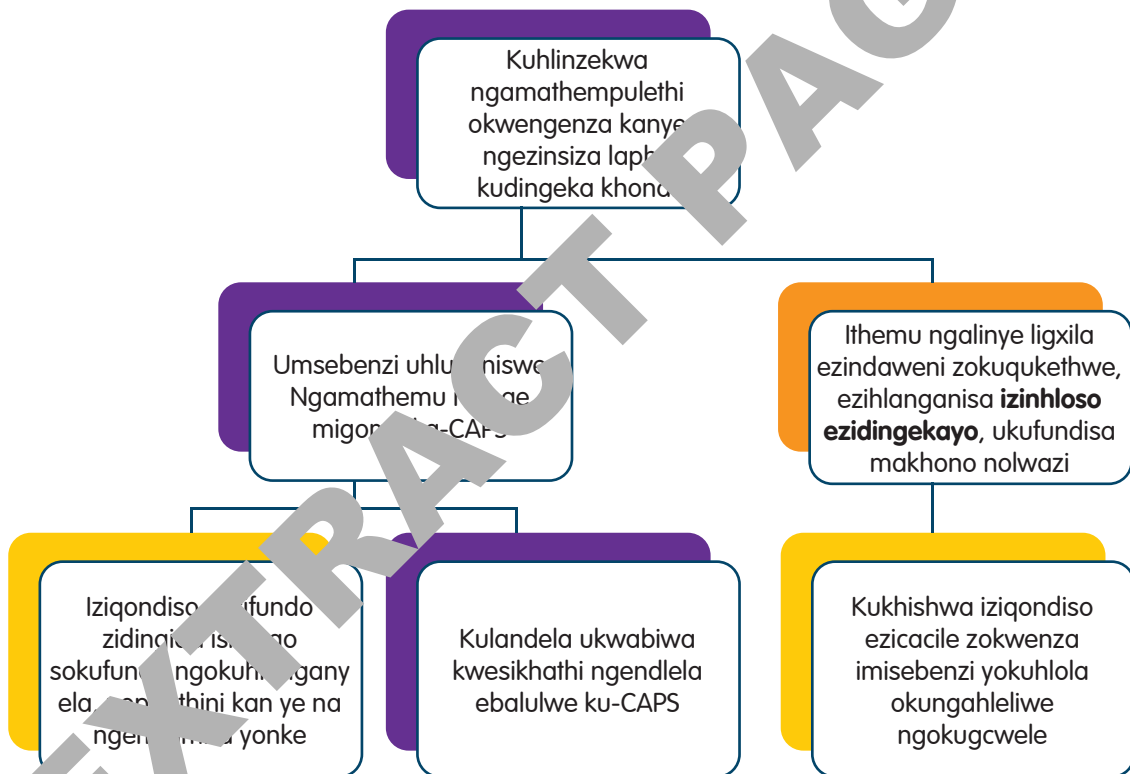
### 3.3. Amakhadi okwenza amakhodi

Ikhadi Lokwenza Ikhodi	Ilebula	Incazelo (isinyathelo)	Ikhadi Lokwenza Ikhodi	Ilebula	Incazelo (isinyathelo)
	<b>Phambili</b>	Thatha isinyathelo esisodwa sokuya phambili.		<b>Phinda kahlanu</b>	Phinda isinyathelo kahlanu.
	<b>Phezulu</b>	Thatha isinyathelo esisodwa uye phezulu.			
	<b>Phansi</b>	Thatha isinyathelo esisodwa uye phansi.		<b>Nkintsho (Iluphi)</b>	Isithonjana seuphu sikutshela ukuthi uphinde izinyathelo zochungechunge.
	<b>Kwesokunxele</b>	Thatha isinyathelo esisodwa uye kwesokunxele.		<b>Ukukhuluma</b>	Isithonjana sokulinda sikutshela ukuthi ume imizuzwana emibili.
	<b>Kwesokudla</b>	Thatha isinyathelo esisodwa uye kwesokudla.		<b>Umsindo</b>	Isithonjana somsindo sikutshela ukuthi ulalele umsindo.
	<b>Jikela kwesokunxele</b>	Jikela kwesokunxele.		<b>Dansa</b>	Isithonjana somdansa sikutshela ukuthi wenze umnyakazo womdansa owodwa.
	<b>Jikela kwesokudla</b>	Jikela kwesokudla.		<b>Khuluma</b>	Isithonjana sokukhuluma sikutshela ukuthi usho igama.
	<b>Uma/bese</b>	(Isitatimende) esithi uma, kusho ukuthi enza lokhu (thatha isinyathelo)		<b>Jikisa</b>	Isithonjana sokujikeleza sikutshela ukuthi ujikeleze kanye. (Jikeleza ngokugcwele).
	<b>Gobisela phambili</b>	Gobisela umzimba wakho phambili		<b>Dweba</b>	Isithonjana sokudweba sikutshela ukuthi udwebe.

	<b>Gobisela ngemuva</b>	Gobisela umzimba wakho emuva.		<b>Shaya izandla</b>	Isithonjana sokushaya izandla sikutshela ukuthi ushaye izandla kanye.
	<b>Gobisela kwesokunxele</b>	Gobisela umzimba wakho kwesokunxele.		<b>U-high five/ ukupansa (Ukushayana ngesandla esisodwa)</b>	Isithonjana sokushayana ngesandla esisodwa sikutshela ukuthi shayana ngesandla esisodwa.
	<b>Ukugobisela kwesokudla</b>	Gobisela umzimba wakho kwesokudla.		<b>Landela</b>	Isithonjana sokuthi landela sikutshela ukuthi ulandele.
	<b>Cosha</b>	Cosha okuthile.		<b>Ududule</b>	Isithonjana sokududula sikutshela ukuthi ududule.
	<b>Beka phansi</b>	Beka phansi intambo.		<b>Donsa</b>	Isithonjana sokudonsa sikutshela ukuthi udonse.
	<b>Qala</b>	Isithonjana sokuthi siqale kakhona sikukhombisa indlela okumele iqale kuyo.		<b>Izithupha phezulu (Shap shap)</b>	Isithonjana sokuthi shap shap sisetshenziselwa ukuthi yebo.
	<b>Hamba</b>	Isithonjana sokuthi hamba kukhombisa ukuthi uqale nini.		<b>Izithupha phansi</b>	Isithonjana sokuthi hhe e sisetshenziselwa ukuthi cha.
	<b>Yima</b>	Isithonjana sokuthi ima sikutshela ukuthi uma nini.		<b>Cabanga</b>	Isithonjana sokuthi cabanga sikutshela ukuthi: <ul style="list-style-type: none"> <li>• cabanga ngokuthile.</li> <li>• sebenzisa ubuciko (umbono);</li> <li>• enza uhlelo</li> </ul>
	<b>Phinda kabili</b>	Phinda isinyathelo kabili.		<b>Gxuma</b>	Isithonjana sokugxuma sikutshela ukuthi ugxume kanye.

3	<b>Phinda kathathu</b>	Phinda isinyathelo kathathu.		<b>Yeqa</b>	Isithonjana sokugxuma sikutshela ukuthi ugxume phezu kwento ethile
4	<b>Phinda kane</b>	Phinda isinyathelo kane.			

## 4. Okuqukethwe Kusiqondiso Sikathisha

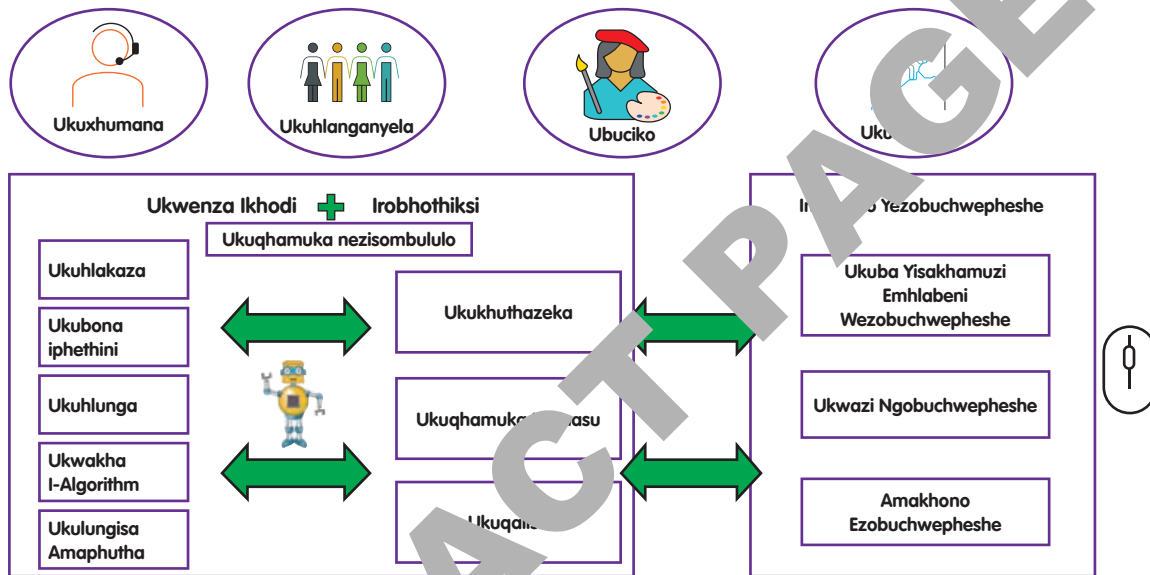


## 5. Isinyezo

### 5.1. Iyini Imibhalo Efihliwe namaRobhothiksi?

- Imibhalo efihliwe namarobhothiksi kuhlangukisa imigomo yokuhlala ngokwamakhompyutha enedizayini yerobhothi, ukwakha, kanye nokusebenza.

- Imiqondo, imisebenzi yokuzijwayeza, kanye nemibono yokuhlela ngokwamakhompyutha isetshenziselwa ukulawula amarobhothi ukuze enze imisebenzi ebaluliwe.
- Ibandakanya imiqondo yedijithali ebheke imibono, imigomo, kanye nezinqubo ezihlukene ezihambisana nobuchwepheshe bedijithali kanye nokusetshenziswa kwayo.
- Uhlelo lokufunda lweMibhalo Efihliwe namaRobhothiksi lususelwa kumibhalo ezilandelayo, ezivezwe esithombeni esingezansi:



Uhlelo lokufunda lweMibhalo efihliwe kanye namaRobhothiksi lususelwe emiqondweni elandelayo:

- **Imiqondo yedijithali** yinqubo yokubhala imiyalelo eqondwa futhi elandelwa ikhompyutha. Yinqubo abantu abatshela ngayo amakhompyutha okumele akwazi ukusethela nesinyathelo ukuze enze imisebenzi ehlukene.
- **Irobhothiksi** ihlanganisa isayensi nezobunjiniyela ukuze kwakhiwe imishini ebandakanya indawo okuyo, ithathe izinqumo, futhi yenze imisebenzi ngokuzimele. Ininzi abafundi ithuba lokuzihlolela ngqo, futhi bazakhele awabo amadizayini. IRobhothiksi igxila ekwakheni, ukusebenzeni, kanye nasekusetshenzisweni kwamarobhothi.
- **Imiqondo yezobuchwepheshe** ibandakanya amakhono ahlukehukene kanye nokufunda okusiza abafundi basebenzise ubuchwepheshe ngempumelelo nangokuba nomthwalo.

## 5.2. Izinhliso Ezibaluliwe:



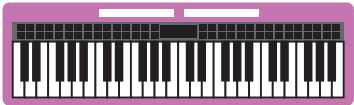

- Ukwakha amakhono okuxazulula izinkinga ngokucabanga ngokocwangingo.
- Ukuthuthukisa ukucabanga ngokwedizayini ukuze kwakhiwe izisombululo eziyimiqondo emisha nezigxile ebantwini.
- Ukuba yingxenye yesizukulwane sabantu abangamaciko kwezokucabanga besebenzisa ukwenza ikhodi, irobhothiksi, kanye namakhono amakhompyutha ukuveza imiqondo.
- Ukukhuthaza ubuciko, ukucabanga ngokuhluzekile, ukusebenza nabanye, ukuxhumana, kanye namaqhinga amasha.
- Ukusebenza ngokuba nomthwalo nangempumelelo emalungelweni, wezobuchwepheshe.
- Ukuqonda indlela ubuchwepheshe obunomthelela ngokwemphakathini.
- Ukwakha ukuzethemba kwezokubhekana ngempumelelo kusetshenziswa ukucabanga ngokocwangingo kanye nokwecwango.

## 6. Amakhono abaluliwe

### 6.1. Ukucabanga ngokocwangingo

- Ukucabanga ngokocwangingo kungaba nokuxazulula inkinga okubandakanya ukuhlakaza izinkinga ezidandandane eziyizingxenye ezincane, ezilawulekayo.
- Kusiza abafundi bafundise amakhono abo okuxazulula izinkinga zemibhalo efihliwe namarobhothiksi. La makhono angasetshenziselwa nokuxazulula izinkinga zangokocwangingo.
- Yindlela yokucabanga kanye nohlu lwamakhono asebenzisa izindlela zobuchwepheshe ukuxazulula izinkinga nokuqeda imisebenzi ngempumelelo.
- Ukucabanga ngokocwangingo kusiza abantu bathole izisombululo eziqondwa emalungelweni kanye namakhompyutha.
- Ukucabanga ngokocwangingo akusikho okwesayensi yezamakhompyutha kuphela; kungasetshenziswa emikhakheni ehlukeni nasezimweni zansukuzonke, ukusiza abantu bacabange ngokukhalipha nangendlela ehlelekile.

**Kubandakanya izakhi ezilandelayo:**

 <p><b>Ukhlunga:</b> Ukugxila olwazini olubalulekile noludingekayo bese kunganakwa okungabalulekile nokungasebenzi kuleso simo</p>	 <p><b>Ukuhlakaza:</b> Ukuxazulula inkinga ejulile ngokuyihlukanisa ibe yizingxenye ezilandelayo</p>
 <p><b>Ukubona Iphethini:</b> Ukuhlonza ukufana nokuhlukana kwezidingo. UKubona amaphethini afanayo kwezinye izinkinga kukusiza uxazulule inkinga entsha.</p>	 <p><b>Ama-alom:</b> Uku-chaza uchungechunge ngqo ezinyathelo noma lwemiyalelo yokwenza umsebenzi.</p>

Kurobhothiksi, abafundi basebenzisa ukucabanga ngokocwaningo ukudizayina, ukwakha, nokuhlela irobhothi. Okwenziwa yirobhothi kuveza ukuthi lokhu kucabanga kusetshenziswe kangokwanele lapho sebhola futhi belungisa ikhodi yabo.

**Ukucabanga Ngokwedizayini**

- Ukucabanga ngokwedizayini kugxila ebantwini futhi kukhuthaza ubuciko nokuqhamuka kamaqamasha. Kulandela izinqubo zezinyathelo ezintathu ezilandelayo.
- Ukucabanga ngokwedizayini kuyindlela yokuxazulula izinkinga ehlanganisa ubuciko nokukhuluma olumisiwe futhi kugxila ekuqondeni nasekudingeni ezintathu ezilandelayo.

Okulandelayo kuchaza inqubo yedizayini:

- **Iba nozwelo:** ukuqonda ukuthi umsebenzi wohlelo ungubani esimweni ngasinye.
- **Chaza:** ukubhala izidingo zabasebenzisi, okubandakanya amakhono, izimpokophelo, kanye nemigomo yabo.
- **Bonisanani:** bandakanya imibono yobuciko kanye nezisombululo usebenzisa izindlela ezihlukene.

- **Isampula:** libandakanya ukuqhamuka nesisombululo noma izisombululo zokuxazulula inkinga.
- **Ukuhlola:** ukuhlola ukusebenza kwesisombululo.

## 7. Ukudidiyela Izifundo zeMibhalo Efihliwe namaRobhothiksi eZingeni Lemfundo Eyisisekelo

<p><b>Ama-algorithm</b> Ezifundweni <b>zolimi</b>, uchungechunge kanye nokufinyeza kunendima ebaluleke kakhulu Ezifundweni <b>zezibalo</b>, ukuhlakaza izibalo ezinzima zibe yizinyathelo ezincane, ezilula kuyindlela ebaluleke kakhulu yokuxazulula izinkinga</p>	<p><b>Ukuhlanganisa</b> Ezifundweni <b>zesayensi yamakhompyutha nezibalo</b>, ukuhlukanisa imisebenzi ibe yizingxenywe ezincane, ezilawulekayo kwenza kube lula ukubhekana nazo kanve nokuzixazulula</p>	<p><b>Izakhi zokuhlola</b> Lapho <b>wenzelwani nodi</b>, nomona ukhetha unlu lwemiyalelo lokuxazulula kulelo luzolandelana kanjengezifundweni <b>zezibalo</b>, namabanga kokuhlola kwesibini ukusebenzisa izindlela ezihlukene ezinokukhalipha zokuzama ukuxazulula izinkinga</p>
<p><b>Imibhalo efihliwe kanye nolimi lwemvelo</b> Inqubo yokufunda ikwakha ikhodi ivame ukuqhathaniswa nokufunda <b>ulimi</b> olusha</p>	<p><b>Lungiselela kwakha</b> Ukuzidibana ubuciko bamakhompyutha buxhumanisa izakhi ezifundweni <b>Zezebuciko</b> ezihlanganisa izingxenywe ezincane <b>Zamakhono Empilo</b></p>	<p><b>Imiqondo yezobuchwepheshe</b> Okunjengomthelela wobuchwepheshe kanye nokuba yizakhamizi zomhlaba wezobuchwepheshe kuhambisana nezifundo <b>Zamakhono Empilo (Ukuphila kahle komuntu siqu kanye nokomphakathi)</b></p>

## 8. Ukwaba isikhathi

Ngokwesibonelo, kufanele seNqubomgomo Yohlelo Lokufunda Nokuhlola (i-CAPS), Imibhalo Eyifihliwe namaRobhothiksi yabelwe ihora elilodwa ezinsukwini ezintathu kumaBanga-R kuya kolwesi-2, kanye namahora amabili ezinsukwini ezihlanganisiwe kumaBanga lesi-3.

Ithebhula elilandelayo lihlinzeka ngokwabiwa kwesikhathi kweBanga loku-1:

IBanga loku-1 = ama-% ngesonto	Ithemu loku-1	Ithemu lesi-2	Ithemu lesi-3	Ithemu lesi-4
Ukubona Iphethini	15	15	15	15
Ama-algorithms Nokwakha Ikhodi	50	50	50	50
IRobhothiksi	30	30	30	30
Imiqondo Yezobuchwepheshe	5	5	5	5
Okuphelele	Amaviki ayi-10	Amaviki ayi-10	Amaviki ayi-10	Amaviki ayi-10

## 9. Ukuhlukahluka, Ukulingana kanye nokufakwa



Izinhlabo zokuhlukahlukana

Ithebhula loku-1: Izinhlabo zokuhlukahlukana

Isigaba Sokuhlukahluke	Incwadi	Okuqukethwe incwadi
1. Ukuhlukahluka Kwamasiko Nezinhlanga	Ukuhlukahluka kusho ukumela amasiko nezinhlanga ezahlukene, ukuqinisekisa abafundi zivezwe emibonweni namasiko ahlukene	Sifake abalingisi, ababhali, nezibalo zomlando ezivela ezizindeni zamasiko ahlukahlukene. Izindaba nezibonelo zifaka amasiko, amasiko, nezilimi eziningi. Lokhu kusiza abafundi ukuthi baqonde ukunotha kwamasiko futhi kuqede inkolelo-mbono ngokunikeza imibono elinganiselayo ngezindaba zomlando nezamanje.
2. Ukuhlukahluka kobulili	Ukuhlukahluka kobulili kusho ukumelwa kwabo bonke ubulili futhi kuhlanganisa izingxoxo mayelana neqhaza lobulili, ubunikazi obungeyona kanambambili, kanye nokushintshashintsha kobulili.	Uzoqaphela ukumelwa okulinganayo kwabo bonke ubulili embhalweni, emifanekisweni, nakwizibonelo. Sifake abalingisi abanganambambili kanye nengenderfluid, kanye nemisebenzi ebekela inselele indima yobulili yendabuko. Isibonelo, abafana namantombazane baboniswa bezibandakanya emikhakheni eyahlukene yemisebenzi, kusukela ekusizeni ekhishini kuya kusayensi nobuciko ukukhuza ukulingana.



<b>7. Ukuhlukahluka kwezenkolo Nokomoya</b>	Lokhu kuhlangukisa ukumela izinkolelo ezehlukene zenkolo kanye nokukhuthaza ukhlonishwa kwemikhuba ehlukeni kamoya.	Izincwadi zethu ziqukethe okuqukethwe okwethula abafundi ezinkolweni ezahlukene kanye nemikhuba yomoya. Siphinde sakhuthaza inkhulumompendulwano yezinkolo ezixubile ukusiza ukukhuthaza inhlonipho nokuqonda kuzo zonke izinhlelo zezinkolelo ezihlukahlukene. Imibono yezwe ifakiwe nayo, iqinisekisa ukuthi zonke izinkolelo ziyahlonishwa futhi zingabizwa ngendlela efanele.
<b>8. Ukuhlukahluka Kweminyaka</b>	Ukwehlukahlukana kweminyaka kuhlangukisa abantu abavela emaqenjini eminyaka ehlukeni kanye nokuxoxa ngezindaba eziphathelelele nokuguga.	Ezincwadini, uzothola abalingisi ezibonela ezisukela ezinganeni ezincane kanye kwabadala. Sigqamise ukubaluleka kobudlelwane nakathi kwezizukulwane, kanye nezihloko ezinobene nobudala ezifana nokuthi ubhalaphansi kanye nokukhetha iminyaka yabadala. Lokhu kusiza abafundi baqonde ukubaluleka kwayo yonke iminyaka yobudlelwane nakathini.
<b>9. Ukuhlukahluka Kwendawo</b>	Ukuhlukahluka kwezindawo kumele abantu nezinkinga ezivela ezifundeni nasezindaweni ezihlukahlukene, emhlabeni jikelele nasendaweni.	Lezi zinto ezihlukeni zingabizwa okuqukethwe okuvela ezifundeni ezihlukene emhlabeni jikelele, zikhulumane ngezindaba zomhlaba jikelele nezimo zendawo ezifanele kubafundi. Siphinde sibe nezibonelo ezilinganiselayo ezivela kuzilungiselelo zemadolobheni nezasemaphandleni, ezibonisa izindlele eziyingqayizivele kanye nezinzuzo zendawo ngayinye.
<b>10. Umqondo kanye Ukufunda Ukuhlukahluka</b>	Lokhu kubhekisela ekubhekane nezitayela zokufunda emhlabeni amakhaya, nokwehluka kwengqondo, njengezihlukahluka kwezindawo.	Samukele ukwehlukahlukana kwengqondo nokufunda ngokuhlangukisa izindlela zokufundisa ezihlukahlukene ezibhekana nezitayela zokufunda ezihlukene. Imisebenzi yakhelwe ukubhekelela inhlobonhlobo yezidingo zokufunda, ikhuthaza indawo yokufunda ebandakanyayo. Singeze nokuhlola kwangaphambili okusheshayo ukuze ukucabangele.

## 10. Ukumela ikilasi elibandakanya wonke umuntu futhi elihlukahlukene

### 10.1. Ukuhlukahluka ekilasini

#### Amasu 1-10: Ukwakha indawo yekilasi eyakhayo nefaka wonke umuntu

##### 1. Dala indawo ephephile:

Qiniseka ukuthi ikilasi lakho liyindawo lapho abafundi bezizwa belondekile ngokomzimba, ngokozwelo, nangokwengqondo. Bakhuthaze ukuthi babuze imibuzo, babe nelukuluku lokwazi, futhi basekelane ngokufunda kontanga.

**2. Beka imithetho ecacile nehloniphekile:**

Gxilisani isimo sokuhloniphana nokwethembana ngokubeka imithetho ecacile yasekilasini. Lapho wonke umuntu azi ukuthi yini elindelekile, ikilasi liba yindawo enhle/YOKUKHULULEKA yabo bonke.

**3. Bungaza ukuziphatha okuhle:**

Gxila ekuziphatheni okuhle ngokuncoma abafundi noma nini lapho kungenzeka. Ukukhuthaza okuhle kuzoholela kokuningi kwakho!

**4. Akukho ukugconwa noma ubuxhwanguxhwangu:**

Qinisekisa ukuthi ikilasi lakho liyindawo engenabo ubuxhwa, uxhwangu, lapho izwi ngalinye lomfundi libalulekile, futhi bazizwa ephumelele futhi behlanganisiwe.

**5. Ukukhulumisana ngenhlonipho:**

Zibekele indinganiso yokulalela nokukhuluma ngenhlonipho. Umuntu oyedwa kuphela okhuluma ngesikhathi, futhi wonke umuntu ulalela ngokucophelela. Imayelana nokusebenzisa unendlela ephumelelayo yokuqinisa ulwazi nobuholi.

**6. Khuthaza ukhleka okuhlanganisiwe:**

Vumela abafundi bahleke ndawonye kawa hhayi omunye nomunye. Ukwakha umuzwa womphakathi ngenjabulo eyabiwe kuqinisa ikilasi eliguqukayo

**7. Yakha ubudlelwano bebenza:**

Dala ukuxhumana ngqinise phakathi kwakho nabafundi kanye nababheki babafundi. Wonke umuntu ukusebenza ndawonye kuholela emiphumeleleni ngakho kakhulu kubafundi bakho.

**8. Yamukele izindlela zokufunda ezehlukene:**

Qaphela ukuthi wonke umfundi unendlela yakhe yokufunda. Sekela futhi ukhuliseka ezehluko.

**9. Khuthaza ukufunda kontanga:**

Khuthaza abafundi ukuthi bafunde komunye nomunye. Lokhu kwakha ukuzethemba nokubambisana ekilasini lakho.

**10. Ngenisa ukufundisa kontanga:**

Siza abafundi babe abafundisi ngokwabo ngokubaqondisa ekufundiseni kontanga. Kuyindlela ejabulisayo nesebenzayo yokuqinisa ulwazi nobuholi

## 10.2. Bungaza ukuhluka kwawo wonke umfundi

Kubalulekile ukuthi abafundi bazibone bona kanye nolwazi lwabo oluhlukene lubonakala ekilasini. Lokhu kusho ukukhombisa ukuhlukahluka ngokubukeka komzimba, izilimi, ubuwena, amasiko, inkolo, ubulili, ukukhetha okukhethwa kukho kwezocansi (okubandakanya i-LGBTQ+), ubudala, namakhono okuqonda. Izincwadi zethu zinezinhlamvu ezivela ezizindeni ezihlukene ukuze zibonele lokhu kuzizwisa okuhlukahlukene. Sikhetha ngokucophelela izithombe, umsitho, imibhalo, wobuciko, nokuqukethwe okumelela abantu abahlukene, indawo yamachapho akha iNingizimu Afrika nangale kwayo.

Sikukhuthaza ukuba wenze okufanayo ekilasini lakho. Sebuzisa ukuxoxa indaba ukuze ugqamise ingemuva elihlukahlukene, ubonise izithombe zizilungiselelo zasemaphandleni nezasemadolobheni, futhi ukhulumane nabantu abanamakhono ahlukene omzimba, amakhono okuqonda, nobunikazi, kokuba phakathi i-LGBTQ+. Xoxa ngezinkolo ezihlukahlukene, ubudala, ukuhlukahluka kobulili, futhi uhlole izimo zezomnotho ezihlukahlukene abafundi bakho abangase bahlangabezane nazo. Thatha isikhathi sokufunda mayelana nokuxhumana kwethu namanye amazwe kanye nabantu e-Afrika yonkana kanye nomhlaba. Ngokwenza lokhu, usiza wonke umfundi wamazwe ebonwa, ehlonishwa, futhi eyingxenye yomphakathi omkhulu nomhlaba.

## 11. Indlela eyi - Pedagogical

Ithiyori yokuhlukahluka yindlela yokufundisa egxile endleleni abafundi ababona futhi baqonde ngayo ngokubucayi zomqondo ngokubona ukuhlukahluka kulokho okufundiswayo. Umongo wukuthi abafundi babamba umqondo ngokujula kakhulu kwanalapho bechayeka ezibonelweni eziningi nezingezona izibonelo ezigqamisa umehluko nokufana esifundweni esithile.

Umqondo omkhulu we-**Variation Theory** ukuthi abafundi bafunda kangcono uma bebona umehluko nokufana kulokho okufundiswayo. Iphakamisa ukuthi abafundi abakwazi ukuqonda ngokugcwele into ngaphandle uma beyibona ngezindlela noma izimo ezehlukene. Ngokukhombisa kokubili ukuthi umqondo uyini nokuthi uyini, abafundi bangagxila kulokho okubalulekile.

Ngamagama alula, **ukuze ufunde umqondo kahle, funda udinga ukubona ukuthi yiziphi izinguquko nokuthi yini ehlala ifana.** Lokhu kubasiza ukuthi baqaphele izingxenye ezibalulekile zombono. Njengothisha, singasiza ngokubonisa izibonelo ezahlukene ezigqamisa lo mehluko, senze kube lula kubafundi ukuqonda ngokujulile. Izici ezibalulekile zethiyori ehlukehlukehle ekufundiseni nasekufundeni zihlanganisa:

**11.1. Gxila Ezicini Ezimqoka:** Uthisha ukhomba izici ezibalulekile zomqondo bese ethula izinhlobonhlobo ezigcizelela lezo zici.

**11.2. Amaphethini Okwehlukahlukana:** Uthisha usebenzisa amaphethini ahlukene ukuze asize abafundi babone ukuthi yikuphi okuhlukahlukayo nalokho okungashintshi. Lawa maphethini ahlanganisa:

**Qhathanisa:** Kwethulwa izibonelo eziphikisayo ukuze kugqanyiswe umehluko.

**Ukuhlanganisa:** Ukubonisa ukuhluka ngaphakathi komqondo ukuze ubambe ukusetshenziswa okubanzi.

**Ukwehlukana:** Ukwethula isici ngasinye ngasodwa ukuze sibonise ekubalulekeni kwaso.

**I-Fusion:** Ukuhlanganisa izici ezibalulekile ukuze ubonise ukuthi zisebenzisana kanjani ngaphakathi komqondo.

**11.3. Ukuqonda:** Ngokubona izibonelo ezehlukane, abafundi bangakwazi ukubona ukuthi yiziphi izici ezibalulekile futhi bathuthukise ukuqonda okujulile komqondo.

## 12. Indlela yokufundisa Inibhalo Eyimfihlo namaRokhethiksi

Kuzofundiswa futhi kufundelwe ngendlela esuselwa enkingeni edinga ukuxaxululwa, kugcizelele indlela egxile kumfundi obambe iqhaza.

Ukufunda Okusebenzisa Ekuxazululeni Inkinga kuqhathaniswa Nendlela Yokufunda Evamile	
<ul style="list-style-type: none"><li>• Abafundi busebenzisa ngama-... xazulula izinkinga zomhlaba zingempela.</li><li>• Ukufundisa amakhono okusebenza ngokwenqubo, ukuxhumana kanye nokuxazululwa ucwaningo.</li><li>• Amakhono okucabanga ngokuhlaziya kanye nokuxazulula izinkinga.</li></ul>	<ul style="list-style-type: none"><li>• Othisha bakhapha imiyalelo.</li><li>• Abafundi banikwa ulwazi ngaphandle kokuba basukume babambe iqhaza ngokwabo.</li><li>• Kuthenjelwe ekufundiseni ngokwenqubo kanye nokukhumbula.</li></ul>

## 12.1. Ukufunda ngokuhlanganyela

Ukufunda ngokuhlanganyela kuyindlela yokufunda lapho abafundi basebenzisana emaqenjini amancane, befunda ngokusizana. Lokhu kwenza bakuthokozele ukufunda futhi kubasiza bathuthukise amakhono abo.

Imisebenzi yokufunda kanye namaqhaza ahlelekile futhi aqhashwa uthi, abafundi base ilungu leqembu ngalinye liqaphe umsebenzi wabanye abafundi. Ukufunda ngokuhlanganyela ngempumelelo, ababhali abaphambili emkhakheni (uDavid Johnson noRodger Johnson) bagxizelela ukukhuthaza ukufunda ngokuhlanganyela ezinhlanu eziyisisekelo ngenhloso (Johnson & Johnson, 2021:55-56).



## 12.2. Ukusebenza Nophathini

Ukusebenza nophathini kuwukufundisa indlela labo abafundi ababili besebenza ndawonye ukuze baqede umsebenzi noma umgomo ohlanganyelwe. Ukusebenza nophathini kuvela embonini yezokuhlela ngokwamakhompyutha. Ezikoleni, umfundi oyedwa uzoba neqhaza lokuba “umshayeli”, bese omunye umfundi abe “umcwaningi”.

Umshayeli = usebenzisa ikhibhodi noma abhale ephapheni.

Umcwaningi = usebenzisa izinsiza futhi abuyekeze umsebenzi we umshayeli.

Kulolu chungechunge, imisebenzi eminingi ekugridi izobanikwa umfundi oyedwa esebenza “njengomqambikhodi,” ozohlela “irobhothi” omunye umfundi uzoba neqhaza lokuba “irobhothi,” kulandela imiyalelo yomqambikhodi.

## 12.3. Ukuzijwayeza Ngenhloso

Imibhalo eyimfihlo namarobhothiksi kudinga ukucabanga okunzulu, ukugxila, kanye nokuvama ukuzijwayeza. Lokhu ukuzijwayeza kumele kube nenhloso emisiwe, kuhlelwe ngokufanele, futhi kancane kancane kwakhele olwazini olukhona. Ukuzijwayeza ngenhloso kubandakanya ukumisa imigomo ecacisiwe, ukuthola izimvo ngokwenziwe, kanye nokuba nemizamo egxilile yokuthuthukisa amakhono.

## 12.4. Isayensi Yokufunda

Uhlelo lokufunda ngokufunda yisayensi yokufunda, ehlonza amaqhingasu okufundisa aphaqambili asuselwe ebufakazini obuthuthukisa ukugcina ulwazi isikhathi eside nokuthuthukisa imiphumela yokufunda.

## 13. Ukuphatha izifundo ngempumelelo

### Hlela Kusengaphambili

Hlela izifundo ngokucacile imigomo nezinto zokwakha zilungile. Lokhu konga isikhathi futhi kugcina abafundi bagxile.

### Kugcine Kulula

Hlukanisa imisebenzi ibe mincane, izinyathelo ezilawulekayo zakho abafundi ukulandela kalula.

### Hlala Uvumelana nezimo

Lungela ukulungisa eyakho isifundo uma abafundi benziwe noma noma kuba ukona emiseka.

### Bandakanya abafundi

Sebenzisa imisebenzi eyahlukene ukugcina abafundi abanentshisekelo futhi khuthaza ukubamba iqhaza.

### Ukulawula Kwisikhathi

Gcina isikhathi esisiwe kubo besikhathi sentsholo abafundi babuze imizozo futhi bahlole imizondo emisha.

## 14. Ukuphatha amakilasi amakhulu

Ukuphatha amakilasi amakhulu nokuvamile ezikoleni eziningi, kungaba inselele. Ukusungula imihlahlandlela nokwazi lokusebenzisana kusiza ukukhuthaza umphakathi ofundayo, umhlompopho, obandakanyayo. Ukufaka abafundi ekubekeni izinjongo, ukuphatha nokufunda kuthuthukisa ubunikazi bemithetho nokulindelwe.

### Amasu okuphatha amakilasi asebenzayo ahlanganisa:

- Ukubeka imingcele: Xhumana ngokucacile nemithetho nemingcele kusukela ekubekeni futhi uhlale uyiqinisa.
- Ukufaka izinjongo nesakhiwo: Ukugcina izinqubo ezingashintshi kusiza ukuphatha amakilasi amakhulu.
- Umsebenzi wontanga: Ukubhanqa noma ukuhlanganisa abafundi kugqugquzela ukufundisa kontanga, ukubambisana, kanye nesibopho sokwabelana.
- Izinsiza ezibonwayo nezilalelwayo: Sebenzisa izinsiza-kubona (amaphosta, izimpawu zezandla) kanye nezimpawu zomsindo (umculo, ukushaya izandla) ukuze uqinise iziyalezo.

- Iziyalezo ezehlukene: Hlela izifundo ukuhlangabezana nezidingo ezahlukene zabafundi ekilasini.
- Kubalulekile ukukhumbula ukuthi zonke izingane zingabantu abazimele, angeke sikwazi ukuthi bonke baqonda futhi banolwazi ngawo wonke amasiko nekamuva elifanayo. Ukufunda kuwumphumela wokwenziwe. Umfundi ngamunye unolwazi lwakhe avele esenalo ngokususela kulokho ake ahlangani nakho; umuntu ngamunye uhlukile.
- Ukuthola umphumela ophuma phambili wabafundi bakho, kudingeka ubenze bazethembe. Umfundi ozethembayo yilowo ovulekile futhi ozilungiselele ukubhekana nezinselele futhi lokho kuzokwaziwa ngokulula ukuba abambe imiqondo emisha.
- Ukwakha indawo ephephile lapho abafundi bezimile ngokubhekana nobungozi kanye nalapho ukwenza amaphutha kumfundi futhi kuyingxenye yokufunda. Vumela abafundi ukuba baphumelele ukuba beqala indlela yokufunda amakhono asemqoka abandakanya Esigabeni Semfundo Esiyisisekelo sesiNgisi. Lokhu kusho ukuqala iingeni labo, ukufundisa imisebenzi ngokwezigaba ngokulandelayo kwazo, nokubesekela lapho befunda ulimi olusha kanye nemiqondo evezolimi.
- **KHOLELWA KUBAFUNDI BAKHO.** Umfundi ngamunye kumele azi ukuthi kunomuntu okholelwa kuye, kanye nokuthi uzophumelela.

## 15. Usebenzisa Ukuswayeza Ubuciko Nezinzwa Ekufundeni

Ukufaka imisebenzi yobuciko ezinqubweni zemisebenzi yasekilasini yansukuzonke kumfundi abafundi bagxile emsebenzini futhi kuthuthukise indlela abacabanga ngayo ngendawo yokufundela. Isibonelo, umculo usetshenziswa emhlabeni. Ukwakha isimo esihle, kushintshwe umoya, futhi kusekelwe ukuthuthukisa ukufunda nokuqonda okufundwayo. Ucwangingo luveza ukuswayeza umculo usiza ingqondo ekulungiseni, ekukhulumeni, nasekugcineni okufundwayo. Uma ukusebenzisa umculo, qinisekisa ukuthi awubi nomthelela omubi kubafundi abanezinkinga zezinzwa noma zokuzwa ngokubandakanya abafundi lapho kukhethwa umculo ukuze kubandakanywe bonke abantu kulokho okwenziwayo.

Ukunyakaza, ukucula, kanye nokuphinda okushiwo kungakhuthaza abafundi futhi kusize ekugcina okufundiwe ngokuphindaphinda, ukusho imilolozelo enemisindo efanayo, kanye nomsebenzi owenziwayo ngqo. Le misebenzi yenza kube nokwahlukahlukene ezinqubweni zansukuzonke futhi kwenze kube kuthokozeleke.

## 16. Indawo ehlukile

Ukwethula izindawo ezihlukile noma ukushintsha indlela ikilasi emilewe ngayo kungakhuthaza ukufunda. Ukufundela phandle ngezikhathi ezithile noma ukuhlela kabusha indawo ekilasini kungasiza. Uma ingekhondlela yokuba kube nohambo lokuphuma esikoleni, ukushintsha ikilasi kalula, ukungashintsha indlela yokuhlala noma ukubeka izinsizakufundisa ngenye indlela ukuze kube ngendawo eshintshashintshayo.

Uhambo lwesikole, uma kungenzeka, luhlinzele ngokuthuba lokufunda lokulangabezana nokuhlukile. Ubohlala uqinisekisa ukuthi kulandelwa iziqondiso zesikole lapho kuhlelwa uhambo. Uma unambo lungenakwenzeka, cela abazali noma umphakathi unikele ngizinsiza eziqondene nesihloko esifundwayo ukuze ukufunda kudalulintshiselwe kubafundi.

## 17. Ukusekela izindlela zokufunda ezihlukahlukene

### 17.1. Qaphela ukuthi emandla abahlukene bafunda ngokuhlukene

Sonke sithola ukwazi silucubungule futhi silwethule ngezindlela ezihlukene ezincike emandleni esifunda ngayo. Khumbula ukuthi ekilasini lakho kuzoba nabafundi abafunda ngendlela eyehlukile kuneyakho.

Xoxa ngezindlela zokufunda ezihlukene emakilasini akho. Ezinye izingane zikhetha ukubona ulwazi olusha, kube ezinye zifunda kangcono ngokuzwa ngalo.

Uma ungakwazi ukubhekana nalezi zindlela zokufunda ezihlukene, uzokwazi ukunika abafundi ithuba elingcono lokusebenzisa amakhono abo ngokugcwele, uthuthukise ukuzethemba nokuzigqaja.

## Izindlela Zokufunda Ezihlukene



### Ukucabanga/Indlela yezibalo:

- Uthanda ukwenza imisebenzi yokuhlola, ukucubungula izinto, ukubala izinombolo.
- Ufunda kangcono uma izinto zihlukaniswe ngokwezigaba, ukuhlela nokusebenza ngamaphethini asemqondweni.
- **Izibonelo zemisebenzi:**
- Ukuxazulula inkinga
- Khuthaza abafundi ukuthi benze imisebenzi yokuhlola
- Bameme ukuthi baze kokusiza noma
- Hlela izinsiza zasekilasini



### Ezolimi/ Ukulalela:

- Uthanda ukufunda, ukubhala nokuxoxa izindaba
- Ufunda kangcono ngokusho, ukulalela nokubona amagama
- **Izibonelo zemisebenzi:**
- Hlinzeka ngezinsiza ezinokufanele
- Fundela abafundi
- Bakhuthaze ukuthi bakubhale indaba noma ngezindaba abazifundile ngama
- Baxoxe ngenxa eyayibhalile
- Bakhuthaze ukuthi bayabashahele imitapoyolwazi nonobashahele ku-inthanethi
- Banike imalalo yamagama



### Ukubona:

- Uthanda ukudweba, ukubhala, ukukhululwa, ukudizayina nokubona izinto
- Ufunda kangcono ngemibala, izinombe kanye nemifanekiso
- **Izibonelo zemisebenzi**
- Bahlinzeke ngokunye okungabukwa kunemibhalo isib. imibukiso, amaphosta, amamephu engqondo, imifanekiso, amagrafu, kanye nemidwebho.

## 18. Ukuphila kanye nokuthisa

Ukufundisa kuwumsebenzi wokucindezeleka okukhulu kochwepheshe abaningi. Akufundi nje umsebenzi onzima, onezinselele eziningi zokuthola izinsiza, ungafetha izingozi eziningi ezweni elinamazinga aphezulu obugebe ngendlela. Ngenxa yalezi zizathu kubalulekile ukuthi ube nezinhlelo zokuzinakekela, ucindezele futhi ucubungule ulwazi lwabo kanye nokuchanazeka kwabo.

### **Ukucabangela nokuzindla**

Thatha imizuzu embalwa usuku ngalunye ukuze uphumule ngokuzilolongela ukuqaphela. Ukuzivivinya ukuphefumula nokuthulisa imicabango yakho kungasiza ekunciphiseni ukucindezeleka. Izinsiza zamahhala zokuzindla ziyatholakala ku-inthanethi futhi zingenziwa ekilasini lakho ngezikhathi ezithule.

### **Yakha imiphakathi eyesekayo**

Joyina noma dala iqembu lozakwethu ukuze uthole ukwesekwa nokufundisa. Ukwabelana ngolwazi nabanye kungakusiza ukuthi ulawule izinselele zokuzindla futhi unikeze imibono emisha.

### **Indlela Yokuphila Enempilo**

Gcina ukudla okunomsoco, hlala umatasa futhi unakekile izinto zakho. Imikhuba elula yansuku zonke njengokuhlala umanzi, ukudla ukudla okunomsoco, nokuzivocavoca njalo kuzogcina amazinga akho emandla ekhuphukeni kanti kuvikele impilo yakho.

### **Impilo yengqondo nengokozwelo**

Ukufundisa izingane ezisencane ezingakwikelele kungaba nzima ngokozwelo. Kubalulekile ukuba nendawo ephembele noma indawo lapho ungakhuluma khona ngezibopho zakho futhi ucubungule imithwalo wengqondo wendima yakho.

## **19. Ukuhlola**

Ukuhlola kuquka i-izingane ezihlukene ezisetshenziselwa ukuhlola inqubekela phambili yomfundi. Okuqonda ezibalweni akukho mayelana nokuhlola kuphela—kumayelana nokuhlola ukuthi abafundi bayibamba kahle kangakanani imiqondo nokuthi amafundi abo bawasebenzisa kangakanani. Ukuhlola okuqhubekayo kwabafundi basezingeni eliyisisekelo kulawulwa ukuqapha okuqhubekayo kwe-impilo phambili yomfundi kanye nemiphumela yokufundisa. Kukumumela ukuthi olwazi ukuhlola izindlela zakho kanye nenqubekela phambili yomfundi bese uthathe izinqumo zokukhipha imiyalelo nsukuzonke ezifanele. Ukuhlola kumele kudidiyelwe ngokuzenzekela enqubweni yokufundisa nokufunda kusetshenziswa izindlela ezidala intshisekelo, ezijabulisayo nezikhuthazayo ukuze abafundi bafune ukuzibandakanya.

Ukuhlola kubandakanya izindlela ezehlukene zokukala inqubekelaphambili nokuqonda kwabafundi. Ukuhlola okuvamile kukusiza ukuthi ubone ukuthi abafundi babamba kahle kanjani imiqondo futhi basebenzise amakhono abo. Esigabeni sesisekelo, ukuhlola okuqhubekayo kuvumela ukuqapha okuqhubekayo kwenqubekelaphambili yomfundi kanye nempumelelo yokufundisa. Lokhu kukwenza ukwazi ukuhlola izindlela zakho zokufundisa nokukhula komfundi, kukusize wenze izinqumo zokufundisa zansuku zinko unolwazi.

### 19.1. Ukuhlola kokufunda

**Ukuhlola kokufunda** ngokwemvelo kuhlangukanye nenqubo yayo yokufundisa, lapho izindlela ezijabulisayo, ezihehayo, nezindaba zisekelayo zikhuthaza ukuhlanganyela okukhuthale kwabafundi. Ukuhlola ukubona lapho abafundi bedinga khona ukwesekwa okwengeziwe futhi eqondise imiyalelo yakho ukuze ihlangabezane nezidingo zabo.

<p><b>Buka ukuthi basebenza kanjani</b></p> <p>sondela abafundi, ubuze imibuzo eqondisayo ukubasekela.</p>	<p><b>Izithupha phezulu, izithupha Phansi</b></p> <p>Sebenzisa lokhu ngemva kwesifundo njengesheke elisheshayo lokuqondisa kwabafundi.</p>	<p><b>Ukuzihlola</b></p> <p>Abafundi badweba usiso berobhothi obuhambisana nemizwa yabo ngokuthi benze kahle kangakanani emsebenzini.</p>	<p><b>Ukusebenza nophathini</b></p> <p>Abafundi bayacabanga ngokuzimele, baxoxe nomngani, futhi babelane nekilasi ukuze kuhlolwe ukuqonda.</p>
<p><b>Impendulo yabanye abafundi abafundi babelana</b></p> <p>Ukusebenza nophathini abafundi nabo futhi unikeze elula kumpendulo eyakhayo ukuzindla ngabo umsebenzi.</p>	<p><b>Imisebenzi yomzimba wonke</b></p> <p>Okujabulisayo, ukubambisana imisebenzi ikuvumela ukuba qaphela amakhono ku isikhathi sangempela.</p>	<p><b>Ukubuza ngesikhathi izifundo</b></p> <p>Sebenzisa okuvulekile imibuzo ku khuthaza abafundi ukuthi chaza ukucabanga kwabo nokucabanga</p>	

## 19.2. Ukuhlola njengokufunda

**Ukuhlola njengokufunda** kubandakanya abafundi ukuzindla ngenqubekelaphambili yabo, bebakhuthaza ukuthi bazibophezele ekufundeni kwabo. Ngalokhu, bazihlola ngenkuthalo ukuqonda kwabo, okuthuthukisa ukufunda okujulile nokuzazi.

## 19.3. Ukuhlolwa kokufunda

**Ukuhlolwa kokufunda** kukuhlinzeka ngobufakazi bokuphumelela kumfundi emaphuzwini athile ngesikhathi, kukusiza ukukala inqubekela ngokufunda, yonke futhi wenze izinqumo ezinolwazi mayelana nokuqhubeka kwabo.

## 20. Izinga lokulinganisa

IKHODI YOKULINGANISA	INCAZELO YEKHONO	IPHESENTI
7	Ukuphumelela ngendlela yamalengiso	80 – 100
6	Ukuphumelela ngezingu eline nekayo	70 – 79
5	Ukuphumelela kanye kakhulu	60 – 69
4	Ukuphumelela ngokwelisayo	50 – 59
3	Ukuphumelela ngokusezingeni elinobhaka	40 – 49
2	Ukuphumelela ngezingu eliyisisekelo	30 – 39
1	Ukuphumeleli	0 – 29

# Sidinga amanzi ukuze siphile

Ithemu yoku-1:		
Isonto	Isihloko	Amakhono
1.	Sidinga amanzi ukuze siphile	C1 C2 C3
2.	Ukudla kokubamba umoya okunempilo kungcono	C1
3.	Izindawo eziyimipheme zisigcina siphephile futhi somile	C3 C6
4.	Ubuchwepheshe buwusizo	C2 D1 D3
5.	Wonke umuntu ukhethekile	C11 C3 R1 R5
6.	Siphila emhlabeni wezobuchwepheshe	D2 D3
7.	Khetha umzila	C2 C3
8.	Uhlelo lokulandelana kwezinto kanye namaphethini amangalisayo	C1 C6
9.	Uhlelo lokulandelana kwezinto okanye impilo	C2
10.	Irobhothi ayakazeka likanomi	C1 C2

## Imibhalo efihliweyo namaRobhothiksi Ibanga 2 Incwadi Kathisha

Imikhakha okugxilwe kuyo	Ukwenza ikhodi IRobhothiksi
<b>Umbhalo oqondene nothisha</b>	<p>Kulesi sifundo, abafundi bazofunda ngomjikelezo wamanzi futhi bakhe isondo lomjikelezo wamanzi besebenzisa Amakhono Okucabanga Ngokocwaningo.</p> <p>Sincoma ukuthi uqale ngokuthi "Masiqale" ukuze abafundi bazijwayeze amakhono ngaphambi kokuba wethule "Ibanga" futhi ubayalele ukuba baqede imisebenzi.</p> <p>Ekupheleni kwesonto, sifake ithebhula elinazibalo eziyisithupha zokusebenzisa imiqondo yokucabanga ngokocwaningo ukuze unike abafundi uma isikhathi sivuma.</p> <p><b>Qaphela:</b> Asikho isidingo sokuthi abafundi abafundiswe amatemu amakhono okucabanga ngokocwaningo.</p>
<b>Imithombo enconywayo</b>	
<b>Masiqale</b>	<p>Umsebenzi:</p> <ul style="list-style-type: none"> <li>- Izinkinobho</li> <li>- Amaphekisi</li> <li>- Imimo</li> <li>- Amabhulohi</li> <li>- Izindaba zosimangothi</li> <li>- Izivalobho zela</li> </ul>
<b>Umsebenzi woku-1</b>	- Abafundi abafundisa izithombe zomjikelezo wamanzi
<b>Umsebenzi wesi-2</b>	<p>Umfundisi ngamunye kumele abe nalokhu:</p> <ul style="list-style-type: none"> <li>- Ibhulohi</li> <li>- Izilingi ezi-2 x A4</li> <li>- Izinkomo zizikelo</li> <li>- Amakhrayoni angamapensela</li> </ul>
<b>Umsebenzi 3</b>	- Amakhadi ekhodi
<b>Amakhono</b>	<b>C1</b> <b>C2</b> <b>C3</b>
<b>Amakhono</b>	<p><b>Abafundi bazofunda:</b></p> <ul style="list-style-type: none"> <li>• <b>Ukuhlonza</b> nokwehlukana phakathi kwezigaba ezihlukene zomjikelezo wamanzi.</li> <li>• <b>Ukusebenzisa</b> izihlungi ngokususa izithombe ezingadingeki ochungachungeni.</li> </ul>
<b>Ulwazi</b>	<p><b>Abafundi bazokwenza lokhu:</b></p> <ul style="list-style-type: none"> <li>• <b>Ukubonisa</b> ukuqonda umjikelezo wamanzi kanye nemithelela yalo.</li> <li>• <b>Ukubeka</b> uchungechunge lomjikelezo wamanzi ngokohlelo olufanele.</li> <li>• <b>Ukuhlonza</b> izigaba ezihlukene zochungechunge lomjikelezo wamanzi.</li> </ul>
<b>Ukuhambisana</b>	<b>Amakhono empilo:</b> Umjikelezo wamanzi Izibalo: Xazulula izinkinga ngokwezizinda zazo

## Masiqale

Ungenza umsebenzi owenziwa ngezandla nabafundi ngaphambi kwenza umsebenzi okuNcwadi Yomfundi.

Qondanisa izinto.

Lo msebenzi wenzeka kahle enkundleni yezemidlalo noma endaweni eqinile.

### Imiyalelo yokwenza umsebenzi:

1. **Ukwakheka Kweqembu:** Hlukanisa ikilasi libe amaqembu ama-2 noma ama-3.
2. **Indawo Into Ebekwe Kuyo:** Iqembu ngalinye lithola uhlu lwezinto (amabhulali, izivalo zamabhodlela, izinkinobho, imimo, izinduko zezimangothi, amaphekisi) endaweni eliqala kuyo.
3. **Ukuhlala:** Ngaphambi kweqembu ngalinye, hlela umugqa oqondane wezinto ezifanayo.
4. **Imiyalelo Yomjaho:**
  - o Umfundi wokuqala eqenjini ngalinye uzothatha into efanayo kuzonke izinto ezibekiwe. (Lezi zinto zilungele ukusetshenziswa endaweni okuqalwa ngokufanele)
  - o Kumele ziqhudelane ukuze ziqondanise izinto ngokufanele.
5. **Indlela Yokunqoba:** Iqembu eliqondanise zonke izinto zalo kuqala ngokufanele bese lihlale phansi kuzoba yilo elinqobile.

Qaphela Kungasetshenziswa noma yini efanayo umsebenzi ngokwanele ukuba abafundi bakwazi ukuphatha konke ngesikhathi esodwa.

### Siza uTumi

1. Bheka imimo esemabhakede ngokufanele.
  - a. Thola ibhakede elinobungo beziluhlaza satshani kanye namachashazi aphuzi.
  - b. Bekudingeka ukuba niohekeni? Yini obekumele niyizibe?
  - c. Thola ibhakede elinobungo beziluhlaza sasibhakabhaka nezinhliziyi ezibomvu. Mangakhi amabhakede anezinhliziyi ezibomvu?
  - d. Bekudingeka ukuba niohekeni? Yini obekumele niyizibe?

## Inqubo Yansuku Zonke Yokuzilungiselela Isikole



## Umsebenzi waku-

(Ithemu loku-1 Isonto loku-1 LB pg 2)

Qala isifundo ngokukhuluma ngephosta / ngezithombe ezinkulu eziwu-A3 zomjikelezo wamanzi. Xoxa ngezithombe ezine nabafundi (qaphela ukuthi izigaba zomjikelezo wamanzi kufanele ukuthi abafundwa esifundweni zezaMakhono Okuphila) futhi uqinisekise ukuthi ziyalungile ihlelo lokulandelana lwemicibisholo.

## Umjikelezo wamanzi

## Indiso somsebenzi

- Heka izithombe 1 - 6 kuNcwadi Yomfundi.
- Besebenza ngababili abafundi baxoxa ngezithombe futhi bakhuluma ngephosta yomjikelezo wamanzi.
- Bathatha isinqumo ngokuthi eziphi izithombe ezimbili ezingangeni.
- Manje kudingeka ukuba baxoxe futhi babeke izithombe zomjikelezo wamanzi zilandelene ngokufanele (ngokochungechunge) futhi bachaze ukuthi kungani bezibeke kanjalo.

• **Impendulo:**

**Umhwamuko, Inguqumhwamuko, Ukuna, Ukuqoqa**

**Ukongama amanzi**



Kumele sivale umpompi.

**Ukuna**



Amaqabazi emvula akha amafu. Bese liyana.

**Ukuphefumula kwezitshalo**



Izitshalo zikhipha umhwamuko ngamaqabunga uye emoyeni.

**Inguqumhwabuko**



Umhwamuko wakha amafu.

**Ukuqoqa amanzi emvula**



Siqoqa amanzi emvula ukuze sichelele izitshalo.

**Ukuhwamuka**



Ilanga kudisa amanzi bese emoyeni angene emoyeni.

**Imisebenzi ephakanyisiwe yokwenza**

- Iphosta yomjikelezo wamanzi maphakathi selwe ebhodini, ukuze abafundi bayibone, uma sekudingeka.
- Umfundi ngamunye unesigqibo samasivalwa ngoziphu kanye ne - *permanent marker*.
- Dweba intaba, ulwandle, imvula amafu kanye nemvula - kulandelane ngokohlelo olufanele njengasokwenzweni.
- Uma bonke sebelusiswe, wama zabo ezivalwa ngoziphu. Umfundi ngamunye segcwalisa igumbi ngamanzi ayi- ¼ bese asivale phezulu.
- Dweba umfanekiso kufinyelela khona izinga lamanzi.
- Shiyela khona elangeni bese ubuke umjikelezo wamanzi wenzeka phambi kwakho.

**Imisebenzi wesi-2**

(Ithemu loku-1 Isonto loku-1 LB pg 4)

**Isiqondiso somsebenzi**

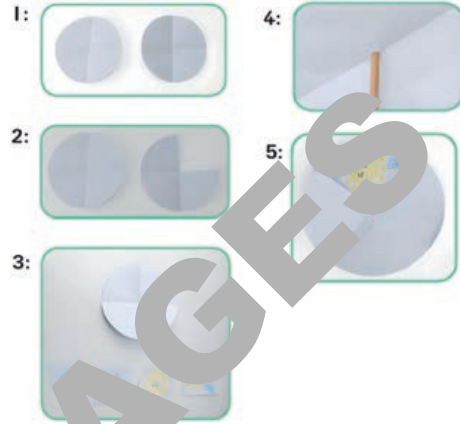


Qala isifundo ngokukhuluma ngephosta / ngezithombe ezinkulu eziwu-A3 zomjikelezo wamanzi. Xoxa ngezigaba ezine nabafundi futhi uqinisekise ukuthi bayaluqonda uhlelo lokulandelana kwemicibisholo.

1. **Landela imiyalelo wakhe isondo lomjikelezo wamanzi.**

- **Nika** abafundi imiyalelo elandelayo ungasheshi futhi ukhulume kucace. Ungayifaki imininingwane engadingeki.
- Umfundi ngalunye manje usenamakhasi ama-2 angu-A2 eziyingi, azohlukaniswa abe amakota amabili. Zisike zozimbili iziyingi.

- Thatha esiye seziyingi esihlukaniswe ngamakota bese usike i-1/4. Sika imigqa.
- Manje sewunesiyingi esi-1 esinamakota ama-4 kanye nesiyingi esi-1 okusikwe i- 1/4. kuso.
- Thatha isiyingi esine- 3/4. Lolu uqwembe lwakho lwangaphambili. Hlobisa umbhalo othi "Umjikelezo wamanzi wami". Yenze ibe nembalabala futhi icace.
- Thatha iziyingi ezisenawo womane amakota. Dweba izigaba ezine ngokohlelo lokulandelana olufanele ziqale ngakwesokudla uqhubeke njengokuhamba kwewashi.
- Khumbula ukufaka ilebula legama lesi-1 ngaphakathi.
- Faka isiyingi esinesihloko ngaphezulu nesiyingi esinezigaba ezine. Faka uphini wokwahlukanisa.
- Bheka ukuthi umjikelezo waktulandelana ngokufanele na uma uwusebenzisa, uma kungenjalo... lungisa ngokufanele phansi.
- Ingabe umjikelezo uphambuka kancinci?
- Ingabe izithombe zibe nimbalebala?
- Ingabe izithombe zibe nimbalebala ngokufanele?
- Yini ongayenikela ngcono?



**Siza:** Siza abafundi besebenzisa ngokufanele ngesikhathi uma kunesidingo. Besebenza ngababili, abafundi banye kuba lapho bakha umjikelezo wamanzi.

#### Okunye okusebenziswa

- iphepha eliyimbalebala
- ipuleti
- iglu

#### Izinto ephakanyisiwe yokwengeza

- Sebenzisa ipuleti, iphepha elisikwe laba isiyingi noma ama - *plastic sleeve* avuselelwe.
- Nika abafundi ubumba bokudlala obumibalabala - ophuzi, oluhlaza sasibhakabhaka, omhlophe kanye nanomunye umbala wokuveza imicibisholo yomjikelezo.
- Abafundi bakha umjikelezo wamanzi njengoba uvezwe esithombeni.
- Cela abafundi bafake amalebula amagama ezigaba bawabhale ezicucwini zamaphepha ezincane

## Umsebenzi wesi-3

(Ithemu loku-1 Isonto loku-1 LB pg 5)

### Isiqondiso somsebenzi



#### 1. Akha uhlu lwemiyalelo ukuze uyise uBinkie kumuntu osesihlalweni esinamasondo.

- Qala isifundo ngokunika abafundi ngababili uhlu lwamakhadi okwenza imiyalelo.
- Abafundi babe sebebheka imephu yegridi ekuNcwadi Yomfundi.
- Fundela abafundi imisho.
- Besebenza ngababili, bakha uhlu lwemiyalelo ukuze uyise uBinkie kumuntu osesihlalweni esinamasondo.
- Chazela abafundi ukuthi imicibisholo ingasetshenziswa kumiyalelo.
- **Buza:** Ingabe imiyalelo ikwazi ukuyisa uBinkie kumuntu osesihlalweni esinamasondo?

**Siza** Abafundi abasebenza ngababili abahlulekayo ukulandelela imiyalelo.

### Imisebenzi ephakanyisiwe yokwengeza

- Akha igridi eyi-5 x 5 kumata noma phandle eminyakeni yokudlala.
- Beka izigaba ezine zomjikelezo wamanzi kumabini okhona ahlukene.
- Besebenza ngababili, tshela abafundi banye ikhodi ukuze ophathini babo badlulele ezigabeni ezilandelayo ngenkathi ukwenza ikhodi.
- Okunye okungenziwa, ungenisa ikhodi ukuze abafundi abambalwa badlulele ezigabeni ezihlukene bese abanye abafundi bapuke.

### Ukuzihlola

Cela abafundi bawenze ubuho obubodwa kobune encwadini yabo noma baveze umunwe owodwa kuya ngakumbi ukuze baklale izinga labo lokuzama ukwenza umsebenzi.

	<b>2</b> 	<b>3</b> 	<b>4</b> 
Ngiyazama!	Ngiyajabula!	Ngiyaziqhanya!	Ngiyazidla!

Qaphela Lesi zibonelo kumele zibe lula, zingabaxaki kakhuluabafundi.

Amakhono Okucabanga Ngokocwaningo	
<b>Ukuhlunga</b>	Uma umzali ethi shanela ekhishini, angeke wenze yonke into ngesikhathi esisodwa. Uzoqala uthathe umshanelo, uqale ukushanele, uthathe i - <i>dustpan</i> , ushanele izibi zingene kwi- <i>dustpan</i> bese ulahle izibi emqonyeni. Wenze umsebenzi nomsebenzi ngokwezigaba ezihlukene ngesikhathi.
<b>Ukuhlukanisa</b>	Selishonile ilanga, sesizogoduka. Sizoqala senza i- <i>Sampana</i> amadeskhi ethu ngokufaka amapeni ethu esikhwama emapeni samapeni. Sifaka isikhwama samapeni emapeni emapeni emapeni zesikole. Sibe sesibheka izincwadi zethu zibeke ukuthi yini okumele sigoduke nayo ukuze sikwazi ukufunda umsebenzi wasekhaya. Sipakisha lezo zincwadi esikhwama zethu. Ezinye izincwadi sizibeka ngaphansi kwamadlathisi ethu. Silahla izibi ezisemadeskhini ethu emapeni emapeni emapeni.
<b>Ukubona iphethini</b>	Cela abafundi baqalaze ukufunda babheke amaphethini angase abe khona. Babuze ukuthi ungani bethi lokho kuyiphethini noma ukuthi iyini iphethini.
<b>I-algorithm</b>	Uma senza isikhwama le - peanut butter, silandela i-algorithm. Siqala sithathe esikhwama sikuqonda sikusondeze, njengesinkwa, imajarini, peanut butter nommese. Sibeka isinkwa epuletini, sithathe ummese nemajarini bese sikugcobe esinkweni. Bese, sithathe ummese sigcobe ipeanut butter esinkweni. Sibe sesibeka ummese esinkwa siwahlanganise bese sisike isinkwa.

# Ukudla kokubamba umoya okunempilo kungcono

Imikhakha okugxilwe kuyo		Ukwenza ikhodi	
Isikhathi sokufundisa		<ul style="list-style-type: none"> <li>• <b>Imisebenzi eyenziwayo:</b> Imizuzu engama-30</li> <li>• <b>Imisebenzi yetiyori kanye nencwadi:</b> Imizuzu engama-30</li> </ul>	
Umbhalo oqondene nothisha		<p>Kulesi sifundo, abafundi bazofunda ukugxila kulokho okubalulekile kanye nendlela yokucozulula into ibe yizingxenye ezihlukene ngokubheka izakhi zemafini enokhrimu.</p> <p>Sincoma ukuthi uqale ngokwethulela abafundi "Inkinga" ukuqala ubayalele ukuba bazijwayeze amakhono asesigaba esi-1 esinombhalo "Masiqale".</p>	
Imithombo enconywayo			
Masiqale		- Incwadi Yomfundi	
Umsebenzi woku-1		- Izithombe zamamafini anokhrimu ezinombhalo, zangaphezulu ezihlukene.	
		- Imiyalelo yemafini enokhrimu ezihlukene.	
Umsebenzi wesi-2		- Amakhrayoni ayimapensel	
		- Izithombe zamamafini enokhrimu ezihlukene	
		- Iphepha noma izincwadi ezibhalwe ngokubheka eziyi-A5	
Amakhono		<b>C1</b>	
Amakhono		<p><b>Abafundi bazofunda:</b></p> <ul style="list-style-type: none"> <li>• <b>Sebenzisa</b> isizathu esisemthethweni ngokusho okumele kube kumafini enokhrimu kanye nokumele zizitshwe.</li> <li>• <b>Sebenzisa</b> kwahlukanisa ngokusho izingxenye ezihlukene zemafini enokhrimu.</li> </ul>	
Ulwazi		<p><b>Abafundi bazokwenza lokhu:</b></p> <ul style="list-style-type: none"> <li>• <b>Ngokukhetha</b> imafini enokhrimu elifanele ngokwemiyalelo ezicacile ehlinzekiwe.</li> <li>• <b>Ngokuchaza</b> isizathu esesekela indlela abaxazulule ngayo inkinga.</li> <li>• <b>Ngokwazi ukuhlakaza</b> imafini enokhrimu ngokusitshela izingxenye ezihlukene zemafini enokhrimu.</li> </ul>	
Ukuhambisa		<b>Amakhono Okuphila:</b> Ukuphila Kamnandi	



### Bewazi?

Ukuhlunga nokuhlakaza kuyingxenye emakhono okucabanga ngokocwaningo. Kusho ukuthi ugxila olwazini olubalulekile bese uzilawulwa ngaludingi ukuze uxazulule inkinga. Kumele uvumele abafundi ukuthi bafunde imiyalelo bese banqume ngokuthi bazoyixazulule kanjani inkinga. Kumele bachaze ukuthi bazoyixazulule kanjani inkinga.

Chazela abafundi ukuthi kumele kufunde inkinga noma imiyalelo bese sikuqonde esikufundayo. Kumele sigxile olwazi olubalulekile.

### Inkinga

UZaza ucabanga amamafini anokhrimu futhi uyawathanda amamafini anokhrimu. Udlala amamafini anokhrimu abaluliwe bese athi ufuna imafini enokhrimu likashokoledi elinosheri, amasini e kanye nocream kashokoledi. Ungamsiza uZaza athole amamafini anokhrimu ayawathanda.

## Masiqale

### Ukuhlunga

1. **Khombisa** abafundi isithombe setafula elinezinto ezihlukene, njengemafini enokhrimu noncamnce.
2. **Buza** abafundi ukuthi wokuphi ukudla okuvame ukuba setafuleni uma kunephathi.  
**Izimpendulo ezingase zivele:** Ikhekhe losuku lokuzalwa, oncamnce, amashipsi, amapuleti, izinkomishi, imidlalo yephathi njl.

**Cela** abafundi ukuthi bathole izinhlobo zokudla okumele ungazinaki lapho ulungile ukufunda lephathi.

**Izimpendulo ezingase zivele:** Isaladi nesiriyeli.



### Ukuhlukanisa

1. **Khombisa** abafundi isithombe setafula lephathi.
2. **Buza** abafundi ukuthi zivini izinhlobo zokudla zedonathi.  
**Izimpendulo ezingase zivele:** Ikhomathi, ukhilimu namasprinkles



### Ukubona iphethini

1. **Buza** abafundi ukuthi bangakwazi ukuchaza ukuthi iphethini iyini.  
**Izimpendulo ezingase zivele:** Kumele bachaze ukuthi liyingxenywe ephindayo. Leyo ngxenywe ibizwa ngochungechunge.
2. **Khombisa** abafundi isithombe sephethini lamamafini anokhilimu.
3. **Cela** abafundi ukuthi bachaze iphethini abayibonayo.



## Umsebenzi woku-1

(Ithemu lesi-2 Isonto lesi-2 LB pg 9)

## Isiqondiso somsebenzi

## 1. Siza uZaza athole imafini enokhrimu olithandayo

- **Nika** abafundi inkinga futhi ubatshela ukuthi kudingeka basize uZaza athole imafini enokhrimu alithanda kakhulu.
- **Khombisa** abafundi isithombe samamafini anokhrimu.
- Besebenza ngababili abafundi bacele baxoxe ngezithombe futhi baxoxe ngalokho okuzodliwa wuZaza.
- **Buza abafundi:**
  - Yini umehluko phakathi kwezingxenye zokwakha imafini enokhrimu uZaza alithanda kakhulu?
  - Kungani ukhethe leyo mafini enokhrimu?
  - Niyixazulule kanjani inkinga?
  - Niqalephi?
  - Niqale nabhekani?
  - Nibhekani emuva kwalokho?

**Impendulo:** Imafini kashokoledi enokhrimu e- masprinkles kanye nesheri phezulu.

## 2. Khetha imafini enokhrimu olithanda kakhulu.

- **Cela** abafundi bakhetha imafini enokhrimu abalithanda kakhulu. Kumele bachazele ophathini babo izingxenye ezilinkene zokwakha imafini enokhrimu abalithanda kakhulu.

**Umsebenzi wesi-2**

(Ithemu loku-1 Isonto lesi-2 LB pg 10)

**Isiqondiso somsebenzi**

**1. Izakhi zemafini enokhrimu**

- **Khombisa** abafundi isithombe samamafini anokhrimu kanye nezakhi zalo.
- **Cela** abafundi ukuthi ibaxoxe ngezinye ezihlukene zemafini enokhrimu.
- **Hlukanisa** abafundi babe ngababili bese ubacele baxoxele ophathani babo ngamamafini anokhrimu abawathanda kakhulu.
- **Batshela** ukuthi kuzodingeka ukuthi badonse futhi balebule imafini anokhrimu elithandwa wuphathini wabo.
- **Buza abafundi:**
  - Bhakani imidwebo yomunye nomunye. Ingabe bayithandwa kanye imafini enokhrimu? Uyidwebe kahle imafini enokhrimu? Ingabe uyahambisa samamafini anokhrimu asencwadini?
  - Ingabe zonke izingxenyane zidwetshiwe futhi afakwa amalebula ngokuyikho?
  - Ingabe imafini enokhrimu elihlotshisiwe elisekwebweni wakho lilandelana njengasesithombeni?



**Imisebenzi ephakanyisiwe yokwenza**

**Umfundi ngamunye kumele aqiniseke imafini enokhrimu eqoqweni lezithombe zemafini enokhrimu**

- Cela abafundi babhalele ngamafini eliyi-A5 izinyathelo nezinyathelo zalokho okumele bakubheke ukuthi kubethe imafini enokhrimu ebaluliwe.
  - Qoqa izithombe zemafini anokhrimu kanye nemiyalelo yabafundi.
  - Beka imiyalelo ibe ngunduma bese ucele umfundi ngamunye abhale uhlu lwemiyalelo bese bangalandeli imiyalelo ebhalwe yibo, kodwa kumele bawintsisa kanye nemiyalelo ehlukele.
- Komabini badwebe izinyathelo futhi baxazulule inkinga ngokusho ukuthi badwebe eliphi imafini enokhrimu.

**Ukuzinikela**

Cela abafundi badwebe ubuso obubodwa kobune encwadini yabo noma baveze umunwe owodwa kuya kwemine ukuze baklale izinga labo lokuzama ukwenza umsebenzi.

1 	2 	3 	4 
Ngiyazama!	Ngiyajabula!	Ngiyaziqhenya!	Ngiyazidla!

# Izindawo eziyimipheme zisigcina siphephile futhi somile

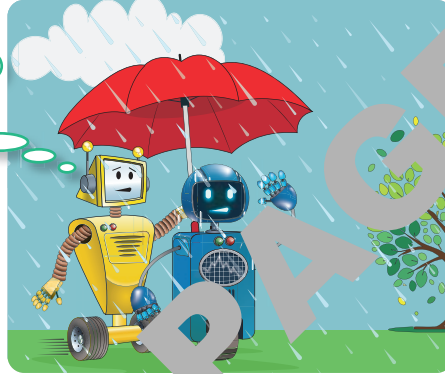
Umqondo okugxilwe kuwo	Ukwenza ikhodi
Isikhathi sokufundisa	<ul style="list-style-type: none"> <li>• <b>Imisebenzi eyenziwayo:</b> Imizuzu engama-30</li> <li>• <b>Imisebenzi yetiyori kanye nencwadi:</b> Imizuzu engama-30</li> </ul>
Umbhalo oqondene nothisha	<p>Abafundi sebeyazi ukuthi igama elithi algorithm alisona isakhi esibaluleke kakhulu esifundweni. Kuwukukhombisa ukuqonda umqondo obaluleke kakhulu.</p> <p>Imisebenzi yokwengeza iyiziphakamiso futhi ingenziwayo imisebenzi abafundi besheshe bawubamba umqondo noma imisebenzi abafundi kusadingeka ukuba bazijwayeze.</p>
Imithombo enconywayo	
Masiqale	- Izicathulo namasokisi abafundi
Umsebenzi woku-1	<ul style="list-style-type: none"> <li>- Incwadi Yomfundi</li> <li>- Amaphepha egridi engu-5 x 5</li> <li>- Incwadi yokubhalela</li> </ul>
Umsebenzi wesi-2	<ul style="list-style-type: none"> <li>- Amaphethini akuNcwadi yomfundi</li> <li>- Izithombe zamaphethini ahlukene</li> <li>- Imibala/amakhrayoni</li> <li>- Amaphepha egridi engu-5 x 5</li> <li>- Amakhadi amaphethini</li> </ul>
Amakhono	<b>C3</b> <b>C6</b>
Amakhono	<p><b>Abafundi bazokwenzeka:</b></p> <ul style="list-style-type: none"> <li>• Landela ikhodi oyinikiwe</li> <li>• Hlonza uchungechunge</li> <li>• Qedela iphethini</li> <li>• Hlonza uchungechunge olungayakhi iphethini</li> </ul>
Ulwazi	<p><b>Abafundi bazokwenza lokhu:</b></p> <ul style="list-style-type: none"> <li>• Ngokulandela amakhodi owanikiwe kanye nokufinyelela kuphethini ngayinye</li> <li>• Ngokuhlonza uchungechunge.</li> <li>• Ngokuqedela iphethini.</li> <li>• Ngokuhlonza uchungechunge ezingayenzi iphethini.</li> </ul>
Ukuqondisa	<p><b>Amakhono okuphila:</b> Esikudingayo ukuze siphile</p> <p><b>Izibalo:</b> Amaphethini</p>

**Bewazi?**

Abafundi kumele bakwazi ukuhlonza amaphethini futhi bayichaze iphethini. Ezinye izinhlelo zokulandelana kwezinto zingase zingayenzi iphethini. Abafundi kumele bachaze ukuthi kungani lokhu kuyinkinga. Amaphethini angaqakatha izakhi ezi-3 noma ngaphezulu.

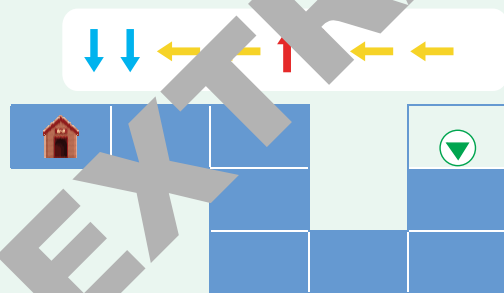
**Inkinga:**

izulu liba libi  
kakhulu, sekumele  
sihambe!



**Masiqale**

Ungakwazi ukusiza uTex noma umsebenzi wuleni?



**Izimpendulo:**

**Phansi, phansi, kwesokunxele, kwesokunxele, phezulu, phezulu, kwesokunxele, kwesokunxele**

Qala isifundo ngokunika abafundi inkinga. Ungeza umsebenzi olandelayo nabo ekilasini, noma endaweni evulekile phandle ukusiza abafundi baqonde ukuthi iphethini iyini kanye nendlela yokuhlonza iphethini.

Umsebenzi woku-1

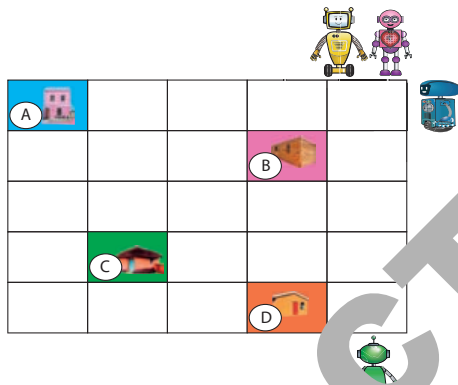


(Ithemu loku-1 Isonto lesi-3 LB pg 12)

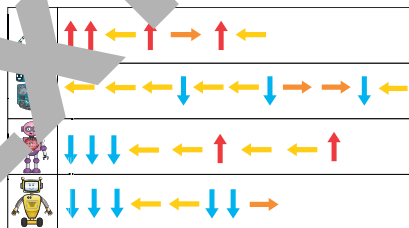
Isiqondiso somsebenzi

1. Irobhothi ngalinye lihlalaphi?

- Qala isifundo ngokukhumbuza abafundi ukuthi uZuzu ubecabanga ngenhlukene abantu abahlala kuyo.
- Cela abafundi ukuthi babheke izithombe kuNcwadi Yomfundi bese batshel'izwi luthi manje sebezosiza amarobhothi akwazi ukuthola imizi yawo.
- Abafundi babheka imephu yegridi bese banqume ukuthi kuhlala banzi kona.
- Landela izindlela ezikumephu yegridi.



- Izimpendulo:
- UTumi - B
- UZuzu - A
- Inkie - C
- UZuzu - D



- a. Blue square, Green triangle, Yellow triangle, Blue square, Green triangle, Yellow triangle, Blue square, Green triangle, Yellow triangle
- b. Yellow star, Green triangle, Red circle, Blue square, Green triangle, Yellow star, Blue square, Green triangle, Yellow star
- c. Yellow house, Green house, Blue house, Yellow house, Green house, Blue house, Yellow house, Green house, Blue house
- d. Yellow house, Green house, Blue house, Yellow house, Green house, Blue house, Yellow house, Green house, Blue house
- e. Yellow house, Green house, Blue house, Yellow house, Green house, Blue house, Yellow house, Green house, Blue house

Cela abafundi ukuthi badwebe amarobhothi kanye nemizi yabo ezincwadini zabo zokusebenzela.

Nika abafundi abahlukene ithuba lokuphendula ngamakhodi abawasebenzisile

Imisebenzi ephakanyisiwe yokwengeza

Hlinzeka abafundi ngezithombe zamasesiphi amathathu ahlukene. Umsebenzi wabo wukuhlela izinyathelo zeresiphu ngayinye ngokochungechunge kusukela ekuqaleni kuya ekugcineni.

## Ukuzihlola

Cela abafundi badwebe ubuso obubodwa kobune encwadini yabo noma baveze umunwe owodwa kuya kwemine ukuze baklale izinga labo lokuzama ukwenza umsebenzi.

1 	2 	3 	4 
Ngiyazama!	Ngiyajabula!	Ngiyaziqhonya!	Ngiyaziqiniseka!

EXTRACT PAGES

# Ubuchwepheshe buwusizo

Umqondo okugxilwe kuwo		Ukwenza ikhodi Imiqondo yezobuchwepheshe
Isikhathi sokufundisa		<ul style="list-style-type: none"> <li>• <b>Imisebenzi eyenziwayo:</b> Imizuzu engama-30</li> <li>• <b>Imisebenzi yetiyori kanye nencwadi:</b> Imizuzu engama-30</li> </ul>
Umbhalo oqondene nothisha		<p>Cela abafundi baphathe izithombe ezinhlobonhlobo zobuchwepheshe ezizosetshenziswa njengengxenye yezakhi zokuthi "Masiqale" kanye noMsebenzi woku-1 wesifundo sesonto.</p> <p><b>Qaphela:</b> Kunomehluko phakathi kobuchwepheshe kanye nobuchwepheshe bolwazi. <b>Ubuchwepheshe</b> busetshenziswa ezimweni eziningi njengezimoto, ama - <i>vacuum cleaners</i>, noga... kanye kubu... <b>ubuchwepheshe bolwazi</b> bugxila ekucwaningeni, aseke... kweneni kweminingo, njengamafoni asmathi, amalaptop, kanye namarouter.</p>
Imithombo enconywayo		
Masiqale		<ul style="list-style-type: none"> <li>- Ingxoxo</li> <li>- Izithombe zobuchwepheshe ezihlukene</li> <li>- Bheka incwadi Yomfundi ukusobala kanye</li> <li>- izithombe nezibonelo</li> </ul>
Umsebenzi woku-1		<ul style="list-style-type: none"> <li>- Incwadi Yomfundi</li> <li>- Izithombe zemikhono ehlukene</li> </ul>
Umsebenzi wesi-2		<ul style="list-style-type: none"> <li>- Incwadi Yomfundi</li> <li>- Izithombe,</li> <li>- Amaphephle egriyengu-5 x 5</li> </ul>
Amakhono		<b>C2</b> <b>D1</b> <b>D3</b>
Amakhono		<b>Amafundo abazofunda:</b> Ukuziqambela awabo amakhodi Ukuqonda ukuthi ubuchwepheshe bubasize futhi bubasiza kanjani abantu ukuze izimpilo zabo zibe ngcono
Ulwazi		<b>Lokhu bakwenza ngokwenza okulandelayo:</b> <ul style="list-style-type: none"> <li>• Ukuziqambela amakhodi</li> <li>• Ukubhekana nezithombe zezinhlobo ezihlukene zobuchwepheshe</li> </ul>
Ukubhekana		<b>Izibalo:</b> Xazulula izinkinga ngokwemiqondo yazo

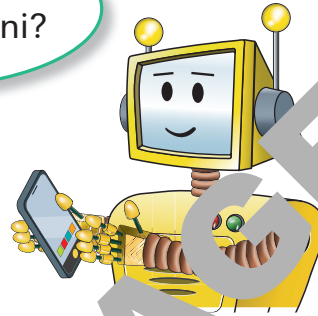
**Bewazi?**

Ubuchwepheshe bushintsha njalo ukuze impilo yabantu ibe ngcono.

**Inkinga:**



Ubuchwepheshe busisiza kanjani?



**Masiqale**

Ithemu loku-1 Isonto lesi-4 LB pg 14)

**Wokuphi okuwubuchwepheshe:**

**Cela** abafundi babheke imikhiqizo ekulandeni kwabafundi.

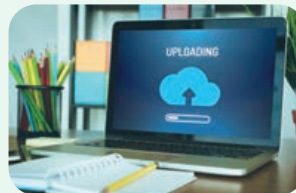
**Xoxa** nabafundi ngobuchwepheshe.

- Ubuchwepheshe buthuthuke ngokwazi eminyakeni ukuze kuzuze abantu.
- Buxazulula izinkinga, buthuthukisa imikhiqizo, buthuthukisa ukusebenza ngokugculisayo, isib. Izando

**Chaza** ukuthi Ubuchwepheshe bolwazi (i-IT) bumayelana nokucina kanye nokudlulisa imininingo.

**Banike** izibonelo ezilandeleni futhi ubacele basho ezinye izibonelo zobuchwepheshe bolwazi.

- Amaselula, i-computer, i-smartphone, i-Wi-Fi, i-USB



## Umsebenzi woku-1

(Ithemu loku-1 Isonto lesi-4 LB pg 16)

## Isiqondiso somsebenzi

- **Qhathanisa ubuchwepheshe nomunye wemisebenzi yayo.**
- Bheka izithombe ezikuNcwadi Yomfundi.
- Khumbuza abafundi ngesifundo esidlule kanye nokuthi ubuchwepheshe busisiza kanjani.
- Basebenza ngababili abafundi qhathanisa ubuchwepheshe nomunye wemisebenzi yabo.

**Buza:**

- Nicabanga ukuthi buyini ubuchwepheshe?
- Nicabanga ukuthi bungabasiza abantu?
- Umama usebenzisa igama elikhulu - lisho ukuthini? Umama ubuho?
- Uma ninamaprojekthi esikoleni. Nilufuna kuphi ulwazi olufanele?

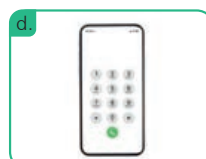
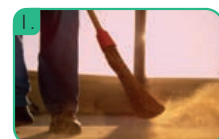
**Siza:** Siza abafundi bengababili ngesikhathi umama esidibana.

## Imisebenzi ephakanyisiwe yokwengeza

- Abafundi bazonikwa amabhrowusha osikhangiso.
- Abafundi bazohlolisa izinhlobo ezintathu zobuchwepheshe.
- Abafundi bazosika futshi bangamabhrowusha ezizithombe ezincwadini zabo zokusebenzela.
- Dweba umugqa owehlayo nokuthi nezidlo base unamathisele izithombe zobuchwepheshe kwesokunxele kanye nezithombe zobuchwepheshe bolwazi kwesokunxele ekhasini.

## Izimpendulo:

- I-ayino - izimphala zomugqa ezihlanzekile, ezishwabene
- AmamephesheGoogle - app ekhomba indlela eyalela umshayeli ngendlela
- I - vacuum cleaner - iyirobhothi - iphansi elingcolile
- Uhlalobokusebenzisa lokuqwashisa ngezinqophelo lomoya - ukungcola komoya
- Ubuxinani ngefoni esmathi - ukucabanga ngomama / ngogogo
- Isando - ukwakha umkhqizo wepulangwe. Ukushayelela isipikili.



Umsebenzi wesi-2

(Ithemu loku-1 Isonto lesi-4 LB pg 17)

Okunye okungasetshenziswa

- Ividiyo ikhombisa abafundi isibonelo

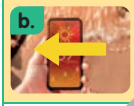








Isiqondiso somsebenzi

1. Bhala ikhodi yokusiza uBinkie athole umkhiqizo wobuchwepheshe

- Khumbuza abafundi ngesifundo esidlule kanye nokuthi ubuchwepheshe busisiza kanjani.
- Kugridi engu-5 x 5 uthisha angafaka izithombe zamathuluzi noma i-compyutha, iselula, njl.
- Uma uthisha echaza isibonelo ngesigameko, abafundi besebenzisa ngababili bakha ikhodi yokusiza uBinkie afinyelele kubuchwepheshe ngobuqiniso noma i-IT.
- Besebenza ngababili babhala futhi bahlolile ngokuthi yikho.
- Siza abafundi balungise inkinga futhi balungise ikhodi.
- **Cela** abafundi ukuthi baxoxe ngekhodi.
- Ingabe amakhodi abo ayamsiza uBinkie athole umkhiqizo wobuchwepheshe?
- Bangakwazi ukulungisa futhi bahlolule noma iliphi iphutha?

**Siza:** Siza abafundi bengababili nosikhamiso ma kunesidingo.

Izimpendulo

Bhaka amaqhingasu okungenelela.

### Ukuzihlola

Cela abafundi badwebe ubuso obubodwa kobune encwadini yabo noma baveze umunwe owodwa kuya kwemine ukuze baklale izinga labo lokuzama ukwenza umsebenzi.

1 	2 	3 	4 
Ngizama!	Ngizabula!	Ngiziqhenya!	Ngizid...

**Igama Elisha  
/ Amagama**

**Tshela abafundi:**

**Ubuchwepheshe** – sebenzisa amathuluzi abini kanye nolwazi ukuxazulula izinkinga nokwenza izinto ebe lula. Ubuchwepheshe bedijithali busakwazi ukhompuyutha ne-inthanethi.